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PACER Pennsylvania Clearinghouse for Education Research

State of Inequity

Disparities in Pennsylvania School Districts by Degree of Funding Adequacy

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Introduction

For the first time in Pennsylvania history, all three branches of state government agree—as reflected in official policy—that hundreds of school districts are inadequately funded.

In 2023, Commonwealth Court President Judge Renée Cohn Jubelirer ruled that current school spending violates the state constitution's mandates to support a "thorough and efficient system of public education to serve the needs of the Commonwealth" and provide equal protection of law.[1] Then, in July 2024, with the passage of the state budget, the Pennsylvania General Assembly and Governor enacted a new method for determining school funding "adequacy gaps" — the difference between current funding and adequate funding — in each school district.[2] Based on this method, the Pennsylvania Department of Education (PDE) found adequacy gaps in 364 of the state's 499 school districts and calculated a total statewide adequacy gap of $4.8 billion.[3]

In this brief, we use PDE's new adequacy gap calculations to examine the *state of inequity* in Pennsylvania's public education system.[4] Specifically, we group school districts by degree of funding adequacy and use public data from PDE to compare average rates of (1) student need, (2) educational opportunity, and (3) student outcomes in each group.[5]

We find that on average, compared with adequately funded school districts, Pennsylvania's most inadequately funded districts:

- **Serve more students who require additional supports**, including higher shares of students with economic disadvantage, experiencing homelessness, receiving special education, and learning English;
- **Provide lower quality educational opportunities**, as measured by the number of teachers and other professional staff per student, average staff salaries, average staff experience, and share of teachers certified through emergency permit; and
- **Experience worse student outcomes,** in terms of standardized test scores, graduation rates, and dropout rates.

On most indicators, the larger the districts' adequacy gaps, the greater the disparities compared with adequately funded districts.

An **Appendix** provides the weighted averages on each indicator for each adequacy grouping. All sources and the raw data for individual school districts are provided in a spreadsheet that is available for download.

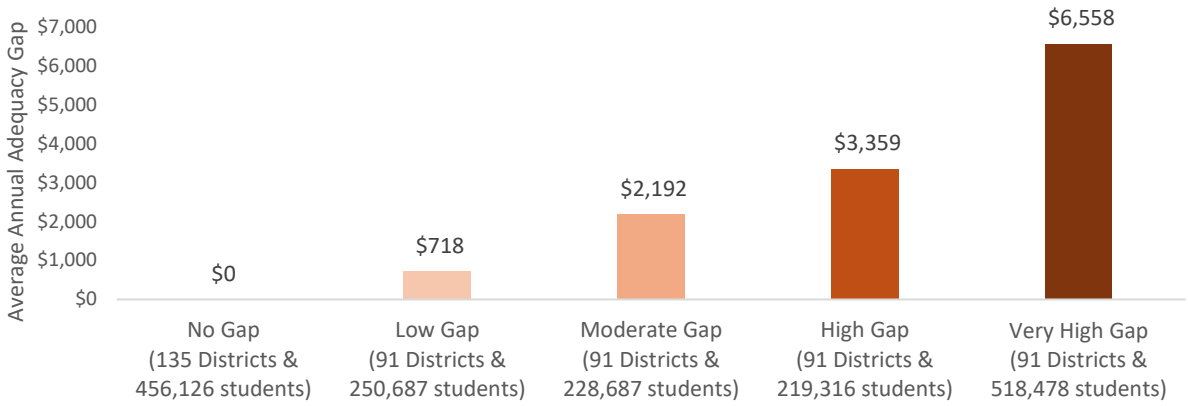
Grouping and Comparing Districts by Size of Funding Adequacy Gap

Using the legislature's enacted methodology, PDE calculated that 135 of Pennsylvania's 499 school districts are adequately funded with the remaining 364 school districts having an annual funding shortfall, or adequacy gap. Adequacy gaps range from a low of $14 per pupil to a high of over $13,000 per pupil. For this analysis, Pennsylvania's 499 districts are compiled into five groups—the 135 districts having zero adequacy gaps were placed in one group and the remaining 364 districts were divided equally into groups of 91 districts based on the size of their annual per pupil school funding adequacy gap as follows:[6]

(1) **no gap** (135 districts are adequately funded and have zero adequacy gaps),
(2) **low gap** (91 districts with adequacy gaps between $14-$1,483 per pupil),
(3) **moderate gap** (91 districts with adequacy gaps between $1,491-$2,842 per pupil)
(4) **high gap** (91 districts with adequacy gaps between $2,851-$4,064 per pupil),
(5) **very high gap** (91 districts with adequacy gaps between $4,074-$13,035 per pupil)

The average annual per pupil adequacy gap for each group and the total number of students in each group are shown in Figure 1.

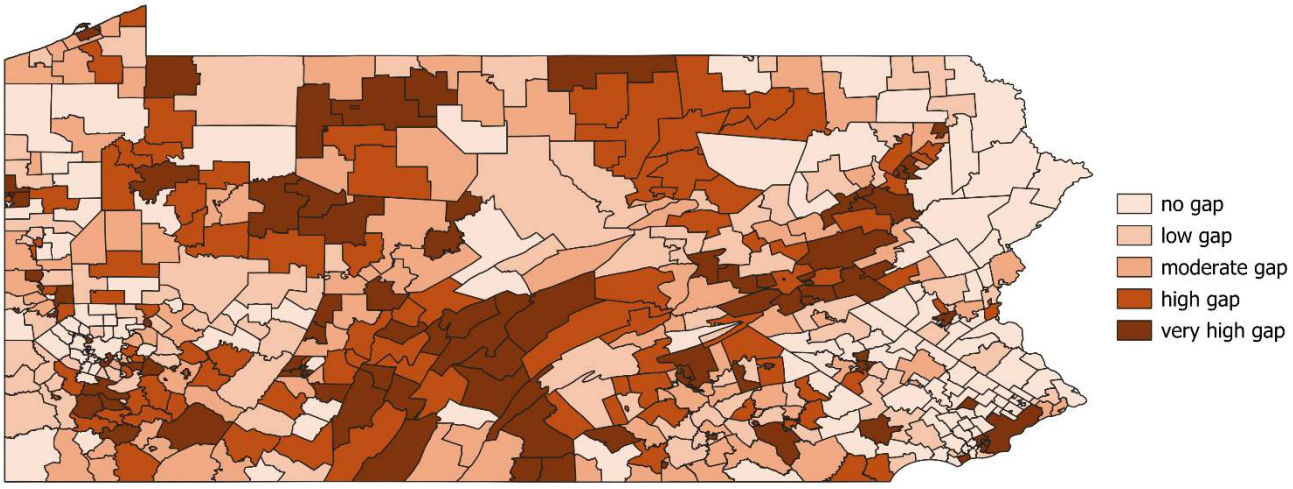
Figure 1: Pennsylvania School Districts Grouped by Size of Average Per Pupil School Funding Adequacy Gap, 2024



Sources: PDE's Ready to Learn Block Grant (RTL) July 2024 and 2024-25 Estimated Basic Education Funding (BEF).
Note: Total gaps include Adequacy Gap and Poverty Supplement; student count is based on average daily membership (ADM)

Figure 2 maps each school district by adequacy gap grouping, demonstrating that—while some areas of Pennsylvania have greater concentrations of the most or least adequately funded districts—in general, rates of school district funding adequacy and inadequacy are widely distributed across the state.

Figure 2: Geographical Distribution of Pennsylvania School Districts by Size of Per Pupil Funding Adequacy Gap, 2024



In the three sections below, we compare each group of districts on weighted average rates of (1) six indicators related to student need, (2) five indicators of educational opportunity, and (3) five indicators of student outcomes. The average rate for each indicator for each district grouping is weighted by district size.

