

# Trends in Virginia Students Identified as At-Risk for Reading Difficulties: Spring Literacy Screening, 2019-2022

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## OVERVIEW

Literacy and reading are foundational to learning and the importance of developing these skills in early schooling is supported by science. Students who do not have adequate reading skills by the time they exit third grade are likely to continue to struggle with reading, often with negative implications for other aspects of schooling as well, including engagement, academic performance, and self-perception. Literacy screening in the early grades is critical to identifying students who are struggling to learn to read and then providing them with the supports needed to become a successful reader.

The Phonological Awareness Literacy Screening (PALS) K-2 assessment is currently administered in all 132<sup>1</sup> Virginia school divisions to evaluate students' risk for reading difficulties and has been used in the Commonwealth for over 20 years. PALS is a primary and critical source of information for families, educators, administrators, and policymakers to understand student performance on key literacy indicators at the individual, classroom, school, division, and state level.

PALS uses benchmark scores to indicate student risk level: students who score below the benchmark are at high risk for persistent reading difficulties. In turn, these benchmark scores guide the allocation of funding in support of early literacy intervention for students who score below the benchmark through the Early Intervention Reading Initiative (EIRI). The resources afforded by EIRI funds can be invaluable for students having difficulty learning how to read. However, it is important to remember that students who score below the benchmark are not the only students at risk. Those scoring in the mid-range of the scale, slightly above benchmark, are also at elevated risk for reading difficulties and can benefit from resources targeted to support their early literacy development.

Each year, PALS scores provide important information about students' literacy and reading competencies throughout the course of the school year (Fall, Spring, and often Mid-Year assessments). Additionally, comparing multiple years of PALS data reveals trends in changes in below-benchmark rates over time across the full student population, by grade-level, and by demographic grouping.

Multiple years of data are critical to understanding the effect of the ongoing COVID-19 pandemic on students' literacy development, particularly how students in different grade levels and with shared demographic characteristics are performing on literacy assessments after multiple years of interrupted learning. For example, across K-2, students who were in kindergarten in the 2021-22 school year have experienced the least amount of pandemic-related learning disruption, whereas students who were in second grade have not yet experienced a school year untouched by COVID-19.

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<sup>1</sup> Fairfax County Public Schools (FCPS) began participating in PALS in Fall 2021, in kindergarten classrooms only. FCPS data are not included in this report to provide consistency in cross-year comparisons.

It is also important to examine trends among student demographic groups to identify variability across groups and determine those who are, on the whole, at disproportionate risk for reading difficulties or experiencing slower recovery from disrupted learning.

This report includes PALS K-2 data across the three most recent (available) Spring assessment windows—specifically, 2019, 2021,<sup>2</sup> and 2022. Data for Spring 2020 are not reported because PALS was not administered at that time point due to pandemic-induced school closures.<sup>3</sup> These three windows offer the opportunity to examine trends in Spring PALS below-benchmark rates for kindergarten, first, and second grade students since the onset of the pandemic, using 2019 as a pre-pandemic baseline.

Following are key takeaways gleaned from the Spring 2022 PALS data and the comparison of PALS K-2 scores across the 2019, 2021, and 2022 Spring assessment windows.

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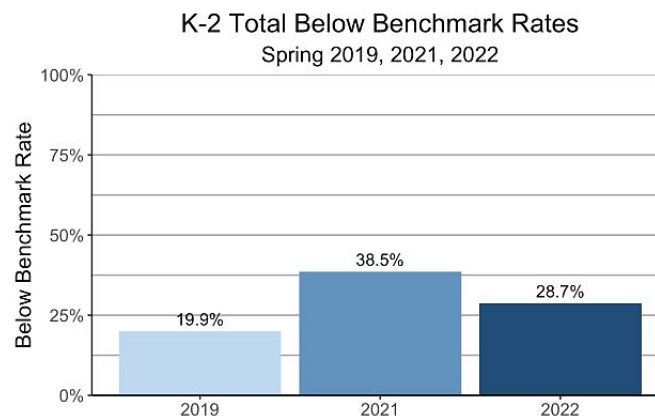
<sup>2</sup> The Spring 2021 rate of K-2 students administered PALS in-person was 98.9%.

