

## Arlington Public Schools Needs to Increase Focus on Academic Excellence (Part II)

In the <u>first paper</u> in this series, we reviewed APS high school performance on a range of metrics reflecting academic excellence and college readiness. These indicators included SAT scores, AP test scores, number of national merit semifinalists, and advanced passing scores on the SOLs. Across most of those metrics, APS high school performance lagged the performance of their peer groups in Fairfax and Falls Church.

One potential cause for that underperformance is the culture of academic expectations at APS. Extensive literature (for example, <a href="here">here</a>, and and

## As the National Conference of State Legislatures framed it:

Research shows that the rigor of high school curriculum is one of the top indicators for whether a student will graduate from high school and earn a college degree. In fact, a study by the U.S. Department of Education found that the rigor of high school course work is more important than parent education level, family income, or race/ethnicity in predicting whether a student will earn a postsecondary credential.

Unfortunately, most recent high school graduates report being only moderately challenged in high school. In the 2005 survey of almost 1,500 recent graduates, just 24 percent of graduates said they were significantly challenged during high



school. One in five recent high school graduates said that "expectations were low and...it was easy to slide by." Among those graduates who reported being significantly challenged in high school, 80 percent felt well prepared for the expectations of college.

A rigorous high school curriculum requires challenging instruction and support for each student to meet high standards. Components of a rigorous high school curriculum include higher expectations for all students, with support for low-performing students through intervention programs and extended learning opportunities, and a requirement that each student complete a college- or work-ready curriculum in order to graduate from high school.

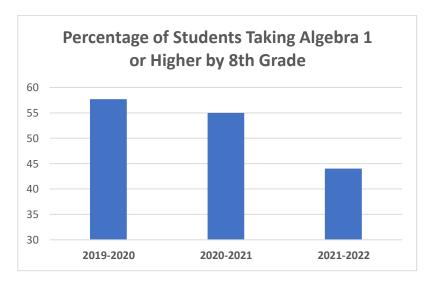
Research reflects that even in classrooms where students appear to be performing well – receiving As and Bs – they are not adequately prepared for college because the level of rigor and challenge in the materials and instruction was not set appropriately high.

A number of data points and anecdotal evidence suggest that APS' sub-par performance may be driven by a lack of high academic expectations for students, particularly at the middle schools, and to some extent at the high school level.

Lowered Expectations in Math. As one example, APS has over the past several years dramatically reduced the number of students taking algebra by 8th grade. As the U.S. Department of Education has reported, algebra I "is seen as a gatekeeper course: Students normally need to complete algebra I in order to take higher level mathematics and science courses. Taking the course earlier in their academic careers allows students sufficient time to take the more advanced courses that are often prerequisites for postsecondary STEM majors." The Department of Education cited research finding that "[e]arly access to algebra has an effect beyond simply increased knowledge measures and, in fact, may 'socialize' a student into taking more mathematics, regulating access both to advanced coursework and increased achievement in high school." The Department specifically focused on students taking algebra I by 8th grade, noting that "[t]aking algebra I before high school, such as in 8th grade, can set students up for a strong foundation of STEM education and open the door for various college and career options."

The percentage of students at APS taking algebra 1 or higher by 8<sup>th</sup> grade has plummeted to 44%. Several years ago, 80 percent or more of APS students enrolled in algebra 1 or higher by 8<sup>th</sup> grade. This number has been cut almost in half.





As a result, more than half of the APS student body is not currently on a path that would permit them to take calculus by their senior year. This is an important threshold because, absent taking summer classes or doubling-up on math during the school year, students who do not take algebra 1 by 8<sup>th</sup> grade will generally be unable to take calculus by their senior year. As reported by many college <u>counselors</u>, highly competitive colleges <u>expect</u> to see students having taken calculus by their senior year, and even use calculus as a <u>filter</u> for student applications. For example, <u>Wesleyan</u> reports that 86% of admitted students had taken calculus. As one admissions dean noted in a recent <u>study</u> "Calculus is the gold standard that people in this business use as a shortcut."

The rationales that APS has historically offered for this drop-off in students taking algebra by 8<sup>th</sup> grade do not withstand scrutiny. Although some argue that students should be held back because they are not ready for algebra by 8<sup>th</sup> grade, as Jay Matthews noted in an article last fall, the alternative to holding students back from algebra in 8<sup>th</sup> grade because they are not ready is to provide more rigorous math instruction in grades K through 8<sup>th</sup> so that students, in fact, are prepared for such courses. As Mr. Matthews recounted, based on a 2006 study, those students taking algebra 1 by 8<sup>th</sup> grade "stayed in the mathematics pipeline longer and attended college at greater rates" than similar students who took algebra in 9<sup>th</sup> grade. He notes that public charter schools focusing on disadvantaged students train teachers to prepare students for algebra 1 and make sure that most students take the course by 8<sup>th</sup> grade. There is no reason that APS could not take a similar path.