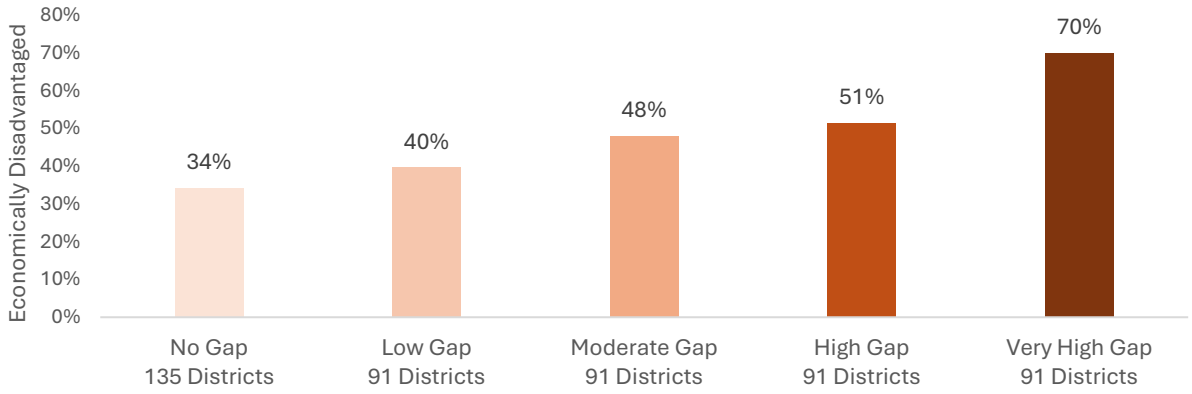
1. Comparing Student Need in Districts by Adequacy Gap

In this section we examine the degree of student need by school district funding adequacy gap. Specifically, in each grouping we compare average rates of students with economic disadvantage, students experiencing homelessness, students receiving special education, and students learning English as a second language, all categories considered by the Pennsylvania Commonwealth Court in determining student needs in Pennsylvania school districts. We also compare rates of charter school enrollment which is associated with greater costs to school districts. *We find that on average students with the greatest academic needs, and thus those that require greater resources to equitably educate, are more heavily concentrated in districts with the largest adequacy gaps.*

Students with Economic Disadvantage

Economic disadvantage is a measure of student poverty or family income annually reported by all Pennsylvania school districts. As shown in Figure 3, the larger the average funding gap for each school district grouping, the larger the concentration of students who are economically disadvantaged. The 91 districts with very high adequacy gaps enroll on average 70% economically disadvantaged students, more than twice the average rate of 34% in districts with zero funding gap.

Figure 3: Percent Economically Disadvantaged Students in PA School Districts Grouped by Funding Adequacy Gap, 2023-24

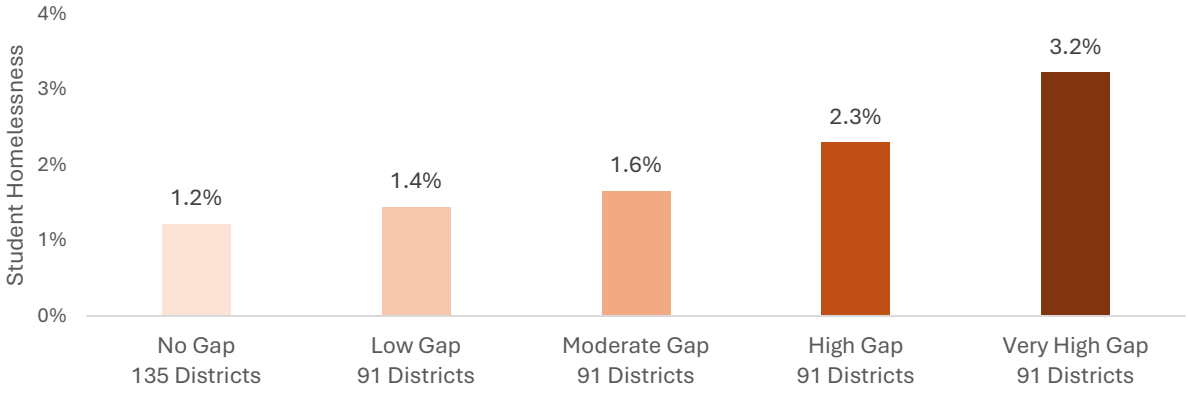


Sources: PDE's RTL Block Grant July 2024 and Future Ready Index 2023-24.
Note: Rates reflect an average of districts in each grouping, weighted by the number of students in each district.

Students Experiencing Homelessness

Homelessness is one of the harshest consequences of extreme poverty and schools require greater resources to effectively serve students experiencing its traumatic effects.[7] Because student homelessness is related to economic disadvantage, it is unsurprising that we see similar trends in Figure 4, with average rates of student homelessness increasing in districts with greater school funding shortfalls.

Figure 4: Percent Students Experiencing Homelessness in PA School Districts Grouped by Funding Adequacy Gap, 2023-24



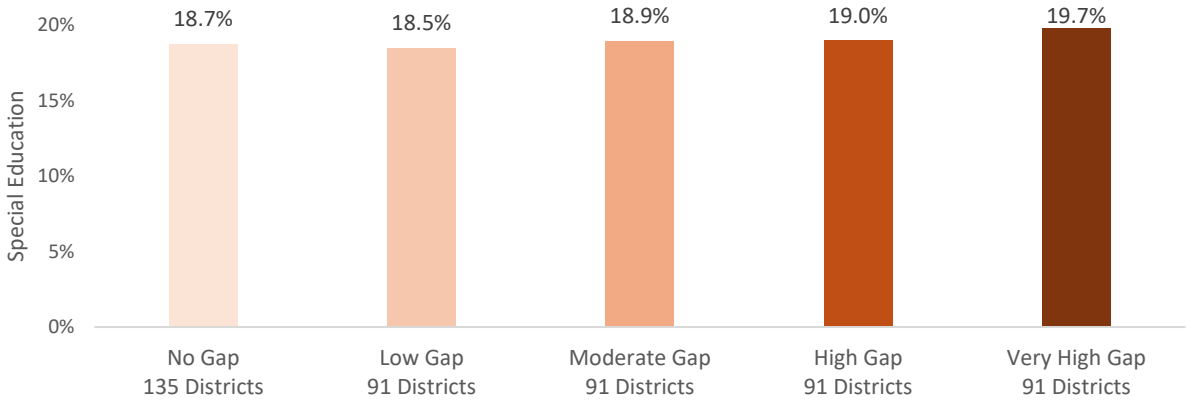
Sources: PDE's RTL Block Grant July 2024 and PDE's Future Ready Index 2023-24.
Note: Rates reflect an average of districts in each grouping, weighted by the number of students in each district.

Special Education

Notably, all school districts bear the same legal and financial responsibilities to provide an appropriate education to students eligible for special education, regardless of school funding adequacy.[8] Figure 5 shows that disparities between school districts' shares of

students receiving special education are small, but still present. Very high gap districts serve the highest rate of students receiving special education (19.7%), compared to 18.7% in no gap, adequately funded, districts. Low, moderate, and high gap districts have similar rates of students receiving special education compared to no gap districts.

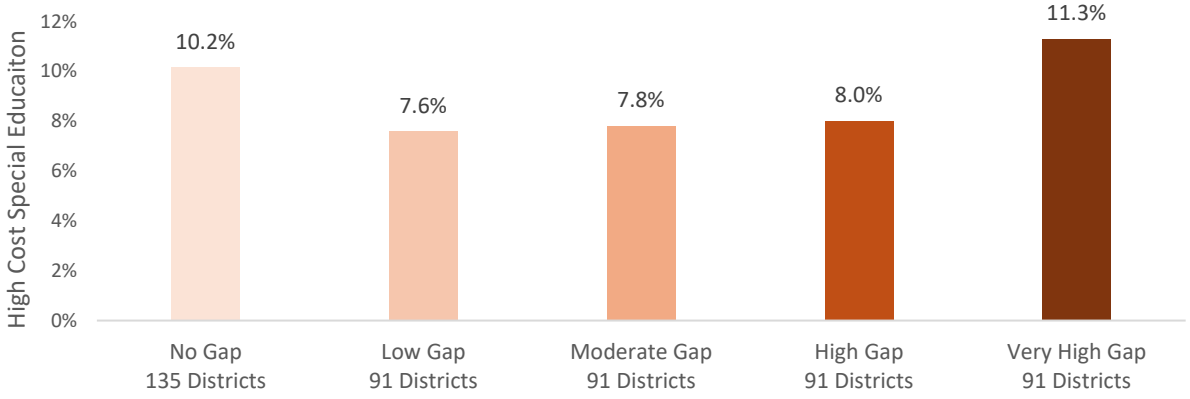
Figure 5: Percent Students Receiving Special Education in PA School Districts Grouped by Funding Adequacy Gap, 2023-24



Sources: PDE's RTL Block Grant July 2024 and Future Ready Index 2023-24.
Note: Rates reflect an average of districts in each grouping, weighted by the number of students in each district.

