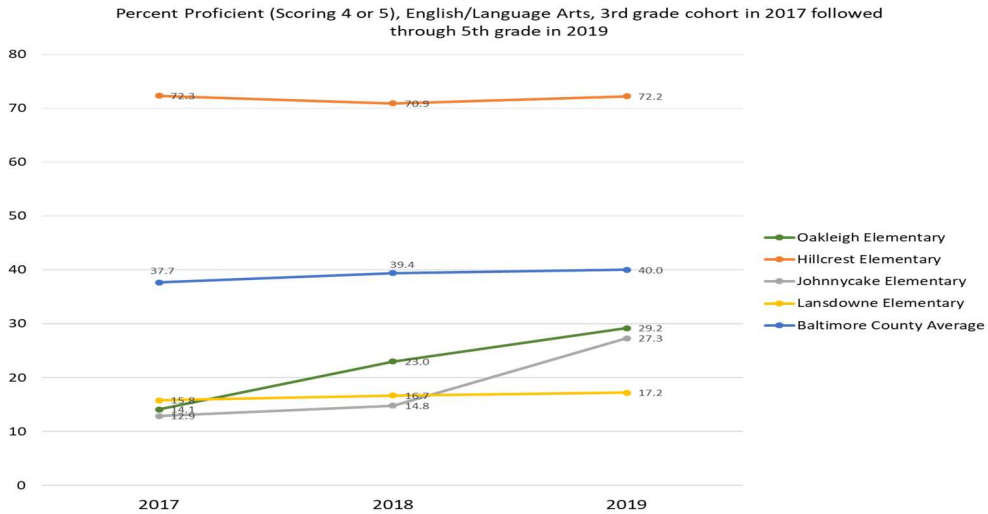


4.4 Case Study Analysis

NDMU PDS Schools – NDMU Completer Impact in Elementary, Middle, and High School

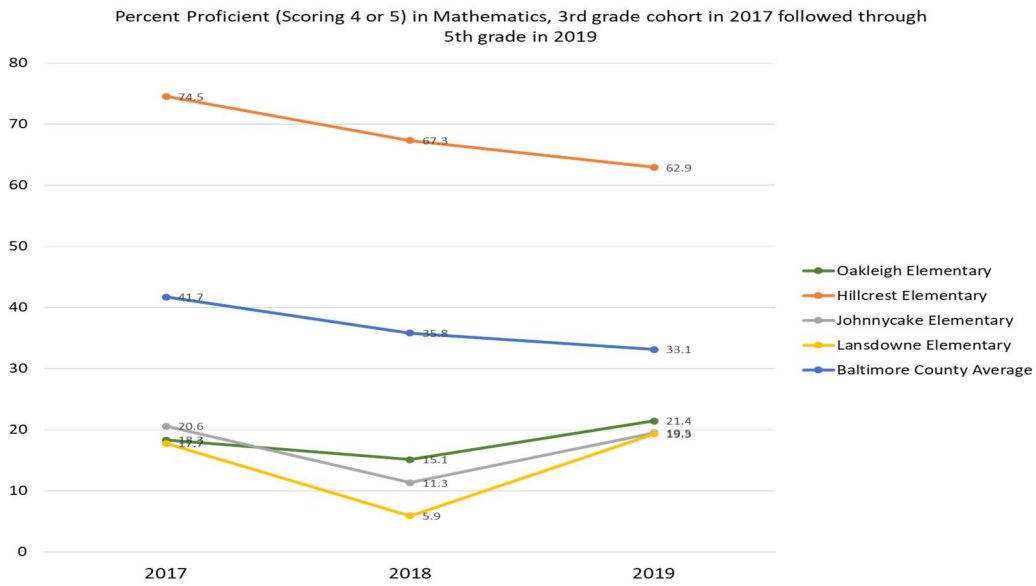
Impact for Elementary/Middle

Baltimore County PDS Sites English/Language Arts



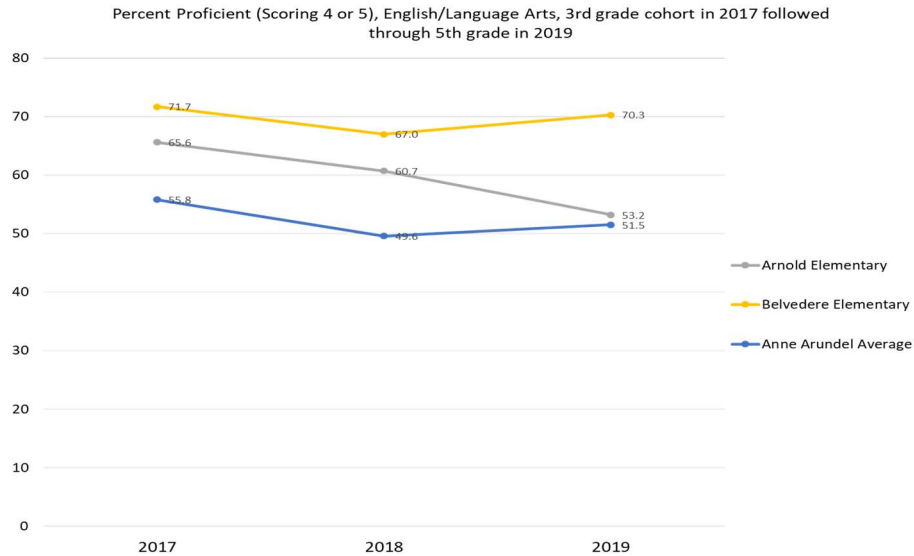
For the BCPS LEA as a whole, ELA proficiency increased just 2.3 percentage points over three years. At two PDS schools, Hillcrest and Lansdowne Elementary, proficiency was similar, though Hillcrest’s cohort began and ended with 72.2% proficient, while Lansdowne’s cohort started at 15.8% proficient and increased to 17.2% proficient. Between 2017 and 2019, the trend in the share of the students scoring proficient increased dramatically at both Oakleigh (14.1% to 29.2%) and at Johnnycake (12.9% to 27.3%). At Lansdowne, proficiency increased slightly, from 15.8% to 17.2%.

Mathematics



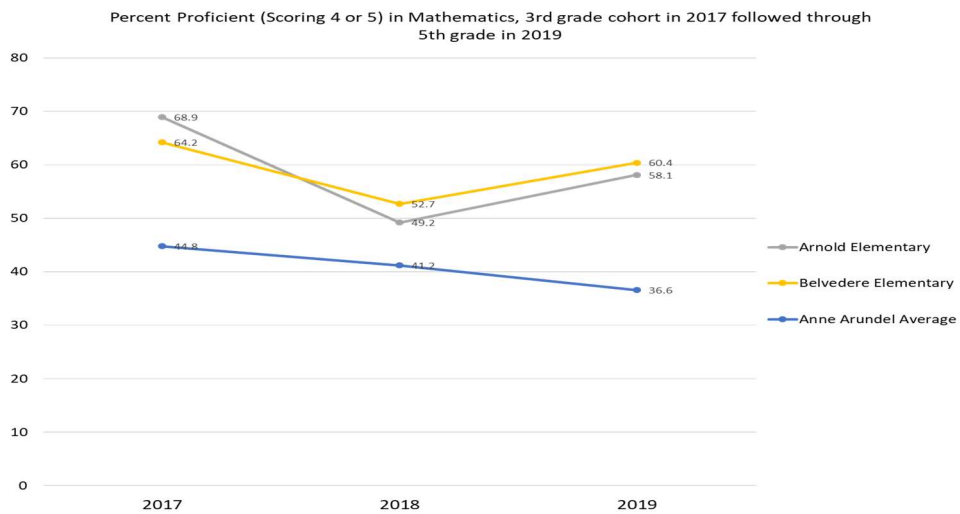
The patterns for Baltimore County PDS cohorts in mathematics were somewhat more complex. For Baltimore County as a whole, the percent of the cohort scoring proficient decreased substantially, from 41.7% to 33.1%. This trend was mirrored at Hillcrest, where in 3rd grade 74.5% were proficient but by 5th grade, the share fell to 62.9%. At the other three Baltimore County PDS schools (Oakleigh, Lansdowne and Johnnycake), the pattern was V-shaped, where the percent proficient in 3rd grade ranged between 17% and 20%. By 5th grade, the share proficient ranged between 19.3% and 21.4%. The latter data point represented a significant recovery from 4th grade when only between 5.9% and 15.1% scored proficient.

*Anne Arundel County PDS Sites
English/Language Arts*



Similar to the average cohort ELA proficiency rate for AACPS, which declined from 3rd to 5th grade (55.8% to 51.5%), Arnold Elementary’s cohort proficiency rate also fell, from 65.6% to 53.2%. However, at Belvedere Elementary, the proficiency rate remained relatively flat, moving from 71.7% to 70.3%.