**Limited Focus on Writing.** APS continues to struggle in providing students a sufficient foundation for the type of writing they will see in college. Although this is difficult to measure,



the English Language Arts Advisory Committee (ELAAC) conducted a <u>survey</u> of APS alumni in college asking about how prepared they were for college level writing. The responses almost uniformly reflected a need for more writing instruction, particularly on longer research papers. Comments from APS graduates included:

- "I did not know how to write. It was embarrassing. I had never written a research paper and the first semester I had to write 3. I did terribly on my freshman papers. It really held me back a year because I was floundering and lost confidence about my major. . . . . Also how to write longer papers. Many of my college classmates had written long papers in high school."
- "I did not know how to write a paper. I had to take remedial English writing. I won't be able to transfer when I want to."
- "Just more about writing and what we have to do at college. I want to transfer and am worried about not being a good enough writer."
- "Could have used more writing practice in high school because I felt unprepared and struggled in my freshman English class."
- "I had to go to the writing center and get a tutor to help me write. I did terrible on my first papers. It was so hard. I did not know what to do. I did not know what they wanted."
- "Style of writing is not at college passing level."
- "More formal writing."
- "More research papers."
- "Practice more research papers! Prepare writing longer papers in shorter amounts of time! I relied on help from my mother and friends."
- "Encouraging students to write beyond a 5-paragraph paper."

This feedback has been available to APS for many years. In fact, in 2019 ELAAC recommended APS increase the focus on formal writing (an initiative that ELAAC has been working on for seven years). Yet, APS has taken few steps to improve the program, prompting ELAAC this January to make an even more prescriptive recommendation for the writing program. Indeed, during a meeting this January, it was disclosed that while the VDOE framework specifies that students will produce a research paper for each grade for grades 7 through 12, the APS program of studies only specifies the need to produce research papers in grades 11 and 12.

**Advanced Academic Options**. APS has provided lackluster middle school options for advanced instruction. For more than a decade, while our neighboring districts of <u>Fairfax</u>.



Loudoun, Alexandria, and Montgomery county have offered advanced and honors classes in middle school, APS has failed to provide that option despite recommendations from the Gifted Student Advisory Committee for a decade. While APS has finally adopted "intensified" classes in 7<sup>th</sup> and 8<sup>th</sup> grade for the 2023-24 school year, pushback from within APS resulted in deferring that option for 6<sup>th</sup> grade students until the 2024-25 school year. While APS' addition of intensified classes is a move in the right direction, it says a lot about the extent to which the school system has a culture of academic excellence that the school system refused to offer such courses for a decade and that those within APS would resist the addition of that program in 6<sup>th</sup> grade. And while APS is just now developing the curriculum for those intensified courses, our peers in neighboring districts have been offering these courses for years.

With respect to advanced and gifted students, the Fairfax gifted program provides four levels of differentiation, providing part-time (level 3) and full-time (level 4) services for students, in addition to advanced differentiation in classes (level 2). Those level 4 services are often taught at schools that are specifically focused on serving advanced students. In 2017, APS retained Hanover Research to conduct an analysis of the most effective gifted education programs. That research, among other things, demonstrated that "achievement scores in homogenous group settings are higher compared to within-class or no-program models for gifted education," indicating that the availability of specialized schools, separate classes, and pull-out models (like those offered by Fairfax) will "help high-ability students perform at higher levels." Despite that research, APS chose to discontinue its pull-out model for gifted students, and to offer only inclass differentiated instruction (the equivalent to level 2 instruction in the Fairfax model).

**Advanced High School Courses.** Two of APS' three high schools see a smaller percentage of their students enrolled in advanced courses (AP, IB, and Dual Enrollment courses) than their peers in Fairfax and Falls Church;<sup>1</sup> the exception being Washington-Liberty.<sup>2</sup> Indeed, in 2019,

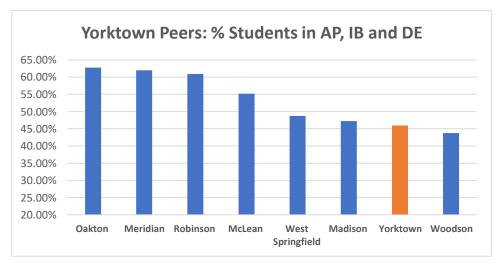
<sup>1</sup> As explained in the <u>First Paper</u> in this series, we identified "peers" of APS' three high schools based on the percentage of students identified as economically disadvantaged attending each high school falling within a range of plus- or minus-5% from the percentage at the APS high school. We used data from 2022 provided by VDOE.

