

Pennsylvania academic achievement from 2015 to 2025

Introduction: This *Policy Brief* examines statewide student scoring on the Keystone exams given to 11th-graders. Several Allegheny County school districts' results are also reviewed with emphasis on Pittsburgh Public School District (PPS).

2019 to 2025 changes

The review begins with a look at the 2019 to 2025 comparison of achievement results since 2019 was the last year before COVID and its deleterious impact on educational achievement. At the state level, Keystone results for all three exams—math (Algebra 1), biology and literature (the stand-in for English)—all fell significantly from 2019 to 2025.

The table shows the changes in percentage scoring at three levels, proficient or advanced, basic and below basic.

Statewide Keystone test scores:

	2019			2025		
<i>Percent scoring:</i>	<i>Proficient/Advanced</i>	<i>Basic</i>	<i>Below Basic</i>	<i>Proficient/Advanced</i>	<i>Basic</i>	<i>Below Basic</i>
Math	63.3	26.2	10.5	44.3	36.4	19.3
Biology	63.2	20.5	16.3	49.4	27.2	23.4
Literature	71.5	18.9	9.6	62.1	24.2	13.7

The test score data point to a dramatic fall in scoring for math and biology from 2019 to 2025 across nearly 120,000 students taking the tests with the literature scores down but not as dramatically. These tests were originally to be used as graduation requirements. But as an earlier *Policy Brief* from [April 2022](#) noted, the original requirements of proficiency on Keystone exams has been replaced through legislation that supplements the original proficiency requirement and adds a litany of other ways to earn a high school diploma. Clearly, the exam results from 2025 would have negated a lot of diplomas if the requirements had not been changed.

Note that statewide per student current spending was \$20,191 in 2023-24, the latest figures posted by the Pennsylvania Department of Education. Statewide average

spending on instruction stood at \$13,473, with a very wide range across school districts. For example, PPS’ instructional spending per student was \$20,443 while the Peters Township district in Washington County spent \$10,921. Mt. Lebanon (\$12,902) and North Allegheny (\$13,002) were close to the state average.

Pittsburgh Public Schools 2019 to 2025

For comparative purposes the PPS’s Keystone test score data are shown in the following table.

Pittsburgh Public School District Keystone test scores:

	2019			2025		
<i>Percent scoring:</i>	<i>Proficient/Advanced</i>	<i>Basic</i>	<i>Below Basic</i>	<i>Proficient/Advanced</i>	<i>Basic</i>	<i>Below Basic</i>
Math	47.6	34.8	17.6	33.8	42.2	24.0
Biology	39.3	27.9	32.8	35.0	30.9	34.1
Literature	58.2	24.9	16.9	54.4	29.5	16.1

In the Pittsburgh Public Schools, there was a substantial drop in the percentage scoring at the proficient or advanced level in math while smaller losses occurred in biology and literature. Notably PPS’ Keystone proficient or advanced scoring percentages trail the statewide scoring in every subject in both 2019 and 2025.

It is also important to note that even in the historically-better performing districts, such as Mt. Lebanon and Peters Township, there was a deterioration in Keystone exam results, particularly math and biology. In Mt. Lebanon, the proficient or advanced percentage in math dropped from 90.2 in 2019 to 81.2 in 2025. In biology, the percentage slid from 90.0 to 82.6. The 2025 numbers are still respectably high but must be disappointing for the district’s parents and school officials.

Similarly, in Peters Township, the percentage scoring proficient or advanced in math dropped from 95.1 to 84.6 and in biology the proficient or advanced score fell from 94.6 to 84.4 percent. These are meaningfully significant declines in scoring and suggest the 2025 scores were still reflecting the massive losses in education during 2020 and the impacts of COVID on school closings and related problems.

To see if weakening was occurring before COVID, scoring data for 2015 was collected.

	State 2015			PPS 2015		
<i>Percent scoring:</i>	<i>Proficient/Advanced</i>	<i>Basic</i>	<i>Below Basic</i>	<i>Proficient/Advanced</i>	<i>Basic</i>	<i>Below Basic</i>
Math	64.6	26.5	9.0	52.4	36.6	11.0
Biology	58.9	22.7	18.4	32.2	31.3	36.5
Literature	72.8	19.8	7.4	64.6	23.3	12.1

At the state level, the percentages scoring proficient or advanced for math and literature were little changed and likely not different enough to rule they were statistically

significant. However, in the case of biology there appears to be a significant rise from 58.9 to 63.2 percent proficient or advanced over the four years 2015 to 2019.

In the case of PPS, biology also saw a significant improvement from 32.2 to 39.3 percent proficient or advanced. Although to be sure, 39 percent is a very weak number notwithstanding the jump from four years earlier. Meanwhile, for math, there was a significant decline from 52.4 percent proficient or advanced in 2015 to 47.6 percent in 2019. At the same time, the literature score also fell from 64.6 percent in 2015 to 58.2 percent in 2019.

In short, biology scores for both the state and PPS improved somewhat while in Pittsburgh, math and literature scores fell appreciably over the period running counter to the overall state scores holding steady. Thus, PPS' declining scores in math and literature preceded the COVID-induced weakening.

Conclusion

Clearly, based on Keystone exam test results for 2019 and 2025, at the state level as well as several districts in the Pittsburgh region, 11th grade students' educational achievement was still suffering from the COVID impact on schools from five years earlier. This includes some districts that have been historically strong academically. Moreover, PPS had significant declines in Keystone scores for math and literature from 2015 to 2019 and therefore independent of COVID impacts.

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