Pennsylvania categorizes students receiving special education into several cost categories for state funding purposes. To further probe districts' special education responsibilities, we also examine rates of students receiving high-cost special education services in each adequacy gap grouping.[9] Note that the most recent data on special education cost categories is for the 2021-22 school year.[10] Figure 6 shows that, of the students receiving special education, very high gap districts also enrolled the highest average rate (11.3%) of students receiving services categorized as high cost. Adequately funded districts enrolled the second highest rate (10.2%), while the three middle groupings enrolled lower rates, between 7.6-8%.

Figure 6: Percent of Special Education Students Receiving High-Cost Services in PA School Districts Grouped by Funding Adequacy Gap, 2021-22

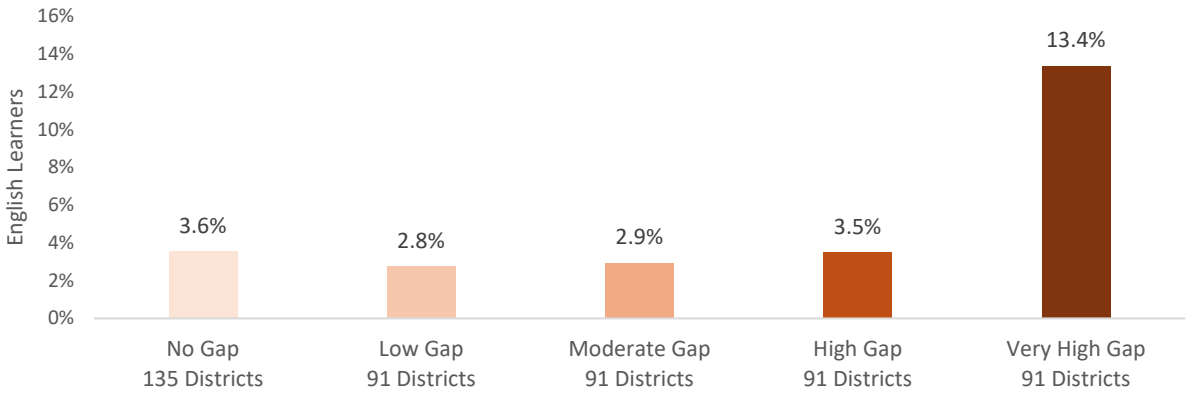


Sources: PDE's RTL Block Grant July 2024.
Note Rates reflect an average of districts in each grouping, weighted by the number of students in each district.

English Learners

English learners, or students for whom English is not their first language require additional resources and services to effectively meet their educational needs.[11] English learners comprised 6% of student enrollment statewide in 2023-24, but they were concentrated in the most inadequately funded school districts with similar rates in the other four groupings, as shown in Figure 7.

Figure 7: Percent English Learners in PA School Districts Grouped by Funding Adequacy Gap, 2023-24



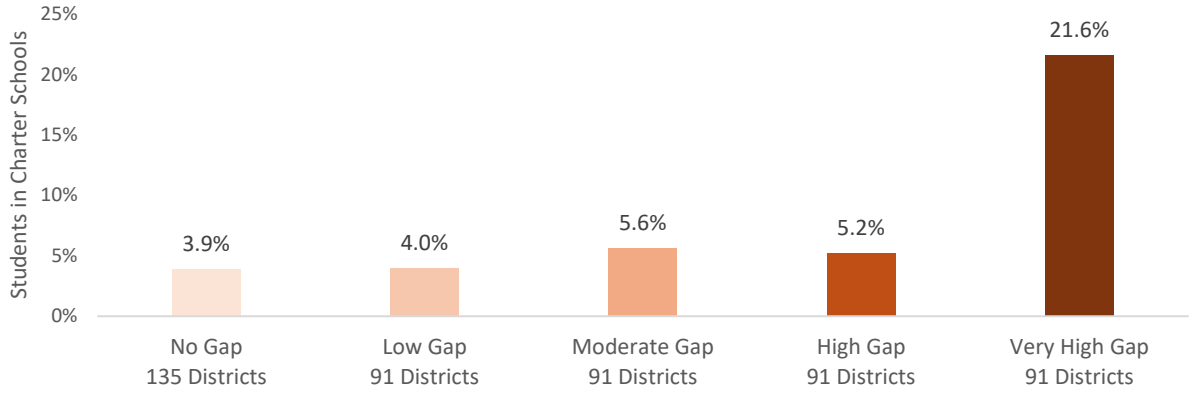
Sources: PDE's RTL Block Grant July 2024 and Future Ready Index 2023-24.
Note: Rates reflect an average of districts in each grouping, weighted by the number of students in each district.

Students in Charter Schools

Pennsylvania does not calculate adequacy targets or adequacy gaps for charter schools. Rather, for state funding purposes charter school students are counted in the average daily membership (ADM) of each student's school district of residence. Charter school demographics are not publicly reported by district of residence; thus, the analyses above do not include students in charter schools. However, RFA found that charter school expansion, or adding charter schools to a school system, creates "stranded costs" and an overall negative fiscal impact on the school districts that pay for charter school tuition.[12]

To better understand how these costs are borne, we examine rates of charter enrollment by district adequacy gap. As shown in Figure 8, charter school enrollment was heavily concentrated in the most inadequately funded districts. This raises several considerations. First, that the lack of resources and educational opportunity in inadequately funded districts may drive family interest in charter schools in the first place. Second, with the financial burden shouldered disproportionately by the school districts least able to bear it, the fiscal impact of charter expansion is likely to further exacerbate adequacy gaps. And finally, because the bulk of charter revenues come from district tuition payments that are based on the district's own spending, it is likely that most Pennsylvania charter schools are themselves also inadequately funded.

Figure 8: Percent Charter School Enrollment in PA School Districts Grouped by Funding Adequacy Gap, 2023-24



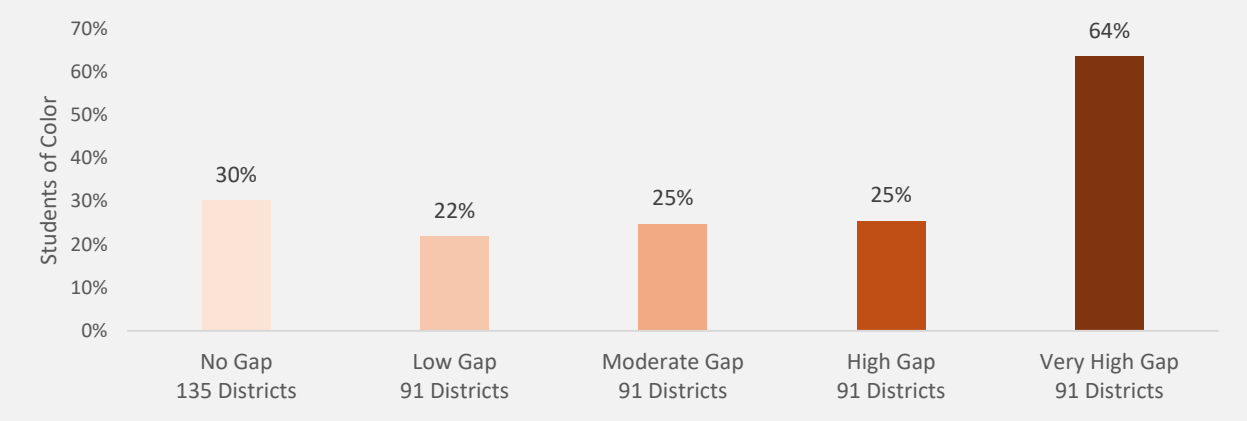
Sources: PDE's RTL Block Grant July 2024 and Future Ready Index 2023-24.
Note: Rates reflect an average of districts in each grouping, weighted by the number of students in each district.