<sup>3</sup> The virtual method of administering PALS was not yet available for use.

## KEY TAKEAWAY #1

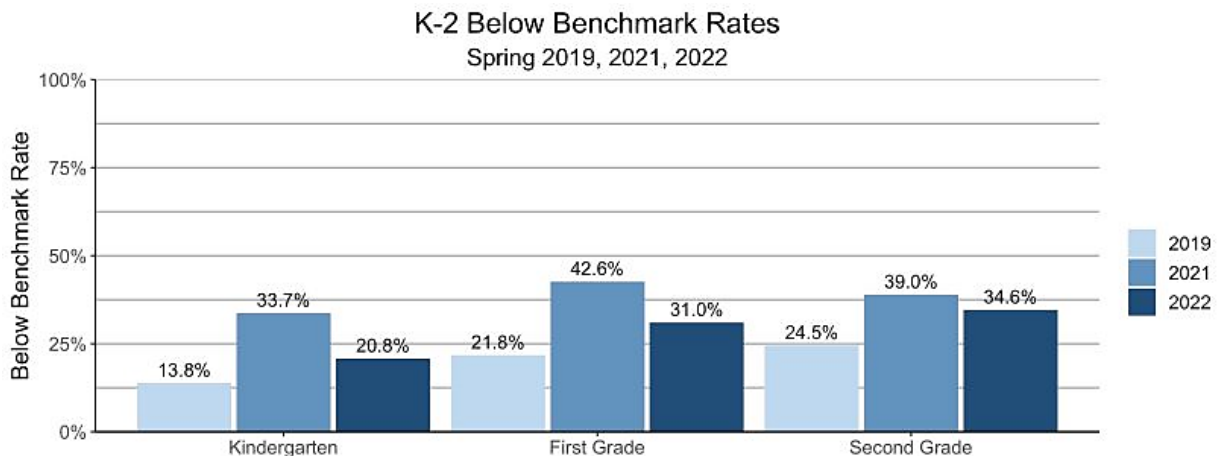
The rate of students scoring below the PALS benchmark decreased from Spring 2021 to Spring 2022. However, the 2022 below-benchmark rate remained higher than that of Spring 2019 (pre-pandemic). Compared to kindergarten and first grade students, second graders showed the least improvement in below-benchmark rates from Spring 2021 to Spring 2022. See Figures 1 and 2.

The below-benchmark rate dropped by nearly 10 percentage points from Spring 2021 to Spring 2022 (a decrease of 18,668 students identified as at-high-risk for reading difficulties). This rate remained about nine percentage points (17,914 students) higher than the 2019 pre-pandemic level.



*Figure 1. Below-benchmark rates for Spring 2019, 2021, and 2022 assessment windows, Virginia-wide, grade levels combined.*

Within grade level, below-benchmark rates declined from Spring 2021 to Spring 2022 by 13 percentage points among kindergarteners and by nearly 12 percentage points among first graders, but by just over 4 percentage points among second graders. Over the past three years, below-benchmark rates have trended upward from kindergarten to second grade meaning that with each year of K-2 schooling, an increasingly higher percentage of students are being identified as at-high-risk for reading difficulties.