Mathematics

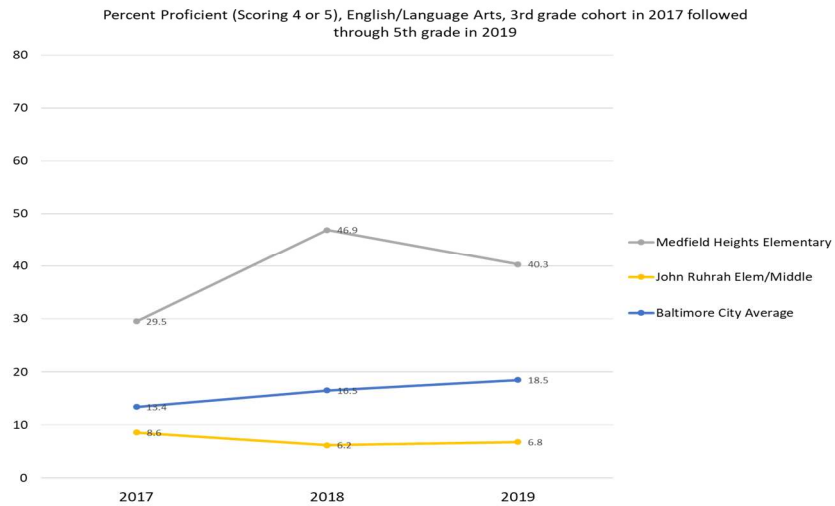


The cohort's proficiency rates in math from 3rd to 5th grade at the two AACPS PDS schools appear very different from the district average, which fell from 44.8% to 36.6%. At both Arnold and Belvedere, the cohorts began higher than they ended (from 64.2% to 60.4% at Belvedere; 68.9% to 58.1% at Arnold), the recovery from 4th to 5th grade is notable (from 52.7% to 60.4% at Belvedere; from 49.2% to 58.1% at Arnold).

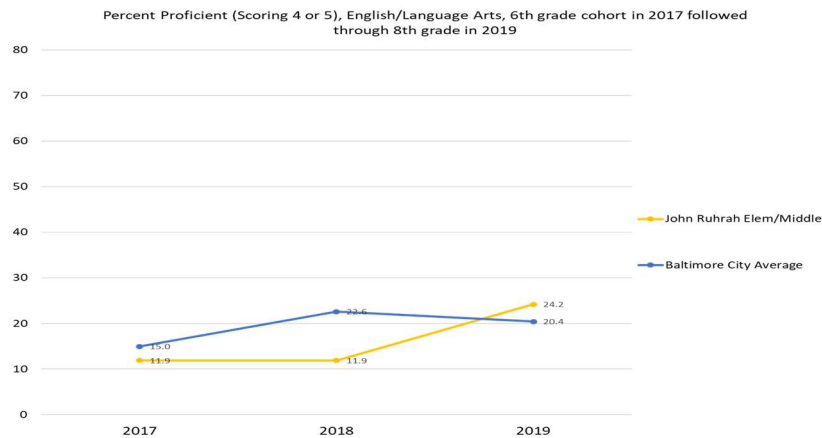
Baltimore City Schools PDS Sites

Given that one of the Baltimore City PDS sites, John Ruhrah, is an elementary/middle school, we examined two simulated cohorts: the first tracking proficiency rates 2017 through 2019 from 3rd to 5th grade and the second from 6th to 8th grade.