The Racially Discriminatory Impact of School Funding Adequacy

Our comparison of relative student needs in Pennsylvania school districts does not include discussion of student race or ethnicity, as these factors are not indicators of student need. Yet Pennsylvania has a long history of large disparities in educational opportunities by student race and ethnicity. So here we separately examine race and ethnicity by school funding adequacy gap as an indicator of the racially discriminatory impact of Pennsylvania's system of school funding.

Students of color comprised 35.5% of Pennsylvania's total student population in 2023-24,[13] but nearly half of all students of color were concentrated in the most underfunded (very high gap) school districts. As Figure 9 shows, very high gap districts enrolled 64% students of color, compared to 30% or fewer in all other groups.

Figure 9: Percent Students of Color in PA School Districts Grouped by Funding Adequacy Gap, 2023-24



Sources: PDE's RTL Block Grant July 2024 and Future Ready Index 2023-24.
Note: Rates reflect an average of districts in each grouping, weighted by the number of students in each district.

2. Comparing Educational Opportunity by Adequacy Gap

In Pennsylvania's landmark school funding case, Commonwealth Court President Judge Jubelirer ruled that the state constitution "requires that every student be provided with a meaningful opportunity to succeed academically, socially, and civically, which requires that all students have access to a comprehensive, effective, and contemporary system of public education." In concluding the state does not meet this requirement, the court considered evidence that "good teaching is a critical part of resource equity of a good-functioning school system and having more money in a school system means smaller class sizes, teacher salaries that can attract a higher quality teaching workforce, [and] increased support staff…"

In 2022, RFA found that disparities by student race and poverty in access to education opportunities in Pennsylvania rank among the worst in the nation, including access to high quality educators.[14] In 2023, RFA found a relationship between school funding disparities and school staffing disparities, based on earlier adequacy gap estimates calculated by scholar Dr. Matthew Kelly.[15] In this section we reexamine much of that analysis using the most recent professional educator staffing data[16] and the state's own new adequacy gap calculations enacted into Pennsylvania law with the 2024 state budget. We also compare rates of inexperienced teachers and emergency certified teachers by district funding adequacy groupings.

As described below, we find that on average, compared to adequately funded school districts, districts with adequacy gaps had:

- fewer classroom teachers and other professional staff per student,
- lower average salaries
- a larger share of inexperienced teachers, and
- higher rates of teachers certified through emergency permits.

Of course, school resources are not unlimited. School leaders must strategically prioritize resources impacting educational quality, as high spending in one area leaves fewer resources in another. For example, some leaders may choose to raise teacher salaries while others prefer to increase the overall number of teachers. But the findings below appear to indicate systemic disparities driven by resource inequity rather than simply differences in strategy or pedagogy.

Teacher/Student Ratios

Class size is commonly used by researchers and policymakers to assess teacher workload and whether a school or school district employs as many teachers as it needs for students. Pennsylvania does not publish data on class size, however, using data on total student enrollment and the total number of classroom teachers we can calculate the ratio of students per teacher in every school district—a highly correlated measure often used by researchers to compare school systems, though generally a much smaller ratio than actual class size.[17]

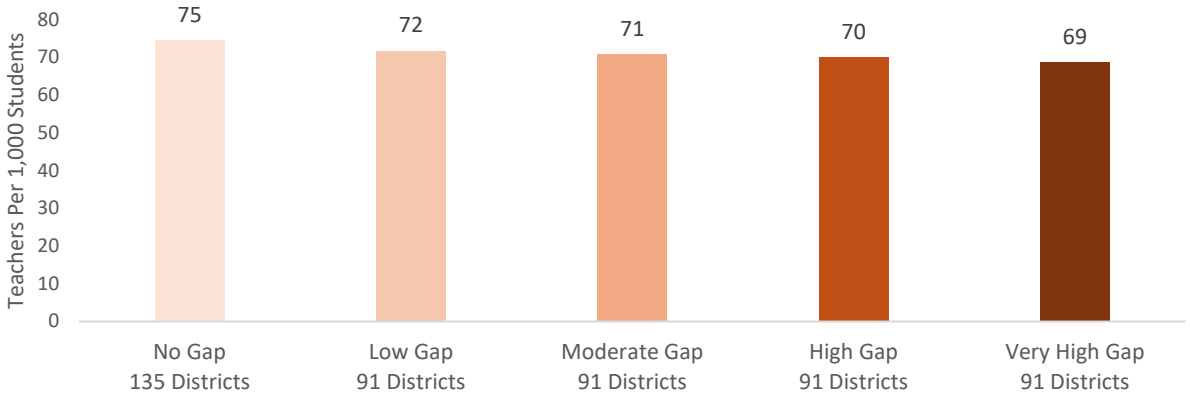
As shown in Table 1, districts with no funding gaps had on average fewer students per teacher compared to districts with funding gaps.

Table 1: Students per Teacher in PA Districts by Funding Adequacy Gap, 2023-24

Adequacy Grouping	Number of Students[18]	Number of Teachers	Ratio Students / Teacher
No Gap	442,593	33,008	13.4
Low Gap	239,939	17,229	13.9
Moderate Gap	213,950	15,151	14.1
High Gap	209,070	14,637	14.3
Very High Gap	407,022	27,950	14.6

To better understand what these ratios might look like at a school or district level, we can use the same data to calculate the number of teachers per 1,000 students. As shown in Figure 10, districts with the largest (very high) funding gaps provided six fewer teachers per 1,000 students compared to no gap districts.

Figure 10: Teachers Per 1,000 Students in PA School Districts Grouped by Funding Adequacy Gap, 2023-24

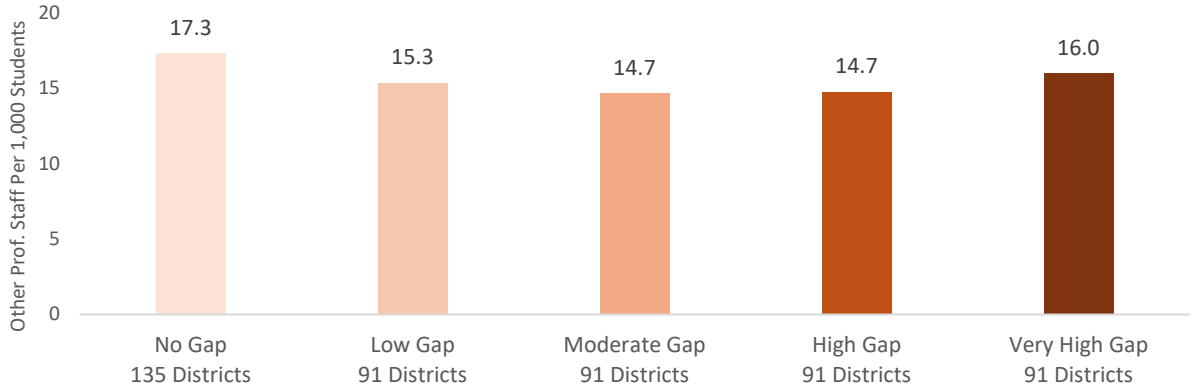


Sources: PDE's RTL Block Grant July 2024; Future Ready Index 2023-24; and Professional Staffing 2023-24.
Note: Rates reflect an average of districts in each grouping, weighted by the number of students and teachers in each district.

Other Professional Staff

While teachers comprise the largest share of professional staff, schools also require other professional staff, including administrators, counselors, librarians, social workers, and others to properly serve students. As shown in Figure 11, adequately funded districts again provided the highest rates of other professional staff compared to inadequately funded districts. However, districts with the highest adequacy gaps tended to employ more other professional staff on average relative to other inadequately funded districts.