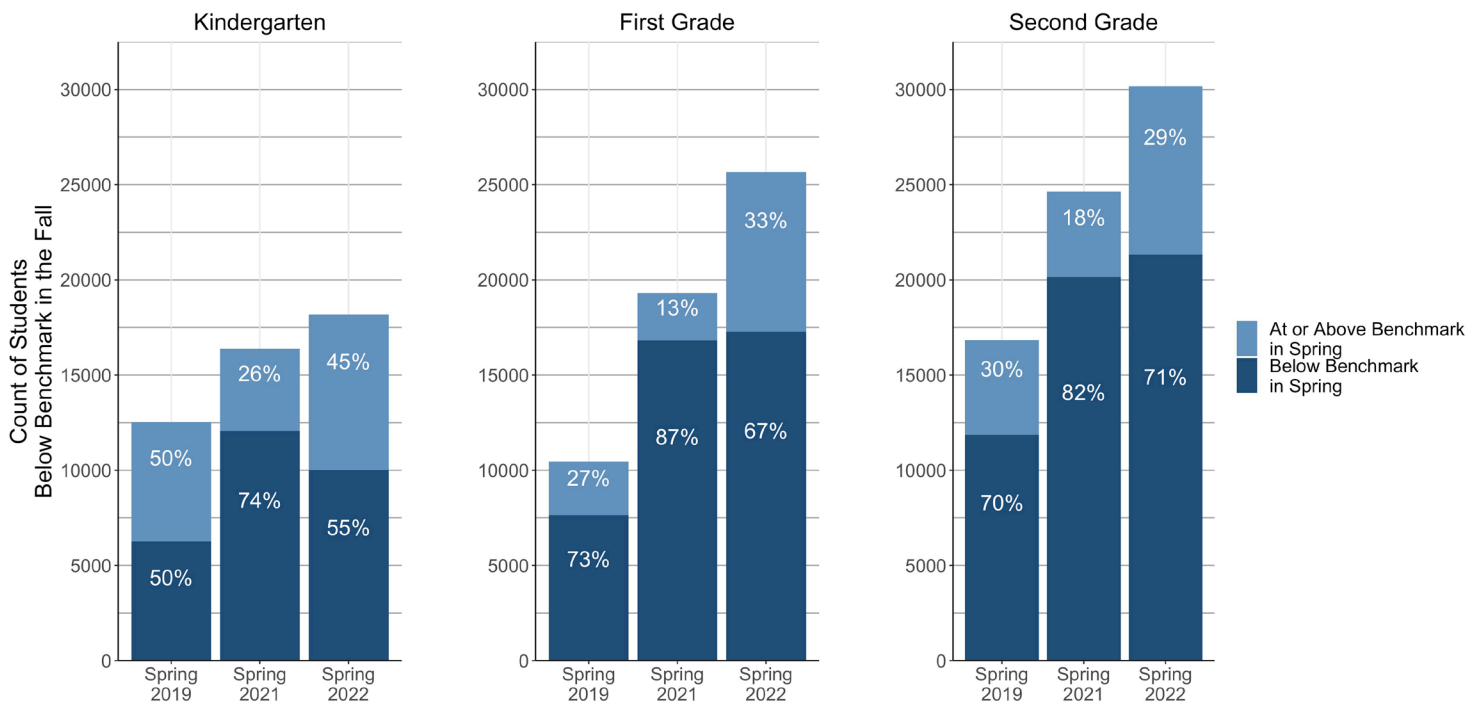


*Figure 2. Below-benchmark rates for Spring 2019, 2021, and 2022 assessment windows, Virginia-wide, by grade level.*

## KEY TAKEAWAY #2

Students who scored below benchmark in the Fall tended to also score below benchmark in the Spring, though the percentage of students with Fall and Spring below-benchmark scores in the 2021-22 school year approximated a return to pre-pandemic levels. Still, rebounding student enrollments mean that even though the percentage of students scoring below benchmark in both Fall and Spring decreased from 2020-21 to 2021-22, the raw number of students falling into this category can still increase, as was the case in first and second grades. See Figure 3.

During the 2021-22 school year, nearly seven of ten students who scored below benchmark in the Fall went on to also score below benchmark in the Spring. Still, the rate of students scoring below benchmark in both Fall and Spring improved in 2021-22, falling from the prior year by 19, 20, and 11 percentage points, respectively, for kindergarten, first grade, and second grade, bringing rates near to pre-pandemic levels. At the same time, student enrollments are increasing, which equates to more students scoring below benchmark in both Fall and Spring. For example, the second grade Fall-and-Spring below-benchmark rate dropped from 82% in 2021 to 71% in 2022; however, this 11-percentage point decrease equated to an increase of about 1,250 students due to higher enrollments and a concurrent increase in the number of students who scored below benchmark in the Fall of 2021.