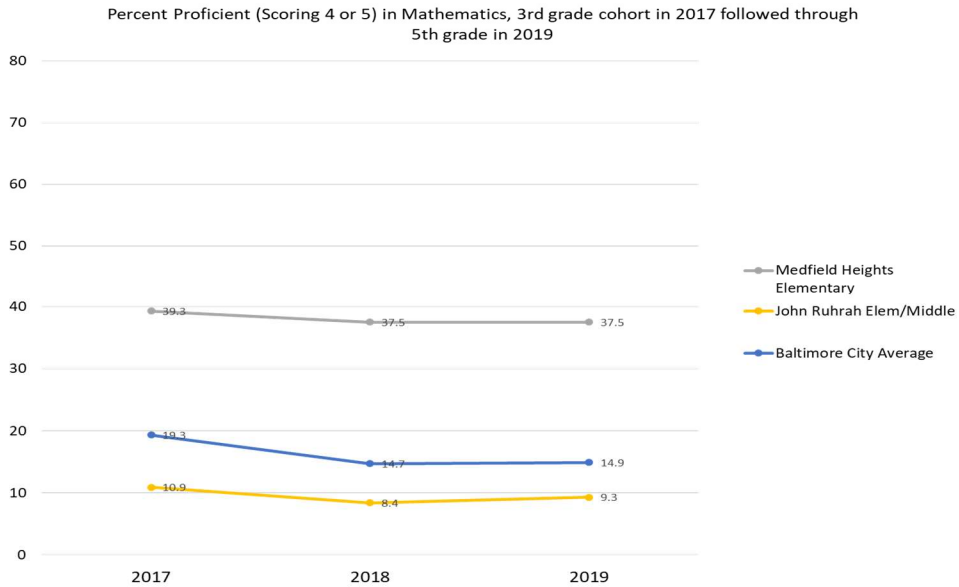
English/Language Arts



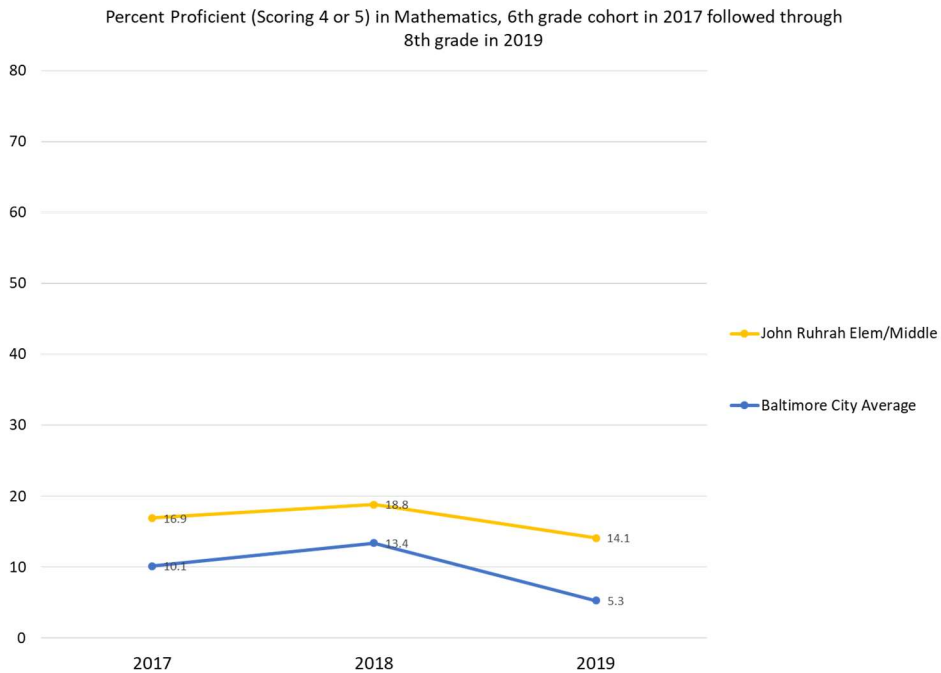
Whereas ELA proficiency increased from 13.4% to 18.5% for the Baltimore City Schools cohort as a whole, trends for the two PDS sites were different. At John Ruhrah, performance declined slightly (falling from 8.6% to 6.8%). At Medfield Heights, ELA proficiency increased overall (rising from 29.5% to 40.3%). For the simulated 6th grade cohort, ELA proficiency at John Ruhrah climbed from 11.9% to 24.2%. This stands in contrast the district overall where proficiency rates grew less dramatically (15.0% to 20.4%) and ultimately ended lower than John Ruhrah.



Mathematics



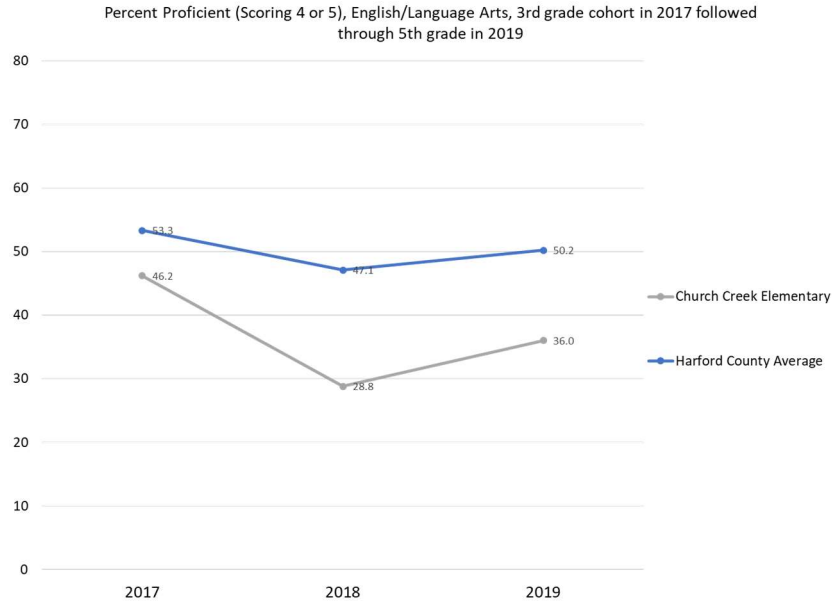
In math and examining the 3rd grade simulated cohorts, proficiency rates remained relatively flat, both for the two Baltimore City PDS schools and the district as a whole. At Medfield Heights and John Ruhrah, the percent of students scoring proficient from 3rd to 5th grade fell slightly (falling 1.8 and 1.6 percentage points, respectively), the decline for the district was steeper (falling from 19.3% to 14.9% proficient).