Figure 11: Other Professional Staff Per 1,000 Students in PA School Districts Grouped by Funding Adequacy Gap, 2023-24

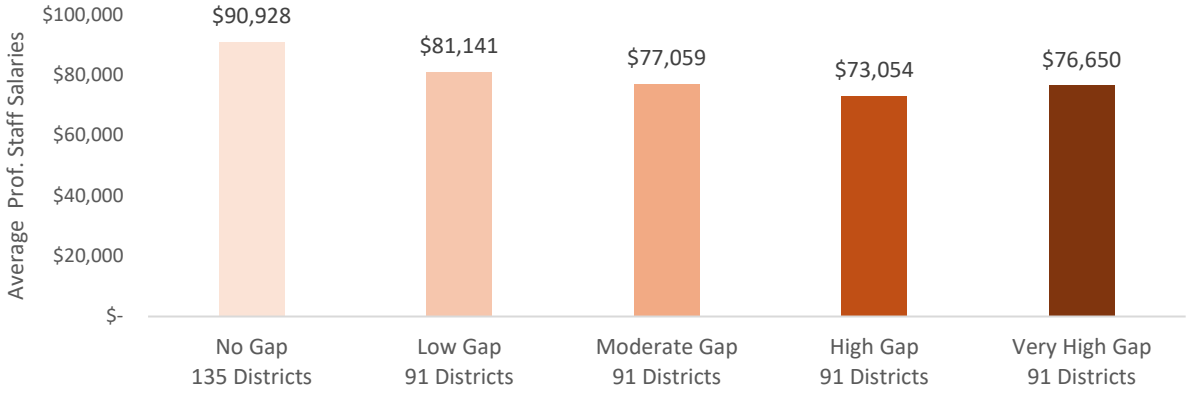


Sources PDE's RTL Block Grant July 2024; Future Ready Index 2023-24; and Professional Staffing 2023-24.
Note: Rates reflect an average of districts in each grouping, weighted by the number of students and other staff in each district.

Salaries of Professional Staff

In addition to more staff, adequately funded school districts also paid higher salaries. Figure 12 provides average salaries of all professional staff (including teachers) by adequacy group, demonstrating that adequately funded districts paid nearly $10,000-18,000 more than districts with adequacy gaps.[19]

Figure 12: Average Salaries of All Professional Staff in PA School Districts Grouped by Funding Adequacy Gap, 2023-24



Sources: PDE's RTL Block Grant July 2024; Future Ready Index 2023-24; and Professional Staffing 2023-24.
Note: Rates reflect an average of districts in each grouping, weighted by the number of professional staff in each district.

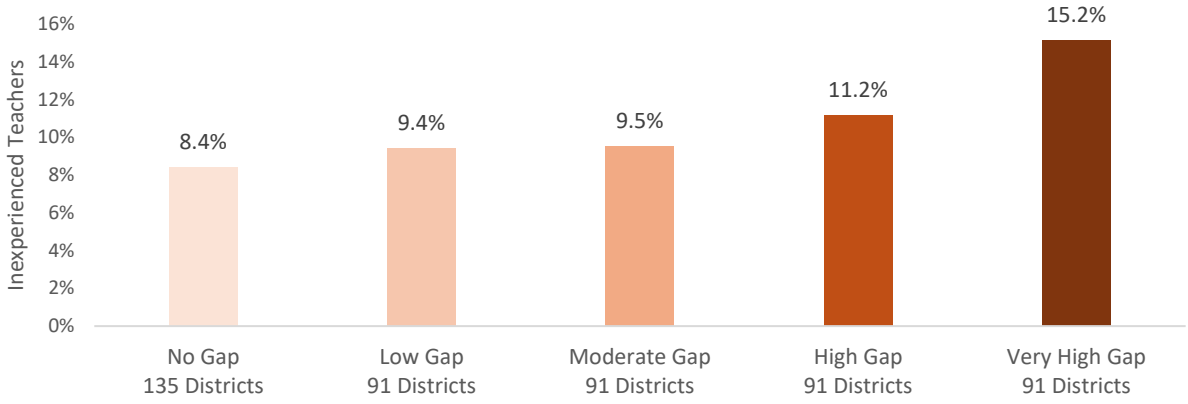
In total Pennsylvania's 364 inadequately funded school districts would collectively need to hire nearly **5,000 additional teachers** and over **2,000 other professional staff** (administrators, counselors, etc.) to achieve student/teacher and other staff ratios equal to the 135 adequately funded districts. And they would need to spend an **additional $1.9 billion on salaries** alone to pay all their teachers and professional staff (existing and new) the same average salaries as adequately funded districts.[20]

Importantly, these staffing and salary rates would likely still be relatively low. Because inadequately funded districts have greater student needs, as discussed in the section above, more teachers and other professional staff are necessary to properly serve their students. Moreover, to recruit and retain high quality teachers and staff and compete with districts with lower student needs, districts with higher student needs likely need to pay not just equal but higher salaries.[21]

Inexperienced Teachers

Teacher salary is closely tied to experience, so it is likely one driver of the salary disparities discussed above. However, experience is also an indicator of teacher quality,[22] so we examine it separately to further compare educational opportunity in Pennsylvania school districts. We find that on average the higher a district's funding gap, the larger its share of inexperienced teachers, defined as teachers with three or fewer years of experience.[23] As shown in Figure 13, very high gap districts had nearly double the percent of inexperienced teachers as adequately funded districts in 2021-22.

Figure 13: Percent Inexperienced Teachers in PA School Districts Grouped by Funding Adequacy Gap, 2021-22

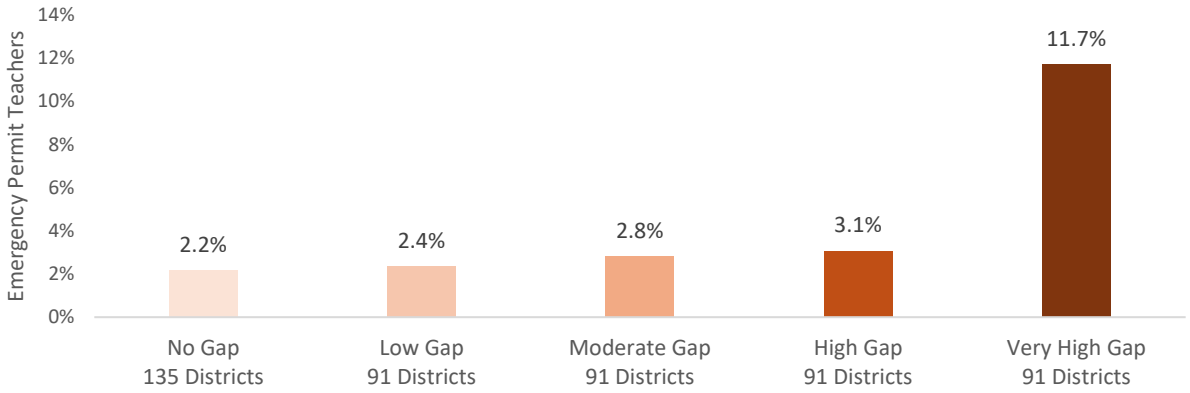


Sources: PDE's RTL Block Grant July 2024 and ESSA Report Card Educator Equity data, 2021-22.
Note: Rates reflect an average of districts in each grouping, weighted by the number of teachers in each district.

Teachers on Emergency Permits

There has been increasing attention to the dramatic rise in the number and share of teachers in Pennsylvania schools who are granted emergency permits to serve as long-term substitutes when traditionally certified teachers are not available.[24] As shown in Figure 14, in 2023-24 rates of teachers on emergency permits were lowest (2.2%) in adequately funded districts, increased moderately in low, moderate, and high gap districts, with a sharp increase to 11.7% in the most inadequately funded "very high gap" districts.

Figure 14: Percent Teachers on Emergency Permits in PA School Districts Grouped by Funding Adequacy Gap, 2023-24



Sources: PDE's RTL Block Grant July 2024 and Educator Preparation and Certification data 2023-24.
Note: Rates reflect a weighted averages based on RFA's analysis of teachers on Type 1 & Type 4 emergency permits.

3. Comparing Student Outcomes in Districts by Adequacy Gap

In this final section we examine student outcomes by average funding adequacy gap, again measuring indicators considered by the Commonwealth Court in ruling that Pennsylvania's school funding system is unconstitutional. First, we compare standardized test scores on the Pennsylvania State System of Assessment (PSSA) for English language arts (ELA), math, and science by adequacy gap groupings. We examine test scores for all students, for economically disadvantaged students, and for students receiving special education. Second, we compare graduation rates, also by student group, and last, we compare school dropout rates, which are only available for all students. As in the prior analysis, *in each case we find worse student outcomes in the most inadequately funded school districts*.