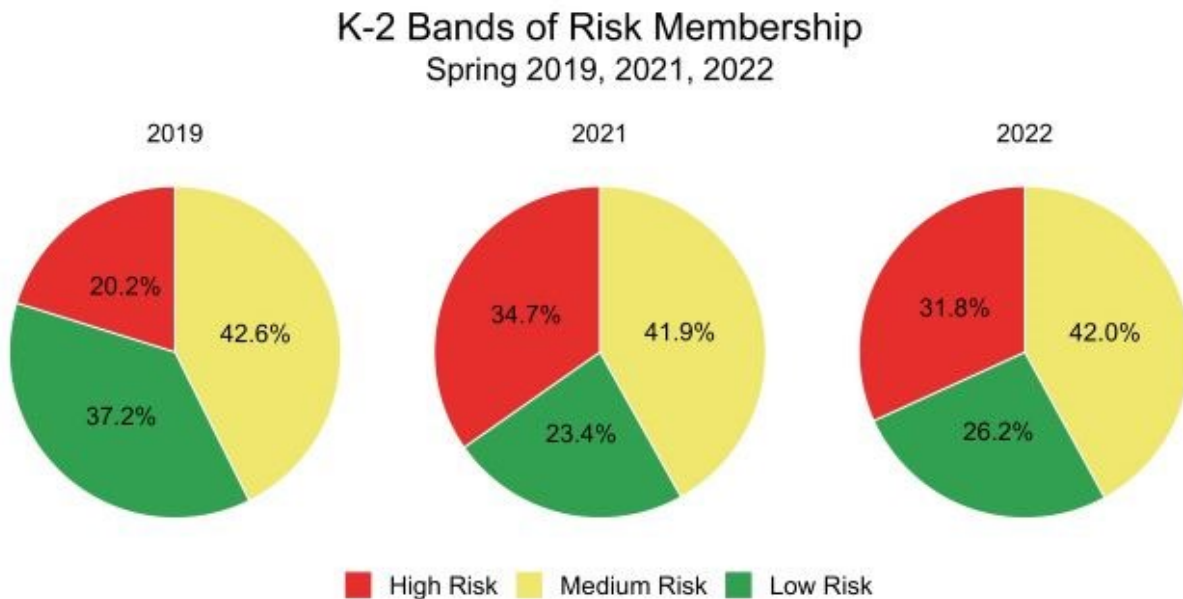


*Figure 3. Proportion of students who scored at or above benchmark and below benchmark in the Spring after having scored below benchmark in the Fall, by school year and grade level. Using the bar to the very right as an example, of second grade students who scored below benchmark in Fall 2021, 71% went on to also score below benchmark in Spring 2022 and 29% went on to score at or above benchmark.*

### KEY TAKEAWAY #3

**In Spring 2022, a large majority of K-2 students were at high or medium risk for reading difficulties. Since the onset of the pandemic, the distribution of PALS scores has shifted, with the proportion of students at high risk for reading difficulties (i.e., below benchmark) increasing and the proportion of students at low risk for reading difficulties decreasing. See Figure 4.**

In 2022, nearly three in four K-2 students were at high or medium risk for reading difficulties, similar to the rates observed in 2021. From 2019 to 2022, the proportion of students scoring below PALS benchmark (high risk) increased by nearly 12 percentage points. During this same period, the proportion of students at low risk for reading difficulties decreased by nearly 11 percentage points.