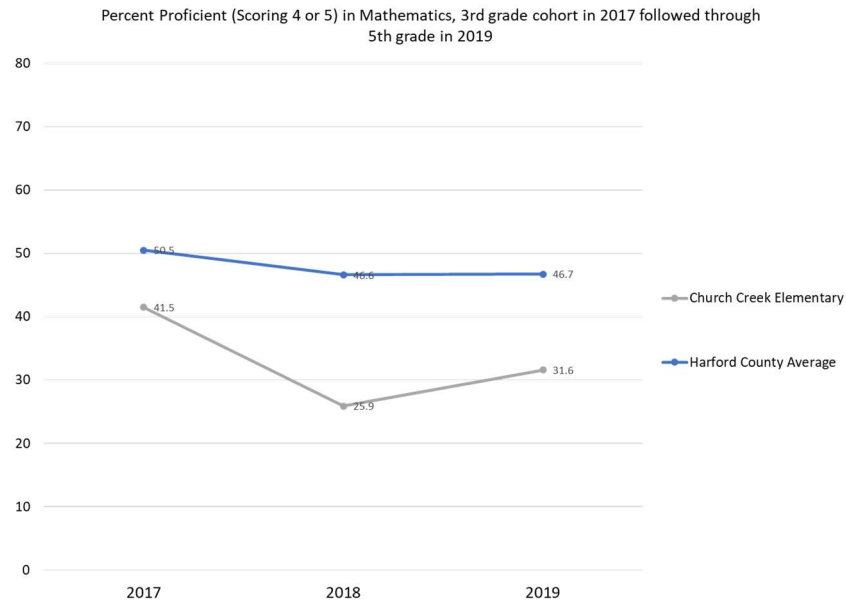
Trends in math proficiency among the 6th grade cohort at John Ruhrah largely mirrored the pattern for the district. At John Ruhrah, the percent of students scoring proficient fell slightly, from 16.9% to 14.1%. Though for the district, the decline in math proficiency by 8th grade was more dramatic, falling from 10.1% to 5.3% proficient.

Harford County PDS Sites
English Language Arts

At the elementary PDS site in Harford, the percent of the cohort proficient in ELA followed the same pattern as for the district, which was V-shaped. At Church Creek, 46.2% of 3rd graders were proficient in 2017; 28.8% of 4th graders were proficient in 2018, rising to 36.0% in 5th grade.



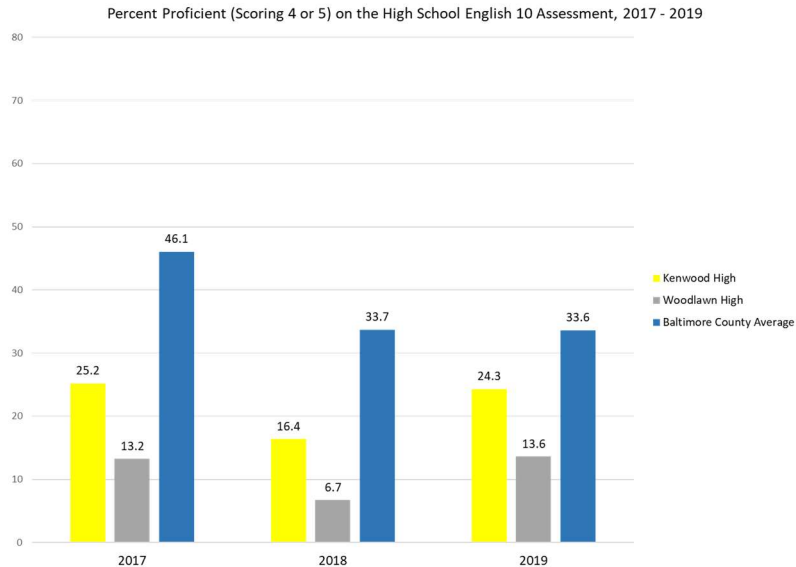
Mathematics



Changes in rates of proficiency in math were similar to ELA at the Church Creek PDS site: the cohort began with a 41.5% rate of proficiency. This fell to 25.9% in 4th grade but recovered to 31.6% by 5th grade. Proficiency among Harford County Schools' 3rd grade cohort in 2017 also decreased over the same time frame (50.5% to 46.7%).