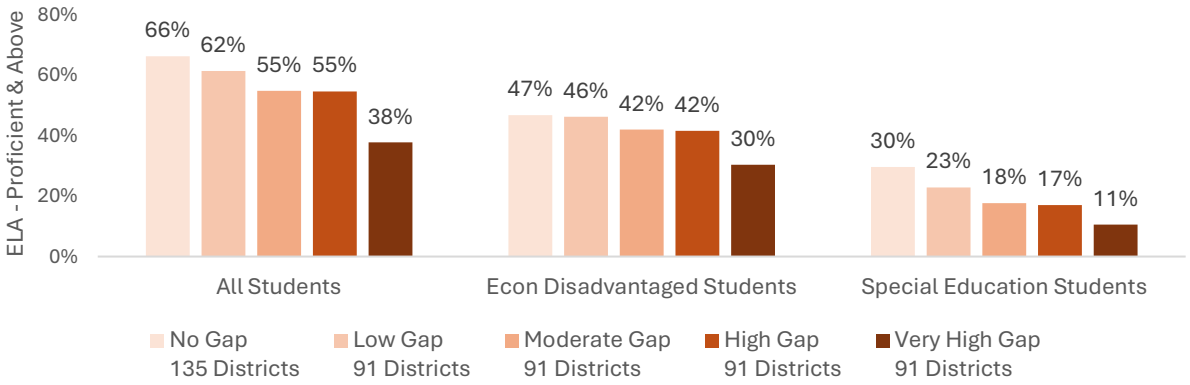
Student Proficiency on the Pennsylvania State System of Assessment

Each year the PSSA exams are administered for ELA and math to students in grades 3-8 and for science in grades 5-8. Student scores are categorized as advanced, proficient, basic, or below basic levels. Standardized test scores are known to be highly correlated with student characteristics and PDE also publishes PSSA results disaggregated by subgroups.[25] As discussed above, districts with higher funding gaps serve higher rates of students who require greater academic support so considering student outcomes within subgroups provides more meaningful comparisons.

Here we compare averages in each district grouping, weighted by district size, of the rates at which all students, economically disadvantaged students, and students receiving special education were performing proficient or advanced on each PSSA subject for each district adequacy gap grouping.[26] Figure 15 provides rates of students that scored proficient and above in ELA, Figure 16 provides rates in math, and Figure 17 provides rates in science.

Following similar trends as the analyses above, students in the most inadequately funded (very high gap) districts consistently had lower PSSA proficiency rates, and this trend persisted across student subgroups. On average, students with economic disadvantage and students receiving special education who attend adequately funded school districts scored proficient on the ELA, math, and science PSSA at higher rates than similarly situated peers in inadequately funded school districts. In general, the higher the funding gap, the lower the proficiency rates for each student subgroup on all three subjects.

Figure 15: ELA PSSA: Percent Students Scoring Proficient & Above in PA Districts Grouped by Funding Adequacy Gap, 2023-24



Sources: PDE's RTL Block Grant July 2024 and Assessment Reporting data, 2023-34
Note: Rates reflect an average of districts in each grouping, weighted by the number of test takers in each district.

Figure 16: Math PSSA: Percent Students Scoring Proficient & Above in PA Districts Grouped by Funding Adequacy Gap, 2023-24

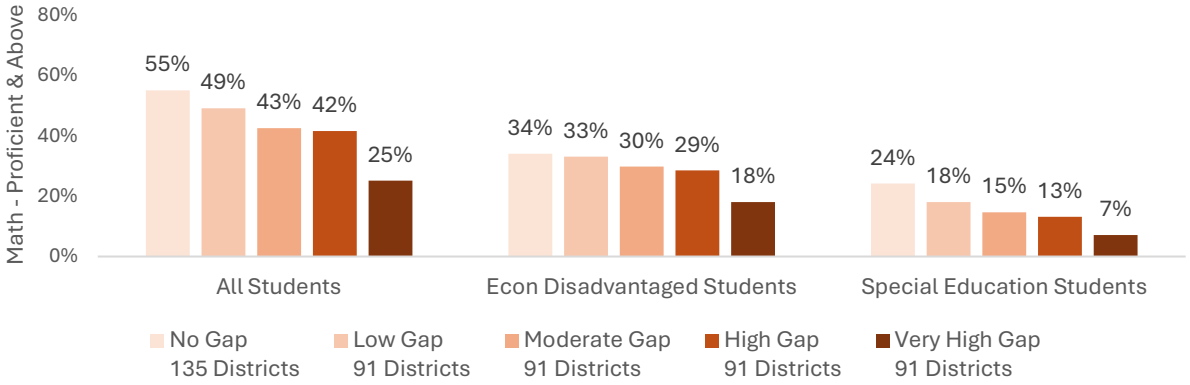
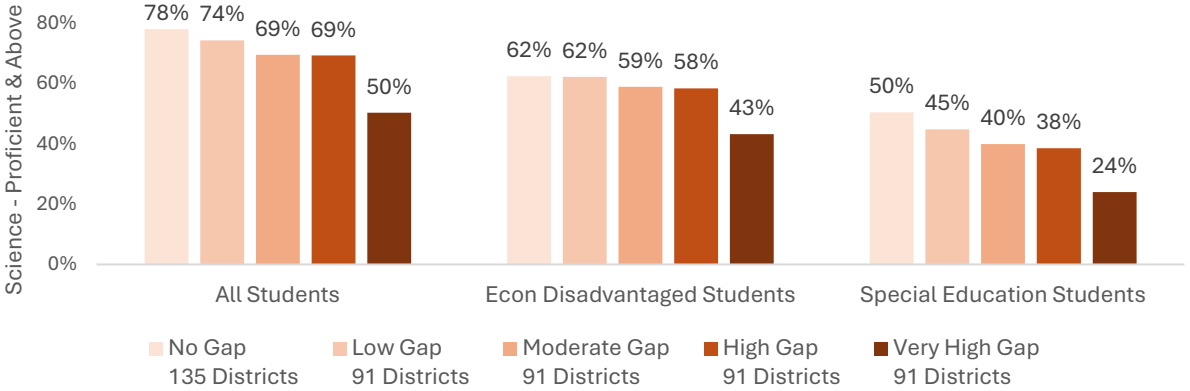


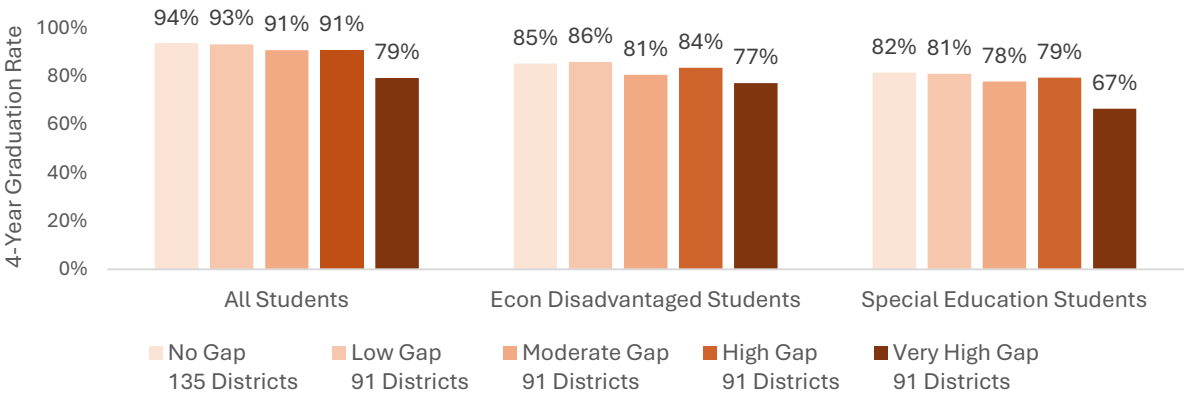
Figure 17: Science PSSA: Percent Students Scoring Proficient & Above in PA Districts Grouped by Funding Adequacy Gap, 2023-24



Graduation Rates

PDE defines four-year cohort graduation rates as the percentage of students who graduated with a diploma within four years of entering high school.[27] Figure 18 illustrates graduation rates by adequacy gap groupings. In general, graduation rates were highest in adequately funded and lowest in very high gap districts.