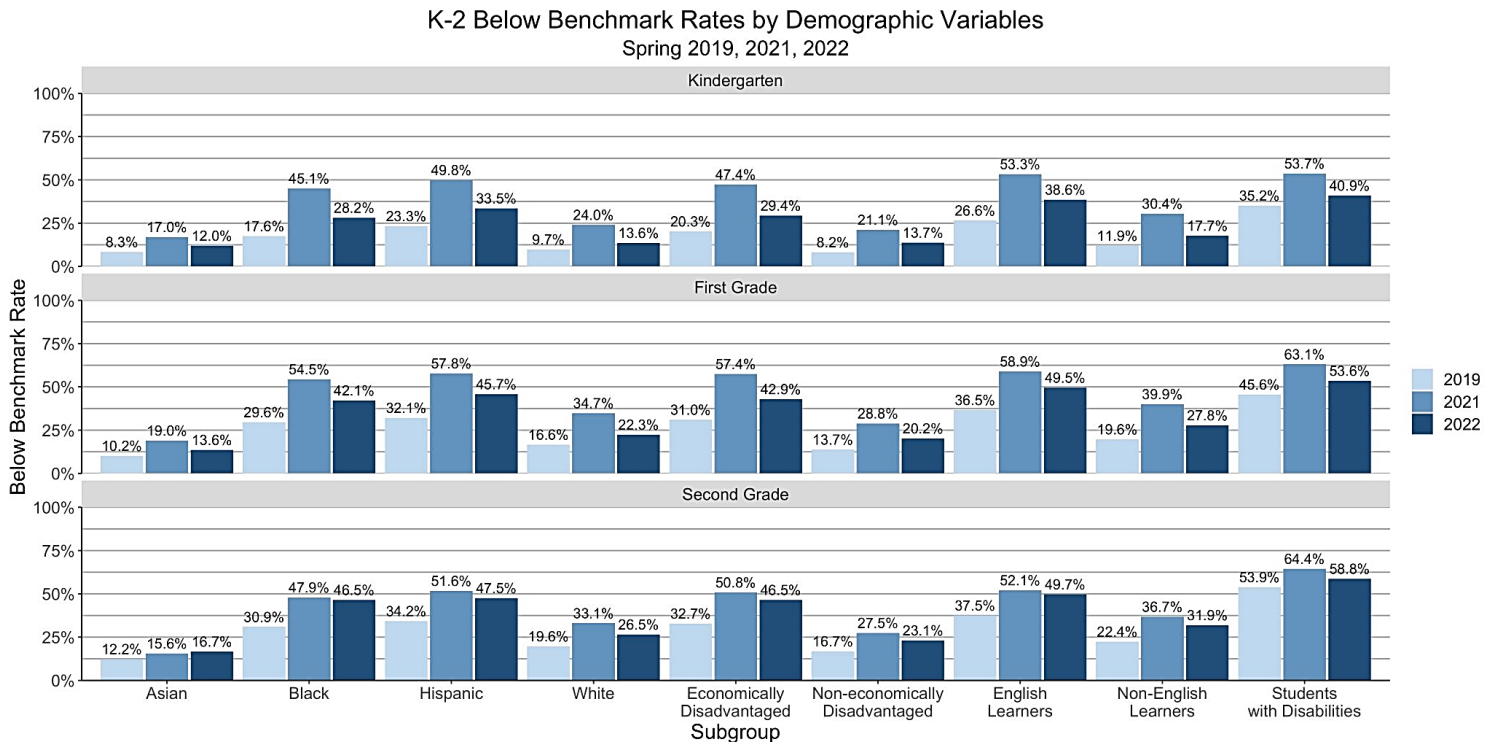
*Figure 4. Proportion of students at low, medium, and high risk (i.e., below benchmark) for reading difficulties by year, grade levels combined.*

#### KEY TAKEAWAY #4

**Student demographic groups and grade levels showed variable below-benchmark rate improvement from 2020-21 to 2021-22. Disparities were apparent in Spring 2022 below-benchmark rates when comparing across student groups and when comparing below-benchmark rates for each student group to the overall Virginia-wide below-benchmark rates. See Figures 5 and 6.**