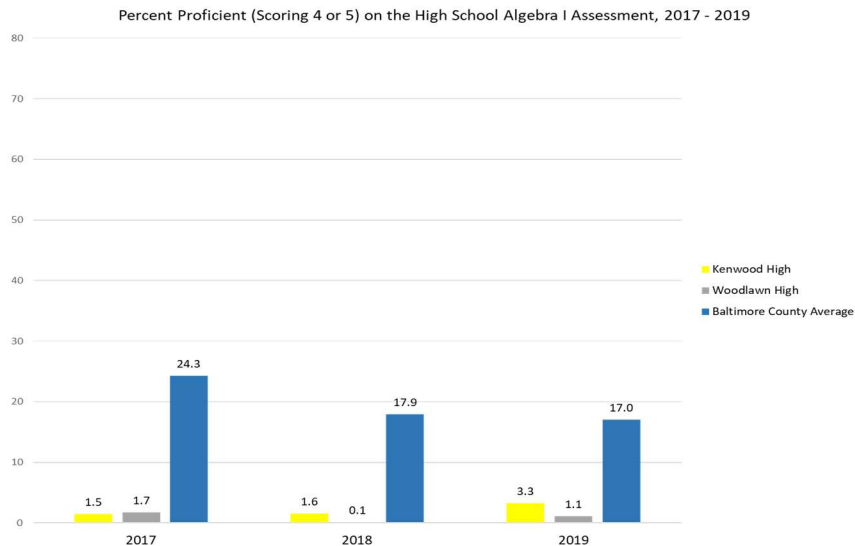
Impacts for High School

Baltimore County PDS Sites

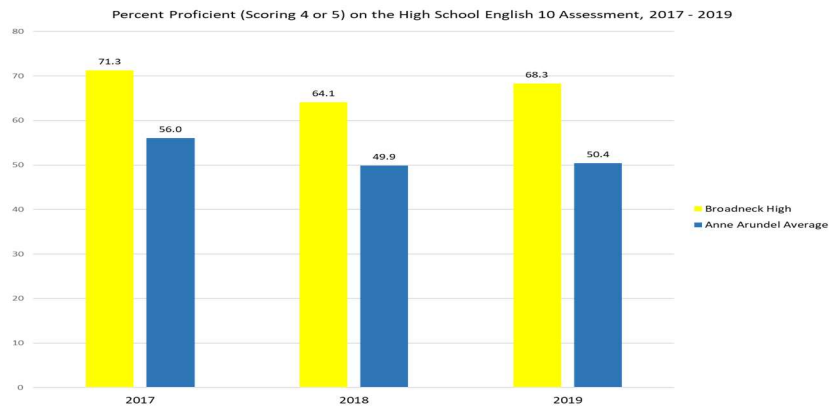


In both ELA10 and algebra I, students at the PDS sites were less likely than those in the district as a whole to score proficient on the state assessment in all three years. At Kenwood High, ELA10 proficiency rates declined slightly from 25.2% in 2017 to 16.4% in 2018, increasing to 24.3% in 2019. At Woodlawn, a similar pattern in seem, where proficiency dipped somewhat in 2018 to 6.7%, but in general increased over time to 13.6%. In contrast, the proficiency rate for Baltimore County as a whole declined from 46.1% to 32.6% between 2017 and 2019.