Figure 18: Four-Year Cohort Graduation Rates in PA Districts Grouped by Funding Adequacy Gap, 2022-23

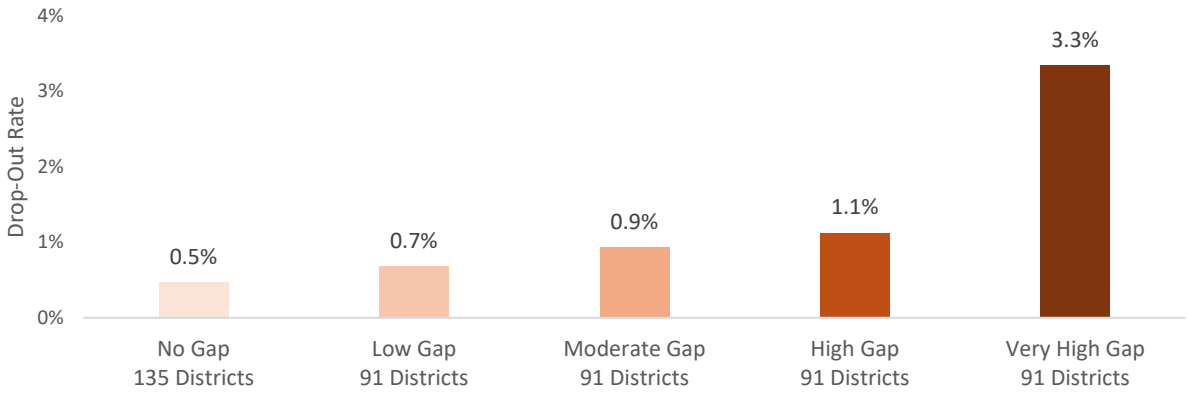


Sources: PDE's RTL Block Grant July 2024 and High School Graduation data, 2022-23
Note: Rates reflect an average of districts in each grouping, weighted by the number of students in each district.

Drop-Out Rates

Public reports on high school student drop-out rates are not disaggregated by student characteristics.[28] Figure 19 demonstrates that, consistent with other metrics, drop-out rates slightly increased from zero gap to high gap district groups and then jumped sharply to a 3.3% average in districts with very high adequacy gaps.

Figure 19: Drop-Out Rates in PA Districts Grouped by Funding Adequacy Gap, 2022-23



Sources: PDE's RTL Block Grant July 2024 and High School Graduation data, 2023-34
Note: Rates reflect an average of districts in each grouping, weighted by the number of students in each district.

Conclusion

This study provides the first statewide comparison of student needs, educational opportunities, and student outcomes in Pennsylvania school districts by the size of the school funding adequacy gaps newly calculated by PDE in 2024. We compare districts on 16 indicators of (1) student need (rates of student economic disadvantage, homelessness, special education, high-cost special education, English learners, and charter schools); (2) opportunity (rates of teachers and other professional staff per student, staff salaries, teacher experience, and rates of teachers on emergency permits); and (3) student outcomes (math, ELA, and science proficiency rates, graduation rates, and dropout rates).

We find remarkably consistent trends. On virtually every indicator, districts with the most inadequate funding serve students with greater needs, provide less educational opportunity, and experience worse student outcomes than districts with adequate funding. Considered individually, not every indicator may represent meaningful differences between districts. Collectively, these data paint a clear picture of harsh inequity in Pennsylvania's system of public education.

With passage of the 2024-25 education budget the legislature appropriated approximately $494 million of new "adequacy supplement" dollars, targeted and progressively distributed to districts with the largest adequacy gaps. This investment represents meaningful progress by closing approximately 11% of the total adequacy gap. In January 2025, Governor Shapiro proposed an increase of similar size for the 2025-26 budget.[29] However, the legislature has yet to commit to this increase or adopt a timeline for providing the full funding needed to eliminate the remaining annual adequacy gaps of more than $4 billion.

Students in underserved communities want and deserve great schools with quality staff, robust educational opportunities, and a meaningful chance to achieve great success just as much as students in wealthy communities. State policymakers must eliminate Pennsylvania's school funding adequacy gaps to close the related gaps in educational opportunity and in student outcomes. So long as these gaps persist, Pennsylvania will continue to earn its designation as a state of inequity.

Appendix

Table 1A: All Indicators & Weighted Averages in PA Districts by Funding Adequacy Gap

Highest Rank ⟷ Lowest Rank

	No Gap (135 Districts)	Low Gap (91 Districts)	Moderate Gap (91 Districts)	High Gap (91 Districts)	Very High Gap (91 Districts)
Adequacy Gap Per Pupil	$0	$718	$2,192	$3,359	$6,558
Economically Disadvantaged (2023-24)	34%	40%	48%	51%	70%
Student Homeless (2023-24)	1.2%	1.4%	1.6%	2.3%	3.2%
Special Education (2023-24)	18.7%	18.5%	18.9%	19.0%	19.7%
High-Cost Special Education Students (2021-22)	10.2%	7.6%	7.8%	8.0%	11.3%
English Learner (2023-24)	3.6%	2.8%	2.9%	3.5%	13.4%
Charter Enrollment (2023-24)	3.9%	4.0%	5.6%	5.2%	21.6%
Classroom Teachers Per 1,000 Students (2023-24)	75	72	71	70	69
Other Professional Personnel Per 1,000 Students (2023-24)	17.3	15.3	14.7	14.7	16.0
Average Salaries of Professional Staff (2023-24)	$90,928	$81,141	$77,059	$73,054	$76,650
Inexperienced Teachers (2021-22)	8.4%	9.4%	9.5%	11.2%	15.2%
Teachers with Emergency Certificate (2023-24)	2.2%	2.4%	2.8%	3.1%	11.7%
ELA PSSA (proficient & above) - All Students (2023-24)	66%	62%	55%	55%	38%
ELA PSSA (proficient & above) - Economically Disadvantaged (2023-24)	47%	46%	42%	42%	30%
ELA PSSA (proficient & above) - Special Education Students (2023-24)	30%	23%	18%	17%	11%
Math PSSA (proficient & above) - All Students (2023-24)	55%	49%	43%	42%	25%
Math PSSA (proficient & above) - Economically Disadvantaged (2023-24)	34%	33%	30%	29%	18%
Math PSSA (proficient & above) - Special Education Students (2023-24)	24%	18%	15%	13%	7%
Science PSSA (proficient & above) - All Students (2023-24)	78%	74%	69%	69%	50%
Science PSSA (proficient & above) - Economically Disadvantaged (2023-24)	62%	62%	59%	58%	43%
Science PSSA (proficient & above) - Special Education Students (2023-24)	50%	45%	40%	38%	24%
Graduation Rate - All students (2022-23)	94%	93%	91%	91%	79%
Graduation Rate - Economically Disadvantaged (2022-23)	85%	86%	81%	84%	77%
Graduation Rate - Special Education (2022-23)	82%	81%	78%	79%	67%
Drop-Out Rate (2022-23)	0.5%	0.7%	0.9%	1.1%	3.3%

About Research for Action

Research for Action (RFA) is a Philadelphia-based nonprofit education research organization. We seek to use research to improve equity, opportunity, and outcomes for students and families. Our work is designed to strengthen early education, public schools, and postsecondary institutions; provide research-based recommendations to policymakers, practitioners, and the public; and enrich civic and community dialogue. This report is a product of RFA's Pennsylvania Clearinghouse for Education Research (PACER) project, which seeks to inform state education policy discussions through rigorous objective research. For more information, please visit https://www.researchforaction.org/project/pennsylvania-clearinghouse-for-education-research-pacer/.