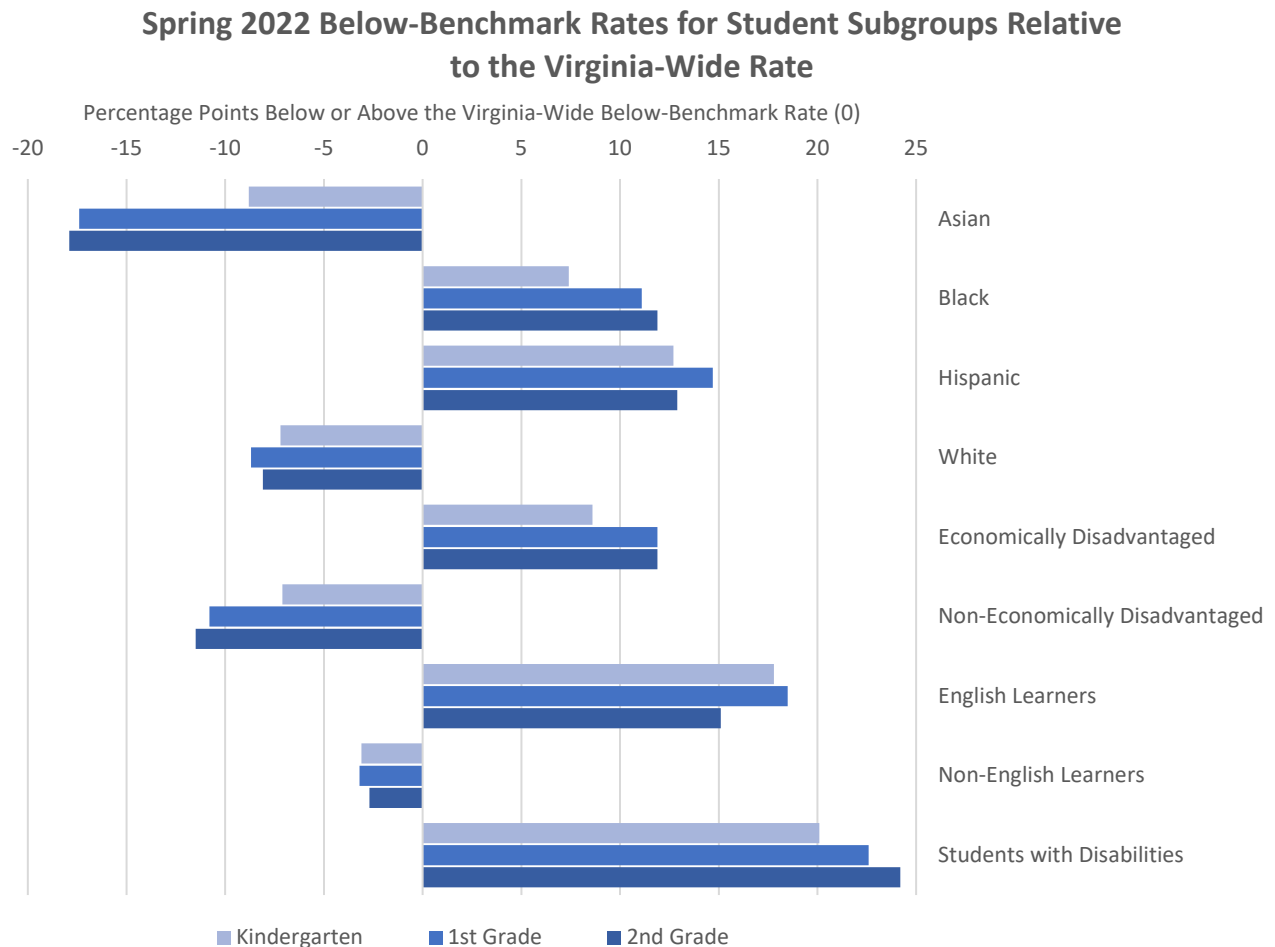
In kindergarten, the below-benchmark rate improved (i.e., a lower percentage of students were below benchmark) from Spring 2021 to Spring 2022 by more than 10 percentage points for all but two student groups. The most pronounced improvement (15 percentage points or more) was seen among students who are Black, Hispanic, economically disadvantaged, or English learners, whereas the least amount of improvement was seen for students who are Asian, White, or non-economically disadvantaged. By second grade, these patterns shifted. Improvement overall was lower (under seven percentage points for all groups), with Black students and English learners showing the least improvement of all student subgroups (one and two percentage points, respectively). In one exception to the overall pattern of improvement, the below-benchmark rate for second grade students who are Asian increased by one percentage point from Spring 2021 to Spring 2022.