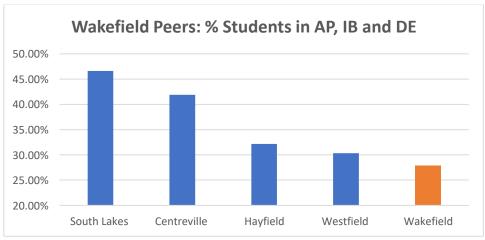
<sup>&</sup>lt;sup>2</sup> VDOE reports the percentage of students who enrolled in advanced courses, including AP, IB, or dual enrollment courses. We have summed the percentage of students enrolled in each of those three types of advanced courses. This likely overstates the actual percentage of students taking these advanced courses for some schools, particularly schools that reflect a substantial portion of students enrolled in both IB and AP courses, which include Meridian, Robinson, and



Montgomery County reported that the number of students taking at least one AP/IB exam was around 75%, which is substantially higher than the percentage of students taking such courses in APS. The APS equity dashboard, which tracks participation in AP, IB and Dual Enrollment courses, reflects that the total percentage of APS students enrolled in advanced courses was 49.1% in 2019, and has declined to 47.7% in 2021-2022.

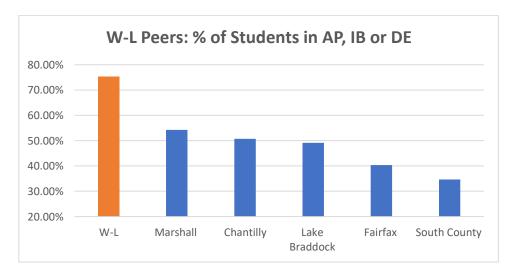
On a school-by-school basis, the data confirm that APS generally trails its peer high schools.





W-L. For example, at W-L, students can (and often do) take both AP and IB courses. Thus, adding IB (27.5%) and AP (40.2%) together undoubtedly double-counts many students, who take both AP and IB courses. Absent that potential double-counting, W-L is closer to the average of its peer high schools.

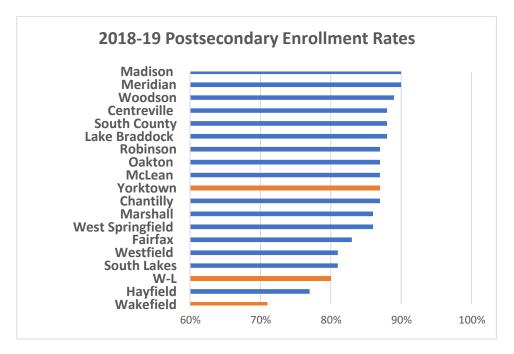




The low participation rate in AP, IB and Dual Enrollment courses reinforces the perception that APS is not developing a culture of high academic expectations.

**Post-Secondary Enrollment Rates:** Perhaps not surprisingly, APS high schools also perform below their peers with respect to the rate at which students are enrolled in post-secondary schools. Although the state data measuring this variable is from the 2018-19 school year, it reflects that the rate of post-secondary enrollment, particularly for Wakefield (71%) and Washington-Liberty (80%), are at or near the bottom of their peers from Fairfax and Falls Church. As noted above, the level of rigor in high school course work is one of the strongest predictors of students earning a post-secondary credential. The reduced rate of post-secondary enrollment from APS high schools raises questions about the extent of academic rigor.

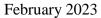




Your Voice Matters Survey. APS' most recent "Your Voice Matters" survey lends support to the view that APS suffers from a lack of high academic expectations. Among students in grades 6-12, the category receiving the second lowest score among students was on the topic of "High Expectations." Only 52% of students responded favorably to the question of whether APS set High Expectations. The subcomponents of that survey question reveal that students had a favorable view of teacher expectations of students (scoring teacher expectations at 70% favorable, challenge level in class at 68% favorable, and teachers taking the time to make sure the student understands the material at 63% favorable).<sup>3</sup> But students confirmed a general lack of excitement to learn (scoring only 25% favorable), and low levels of grit or tenacity (scoring 54% favorable on whether teachers encourage students to keep trying when they feel like giving up, 39% favorable on whether they are likely to try a different strategy when they get stuck).