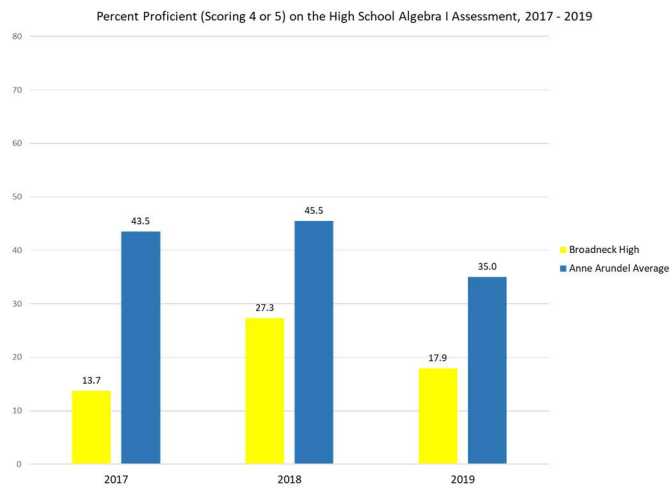
Algebra I appears to be challenging for all students. Across the district, proficiency declined from 24.3% to 17.0%. However, at Kenwood, proficiency increased slightly from 1.5% to 3.3%.



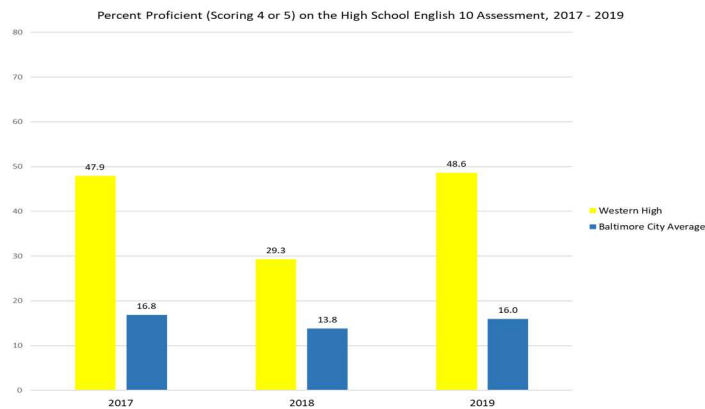
Anne Arundel County PDS Site



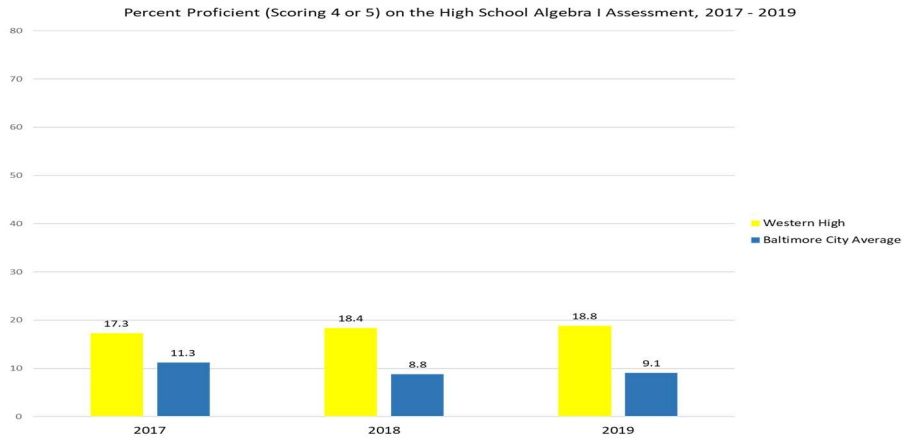
High school students at NDM’s PDS site in AACPS, Broadneck High, outperformed the district average in ELA10, but had lower rates of proficiency in algebra I. In ELA10, Broadneck High students’ proficiency rates declined to some extent (from 71.3% to 68.3%); however, in algebra I, their proficiency rates grew to a greater extent, from 13.7% to 17.9% over three years.