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Endnotes:

[1] *William Penn Sch. Dist. v. Pa. Dep't of Educ.*, No. 587 M.D. 2014 (Pa. Commw. Ct. Feb. 7, 2023), https://pubintlaw.org/wp-content/uploads/2023/02/02.07.23-Memorandum-Opinion-Filed-pubintlaw.pdf.
[2] 24 Pa. Stat. § 25-2599.6 (2024). Available at https://www.legis.state.pa.us/cfdocs/legis/LI/uconsCheck.cfm?txtType=HTM&yr=1949&sessInd=0&smthLwInd=0&act=14&chpt=25&sctn=99&subsctn=6.
[3] The state's adequacy calculations for each district are included in the 2024-2025 Ready to Learn Block Grant, available from the Pennsylvania Department of Education at https://www.pa.gov/agencies/education/programs-and-services/schools/grants-and-funding/school-finances/ready-to-learn-block-grant.html. Each district's total per pupil adequacy gap was calculated by combining the adequacy gap and poverty adjustment and dividing the total by each district's 2022-23 adjusted ADM (average daily membership) from the 2024-25 Estimated Basic Education Funding (BEF) file, available at https://www.pa.gov/agencies/education/programs-and-services/schools/grants-and-funding/school-finances/education-budget.html#:~:text=Basic%20Education%20Funding&text=This%20amount%20is%20a%20%2475%2C000%2C000,school%20district%20basic%20education%20programs.
[4] Past research found Pennsylvania has among the nation's largest school funding disparities by race and poverty. These funding gaps are related to nation-leading disparities in educational opportunity which in turn are associated with large disparities in educational outcomes. See Education Law Center. (2023). *Making the grade 2023*. Available at https://edlawcenter.org/research/making-the-grade-2023/ (finding that Pennsylvania has the third largest funding gap of the 50 states between low and high poverty school districts and is the only state with above national average funding for low poverty districts and below average funding for high poverty districts); Bamat, D., & Freeman, J. (2022, October). *Persistent unequal access to educational opportunity in Pennsylvania for K-12 students,* Research for Action; Lapp, D. (2023, September 21). *The upside-down system: Inequity in Pennsylvania's system of public education* [Testimony before the BEF Commission]. Research for Action. Available at https://www.researchforaction.org/news-events/k-12/research-for-action-testimony-basic-education-funding-commission/
[5] RFA's past analysis relied on funding adequacy calculations of Dr. Matthew Kelly, initially conducted in his capacity as an expert witness in *William Penn SD et al. v. Pa. Dept. of Education et al*, and later refined in his testimony to the Pennsylvania Basic Education Commission. Kelly's updated approach found a total adequacy gap of $6.2 billion and 412 districts having adequacy gaps. The Basic Education Funding Commission recommended a similar approach to Kelly in its majority report, with modifications that reduced the total adequacy gap to $5.4 billion and 387 districts having adequacy gaps. The methodology ultimately enacted into state law, and relied on for this analysis, further altered the methodology resulting in a total adequacy gap calculated by PDE of $4.8 billion and 364 districts with adequacy gaps.
[6] Alternate groupings were considered, including larger groupings, smaller groupings, groups with equal ranges of adequacy gap differences, and groupings by student count. Similar general trends were found with each alternate grouping, but five district groupings with four equal groups of inadequately funded districts were found to best represent statewide trends.
[7] Espinoza, D., Griffith, M., Burns, D., & Shields, P. M. (2023). *Federal and state resources for students experiencing homelessness*. Learning Policy Institute. https://doi.org/10.54300/546.264
[8] Special Education Law Blog. (2020, July 1). *Budget concerns do not supersede IDEA legal obligations*. Special Education Law Blog. https://spedlawblog.com/2020/07/01/budget-concerns-do-not-supersede-idea-legal-obligations/
[9] See Act 16 – Reporting of Expenditures Relating to Exceptional Students. The lowest cost category (students who require services costing ~$28,00 or less) comprises over 90% of students. Here we label the remaining students in categories that exceed that, as "high-cost" special education students.
[10] Pennsylvania Department of Education. (2024). *Ready to Learn Block Grant: Budget file*. Available at https://www.education.pa.gov/Teachers%20-%20Administrators/School%20Finances/Pages/Ready-to-Learn%20Block%20Grant.aspx
[11] Oscar Jimenez-Castellanos and Amelia M. Topper, "*The Cost of Providing an Adequate Education to English Language Learners*," Review of Educational Research, 82, no. 2 (June 2012): 179–232.

[12] Lapp; Lin; Dolson; and Moran. *The Fiscal Impact of Charter School Expansion: Calculations in Six Pennsylvania School Districts*. Research for Action, September 2017. https://www.researchforaction.org/researchresources/k-12/fiscal-impact-charter-school-expansion-calculations-six-pennsylvania-school-districts/

[13] We use the term "of color" to describe students reported as either Black, Hispanic, Asian, American Indian or Alaskan Native, Native Hawaiian or other Pacific Islander, or two or more races.

[14] Bamat, D., & Freeman, J. (2022, October). *Persistent unequal access to educational opportunity in Pennsylvania for K-12 students*. Research for Action. https://www.researchforaction.org/research-resources/persistent-unequal-access-to-educational-opportunity-in-pennsylvania-for-k-12-students/

[15] Lapp, D., & Shaw-Amoah, A. (2023, May). *Pennsylvania school funding and school staffing disparities*. Research for Action. https://www.researchforaction.org/research-resources/k-12/pennsylvania-school-funding-and-school-staffing-disparities/

[16] Pennsylvania Department of Education. (n.d.). Professional and support personnel. Available at https://www.pa.gov/en/agencies/education/data-and-reporting/school-staff/professional-and-support-personnel.html

[17] Whitehurst, G. J., & Chingos, M. M. (2011). *Class size: What research says and what it means for state policy*. Brookings Institution. Retrieved from https://www.brookings.edu/articles/class-size-what-research-says-and-what-it-means-for-state-policy/

[18] Note that only district enrollment and district teachers are used to calculate district student/teacher ratios. Meanwhile average daily membership (ADM) is used to determine per pupil adequacy gaps, because ADM is inclusive of all students that districts are financially responsible for (including students in charter schools and other LEAs).

[19] Though not displayed separately, average teacher salaries are approximately $3,000 less in each grouping, with similar sized disparities.

[20] Notably, the size of the disparities in staff per student and salaries are found to be smaller here than in RFA's 2023 analysis which relied on the adequacy calculations by Kelly (see note 5). This is driven by the adequacy calculations published with the state budget and relied on here that calculated fewer inadequately funded districts (364) compared to Kelly's (412). In addition, the most recent data indicate student enrollment has dropped in inadequately funded districts, while the number of professional staff has not, leading to more average staff per students and smaller disparities in the most recent year compared to prior years.

[21] Andrew Morgan, Minh Nguyen, Eric Hanushek, Ben Ost, Steven Rivkin (2023). *Attracting and Retaining Highly Effective Educators in Hard-to-Staff Schools*. CALDER Working Paper No. 280-0323. Available at https://caldercenter.org/publications/attracting-and-retaining-highly-effective-educators-hard-staff-schools; Geiger, T., & Pivovarova, M. (2018). *The effects of working conditions on teacher retention*. Teachers and Teaching, 24(6), 604–625. https://doi.org/10.1080/13540602.2018.1457524

[22] Kini, T., & Podolsky, A. (2016). *Does teaching experience increase teacher effectiveness? A review of the research*. Learning Policy Institute. https://learningpolicyinstitute.org/product/does-teaching-experience-increase-teacher-effectiveness-review-research

[23] Pennsylvania Department of Education. (n.d.). *ESSA report card data sources*. Available at https://www.pa.gov/agencies/education/programs-and-services/schools/every-student-succeeds-act-essa/essa-report-card/data-sources.html

[24] Graham, K. A. (2024, November 23). *The number of Philly teachers without full certification has more than doubled. It comes at a cost*. The Philadelphia Inquirer. https://www.inquirer.com/education/emergency-teaching-certification-philadelphia-teacher-shortage-20241123.html

[25] Pennsylvania Department of Education. (n.d.). *Assessment and reporting*. Available at https://www.pa.gov/agencies/education/data-and-reporting/assessment-reporting.html

[26] PDE also disaggregates PSSA data by student race and status as English learners, however data is redacted in districts with low n-sizes, confounding analysis of those subgroups.

[27] Pennsylvania Department of Education. (n.d.). *High school graduation data and reporting*. Available at https://www.pa.gov/agencies/education/data-and-reporting/high-school-graduation.html

[28] Pennsylvania Department of Education. (n.d.). *High school graduation data and reporting*. Available at https://www.pa.gov/agencies/education/data-and-reporting/high-school-graduation.html

[29] Levy, M. (2025, February 4). *Pennsylvania governor seeks more money for schools and transit, but relies heavily on surplus cash*. WHYY. https://whyy.org/articles/pennsylvania-josh-shapiro-budget-schools-transit/