When looking only at the Spring 2022 data, students who are Black, Hispanic, economically disadvantaged, English learners, or who have a disability had a below-benchmark rate 2.2 times higher, on average, compared to students who are Asian, White, non-economically disadvantaged, or non-English learners.



*Figure 5. Below-benchmark rates for Spring 2019, 2021, and 2022 assessment windows, by student demographic group and grade level.*

In Spring 2022, students who are Black, Hispanic, economically disadvantaged, English learners, or who have a disability had below-benchmark rates at minimum 15 percentage points *higher* than the overall Virginia-wide rate, whereas students who are Asian, White, non-economically disadvantaged, or non-English learners had below-benchmark rates three to 18 percentage points *lower* than the overall Virginia-wide rate. English learners and students with disabilities had the largest disparities, with below-benchmark rates 15 to 24 percentage points higher than the overall Virginia-wide rate.



*Figure 6. Disparities between the Virginia-wide Spring 2022 below-benchmark rate and each student group. Zero represents the Virginia-wide below-benchmark rate; Bars to the left of zero indicate a student group with a below-benchmark rate lower than the Virginia-wide rate; bars to the right of zero indicate a student group with a below-benchmark rate higher than the Virginia-wide rate.*



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## CONCLUSION

This report provides information on the literacy performance of kindergarten, first, and second grade students in Spring 2022 as well as trends across the last three Spring PALS assessments, which span pre-pandemic to the most recent school year.

Virginia-wide, the rate of students identified as at-high-risk for reading difficulties decreased in Spring 2022 compared to Spring 2021, though rates remained higher than pre-pandemic Spring 2019 levels for all grades. The overall improvement in below-benchmark rates from Spring 2021 to Spring 2022, as seen in the Virginia-wide report, reflects progress being made in the wake of the highly altered 2019-20 and 2020-21 school years.

The extent to which below-benchmark rates improved from Spring 2021 to Spring 2022 varied across grade levels and student demographic groups. Students who were in second grade in the 2021-22 school year have not yet experienced a full school year untouched by the pandemic, and the duration of disruption—three school years—is longest for these students. In essence, second graders have experienced the greatest interruption to instruction, and the lower rate of improvement in below-benchmark rates likely reflects a cumulative effect of disrupted learning opportunities. In addition, students who are Black, Hispanic, economically disadvantaged, English learners, or who have a disability continue to be disproportionately identified as at high-risk for reading difficulties, as indicated by having below-benchmark rates higher than other student groups and the Virginia-wide rates. However, in a positive trend, kindergarten and first grade students from these groups demonstrated improvements in below-benchmark rates from Spring 2021 to Spring 2022 on par with, and in some cases to a greater extent than, their peers.

Results focus largely on below-benchmark rates because the benchmark is linked to EIRI funding. Although students who score below the PALS grade-level benchmark are at the highest risk for reading difficulties, students who score at or just above the benchmark are also at elevated risk. For this reason, we also draw attention to the students in the medium-risk band (i.e., Key Takeaway #3) and encourage consideration of this group of students when planning to support explicit and intensive literacy instruction and intervention in the coming school year.

Taken together, these data evidence both improvement and ongoing disruption to students' early literacy development due to the pandemic. Many students continue to have difficulties developing basic early literacy skills. Effective instruction and intervention are critical because reading difficulties typically persist for students who do not develop adequate reading skills within the first three years of schooling. In turn, reading deficits often compound to negatively affect other areas of academic learning, engagement, and success.

Just as students must be supported in their literacy development, classroom teachers, special education teachers, and reading specialists must be supported in their work. It is imperative that educators are knowledgeable in science-based reading instruction and have access to high-quality resources to intensify reading instruction and intervention. The Virginia Literacy Partnerships (VLP) Office encourages administrators and educators to visit the [VLP website](#) for access to resources that can aid in the use and interpretation of PALS data to guide decisions related to students' literacy needs. Resources include training tools to support educators in their implementation of high-quality literacy instruction for all students and delivery of individualized support to those students in need of more targeted and explicit instruction, including students at or just above the PALS benchmark.