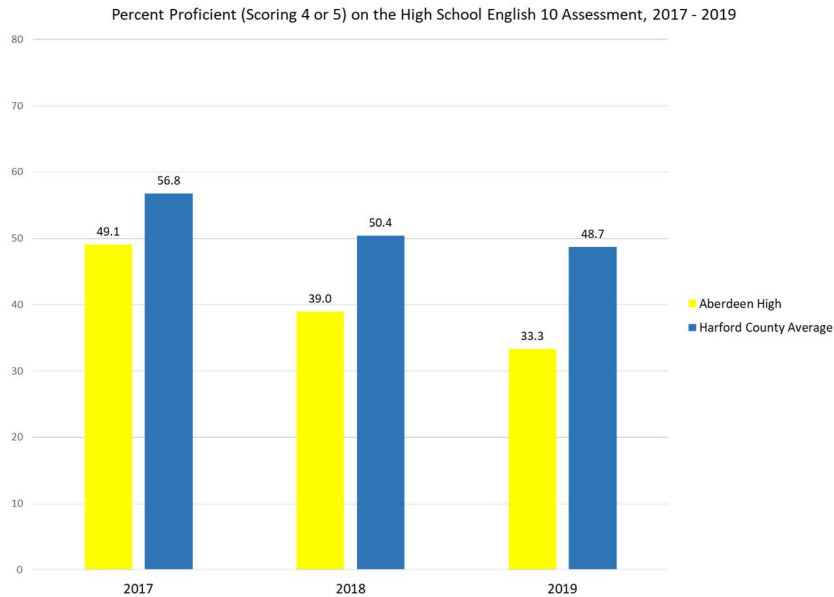
Baltimore City Schools PDS Site



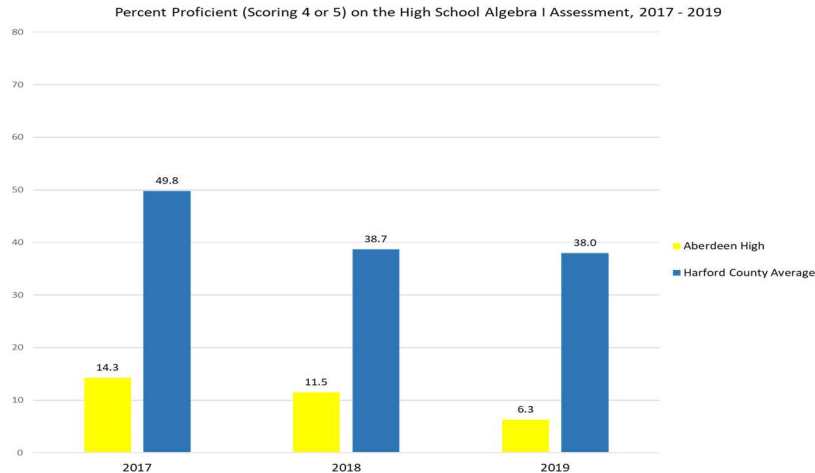
NDM’s PDS site in Baltimore City Schools, Western High, is an all-girls school. For both ELA10 and algebra I, Western High students far surpassed district average rates of proficiency. In ELA10, the percent of students scoring proficient increased slightly, from 47.9% to 48.6%. This is in contrast to the district, where proficiency decreased slightly from 16.8% to 16.0%. In algebra I, and similar to ELA10, proficiency rates increased between 2017 and 2019 (17.3% to 18.8%) while rates for the district fell (from 11.3% to 9.1%).



Harford County PDS Site



The PDS site in Harford County Schools, Aberdeen High School, had patterns of proficiency that largely mirror those for the district overall: In ELA10, proficiency rates among both groups decreased between 2017 and 2019, while Aberdeen students performed below the district average. In algebra I, proficiency rates at Aberdeen High fell from 14.3% to 6.3%, similar to Harford County Schools where proficiency rates declined from 49.8% to 38.0%.



In-Depth Analysis of One Baltimore County PDS Site

An in-depth analysis of one Baltimore County elementary school provides additional impact data. Three recent NDM SOE graduates (2 completing elementary education MAT programs in 2018 and 1 2019) serve as 5th grade teachers at Lansdowne Elementary in Baltimore County Schools. Altogether, Lansdowne Elem has four 5th grade teachers; thus, NDM graduates serve the majority (~75%) of 5th graders at this school. This concentration provides the opportunity to examine the potential impact of NDM's completers on student outcomes.

Lansdowne Elem serves a population of over 600 students that is highly diverse; in 2020, approximately one-third identify as White, one-quarter Black, one-quarter Latinx, with the remainder identifying as Asian or more than one race/ethnicity. Approximately 73% are eligible for free/reduced-price meals, over 15% receive special education services, and 15% are English language learners. This suggests Lansdowne is a relatively high-needs school compared to Baltimore County LEA as a whole, where 49% are eligible for FARMS, 13% receive special education, and 8% are English learners.

In 2017, and prior to NDM graduates' arrival at Lansdowne, approximately 40% of the school's 5th graders were meeting expectations in ELA (i.e., scoring 4 or 5 on PARCC). In 2019 – the most recent year for which assessment data are available -- 17.2% met expectations. However, it is notable that the ELL population at Lansdowne more than doubled between 2017 and 2020. Whereas 6.8% received EL services in 2016-17, the share had increased to 15% in 2019. Further, the PARCC participation rate for 5th grade ELs at Lansdowne was over 95% in 2019, which may help explain the decline in performance.

In mathematics, however, performance on the 5th grade PARCC increased substantially at Lansdowne. While in 2017, just 9.4% met expectations, in 2019 19.3% did so, more than doubling the share of proficient 5th graders.