**APS Policies.** The lowered academic expectations can also be seen from APS' grading practices and policies. The most prominent example occurred at the end of 2021, when the APS school Board proposed "equity based" grading practices that would provide no late penalties for

<sup>&</sup>lt;sup>3</sup> It should be noted that these surveys should be revised in future years, as they provide little insight as to whether a student's "favorable" view of teacher expectations reflects student appreciation for relatively low expectations, or student appreciation that teachers are appropriately challenging them.



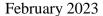


homework, no extra credit, unlimited redoes and retakes on assignments, and no grading for homework. Our teachers, and specifically our teachers at Wakefield, <u>pushed back</u> on that proposal, noting that "the changes, if implemented, will also result in the decline of high expectations and rigor in the classroom across all APS high schools." While that equity-based proposal has apparently been shelved for now (likely due to the brave actions of our teachers), APS has nonetheless adopted "no zero" grading policies (where students who make no effort to turn in homework would still receive a "50" as their score), and time-based limitations on <a href="homework">homework</a> (permitting only 1-hour of homework per class per week at high school).

Even before those grading practice were adopted, grade inflation invisibly lowered expectations for students. Although we have not found reports from APS on grade distribution from the 2021-22 school year, in prior years APS reported to the Board on those distributions. Those reports (for example, here) routinely reflected that more than half (and as many as 60%) of grades given out were As, and typically almost 80% of the grades were either "As" or "Bs." While such prolific distribution of high grades may ease concerns of parents, it does not serve to motivate students, nor does it necessarily reflect mastery of the content. In fact, evidence shows that teachers with high grading standards can increase student performance markedly over the performance obtained by teachers with the lowest standards. Grade inflation is so severe that (when combined with the ranking policy of W-L high school) it will result in approximately 200 "valedictorians" in this year's W-L senior class. The "everyone gets a trophy" approach to grading undercuts any message of "educational excellence."

**APS Tone from the Top:** The lack of high academic expectations is also reflected in the goals set by top leadership at APS. As we have previously <u>reported</u>, the principal academic goal set forth in APS' current performance objectives – to be achieved by 2024 – is that "elementary and middle school students will annually demonstrate growth by a minimum of one level . . ." One-year's-worth of growth in one-year – and only for students in elementary and middle school – hardly sets a high bar for the APS system as a whole. There are *no* student success goals set for high school students at all, and for students performing at advanced levels, the only goal is to avoid deterioration (e.g., those "performing at the advanced level will continue to perform at the advanced level.").

APS' modest academic goals pale in comparison to the far more detailed and stretch goals of surrounding districts. For example, <u>Fairfax</u> set a goal of 100% of students passing the reading and math SOLs by 2024, and 100% of students showing proficiency in at least one AP or IB course. <u>Montgomery</u> County set a goal (among other things) of increasing the number of students invited to participate in enriched and accelerated programs, and 100% of students





meeting college and career readiness standards. Prince William targeted an 85% pass rate on reading and math SOL scores, increasing the pass advanced rates by 10% across all grades (note, at APS High School pass advanced rates in math only range from 6-11%), and an increase in science students participating in VJAS, and regional, state and international science fairs, and the development of a STEM-center. Unlike those districts, APS has set no goals regarding the students taking AP/IB courses, or passing the reading/math SOLs, or meeting college and career readiness standards. If APS is not going to challenge itself to achieve such results, it is perhaps unsurprising that it trails its peers on those measures.

While APS has now created a student progress dashboard, such a tool is only useful if APS and the Board evaluate what that performance says about APS academic success, and make plans to correct deficiencies and improve overall performance. Yet, there is little if any discussion at the Board level directed to the question of how to improve the remarkably low student performance on standardized tests in many APS schools. Indeed, at the February 2022 School Board meeting to review the strategic plan, APS acknowledged that for its one-and-only measure of academic growth (one year's worth of progress), APS has not yet even developed a metric to measure that growth, and APS will not do so until the summer of 2023, one year before the end-date for the strategy period. Worse yet, not a *single board member* raised any questions about this abject failure, even though Arlington Parents for Education flagged the issue at the beginning of the Board meeting. This is consistent with the APS School Board's general lack of focus on academics: It spent almost no time (either last year or this year) addressing the learning loss created by school closures, and last year the Board <u>allocated</u> only 8% of its time to addressing academic issues. If detailed goals are not set, benchmarks are left unevaluated, and the Board fails to focus on academic achievement, it sends and unmistakable message to all within APS about the priority placed on such academics.

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Cumulatively, this data reflects that APS has not put sufficient focus on creating a culture of academic excellence. This is seen in math—where only a minority of students progress to algebra by 8<sup>th</sup> grade. It is seen in writing—where alumni report being unprepared for college level writing. It is seen in the APS middle school program—where APS has historically not provided accelerated courses. It is seen in the gifted program—where APS has failed to offer the level of differentiation and scope of services offered by our neighbors (or recommended by APS' own consultant). It is seen in the relatively low enrollment in advanced courses in high school, and also in the comparative statistics of APS students pursuing post-secondary education. It is seen in the grading and homework policies. And it becomes obvious when considering the



lackluster objectives for academic progress set by school leadership – objectives that the school system has yet to even figure out how to measure, let alone report on.

Although the data tells a compelling story, we also sought input from parents who have had students attend both APS schools, and either private schools or schools in other counties, to see anecdotally how APS measures up in terms of academic expectations. The feedback obtained is consistent with the above data. Some of the comments received include:

- "The [parochial private school] focuses on fundamentals. Letter grades! Textbooks! Pento-paper exercises! Handwritten five-paragraph essays are required and common. Grammar is taught! Knowing grammar is mandatory and graded. Spelling errors are unacceptable."
- The [parochial private school] "has more testing (weekly quizzes) in most classes, so that deficiencies are caught early. There is more feedback from teachers on the assignments."
- "Minimal use of technology. NO IPADS! Some use of Chromebooks in class only."
- The [parochial high school] "has a stronger emphasis on fundamentals, especially in language arts. Our honor-roll APS kid had some huge gaps in grammar. The [parochial] schools make more use of textbooks and do more writing. They are smaller and also better able to hold kids accountable for their work."
- Several comments about parochial private schools having much fewer (if any) reports of fights, vaping, cutting, and alcohol abuse.
- In [a Fairfax high school], it is reported that there are no (or almost no) fights, and that there is an expectation of showing respect and decency, compared to APS schools where drugs and fights are more prevalent. This week we had one fight at our high school and several instances of smelling weed in the bathrooms.
- In Mclean schools, the gifted program seems more advanced and tailored to children's readiness for progress. They have more rigorous support and contests that they participate in.
- "The [secular K-12 private school] is better in math content, grading and homework. They have an ambitious syllabus with good content coverage and they stick with it. Secular private schools seek to maximize AP performance. APS does not always offer as rigorous intensified content."
- "The [secular private school] grades hard. There is a wide dispersion of test results so students are motivated to study hard. APS grading is much softer in comparison, with a seemingly narrower dispersion of test results."



- "The [secular private school] assigns homework, sometimes a lot. That is a major source of difference with APS, particularly in the wake of APS's homework-policy change."
- "My son [at parochial private school] kept begging to go back to APS middle school. When I asked him why he said 'none of my APS middle school friends get any homework at all. I'm tired of doing homework at [the parochial] school."
- "The [local magnet school] encourages students to participate in national math competitions and frequently have students who place at those competitions."
- "In [the local magnet school], they encourage students not only to take calculus by their senior year, but to take multiple post-calculus courses using college level texts while still in high school."
- "In the [secular private school], students write many 3-5 page papers that are extensively marked up by teachers. High school students are required to write timed, in-class essays."
- "As a parent, I am very concerned about the lack of writing in APS middle school. By 7<sup>th</sup> grade, my son [in parochial private school] had written a 6-page research paper (and many shorter papers). By contrast, my son who went through APS middle school did not write a 6-page research paper until 10<sup>th</sup> grade."

Of course, the above comments represent only the comments we received, and may not represent everyone's experience with other school systems, but in broad strokes they highlight many of the academic deficiencies apparent from the data. In short, many of APS' peers have greater focus on the fundamentals of education, particularly in grammar and writing. They put their resources into books and paper exercises, not in technology or facilities (one parent reported that facilities in their parochial school, in fact, were a bit old and lacked the fancy gyms and auditoriums seen in APS). They engage their students through participation in contests and competitions, and have more ambitious curriculum. They hold their students accountable for their work, generally give them more homework, and have a broader dispersion of grades. Those components of success have little (if anything) to do with financial resources (indeed, APS has a higher cost per student than does Fairfax and even many parochial schools). It is the product of school cultures focused on academic fundamentals that deliver academic excellence without excuses.

In our third installment in this series, we will address those steps that APS could take to reinvigorate a culture of academic excellence within the school system.