# **Delaware Ranks 45<sup>th</sup> Nationally in Education Outcomes:**

#### Measuring Academic Success and Improving Educational Outcomes for Delaware's Youth

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#### Abstract

Delaware's ranking as 45th in the nation for education outcomes highlights the multifaceted challenges and influences affecting children's development and education in the state. This paper explores how student success is measured in Delaware and the impact social determinants of health have on youth outcomes, including chronic absence, homelessness, nutrition, poverty, and adverse childhood experiences. By addressing these interconnected issues, Delaware can work towards closing achievement gaps and improving educational experiences for all students. Findings underscore the necessity for comprehensive support systems within schools informed by empirical evidence to foster a conducive learning environment and improve student outcomes. By addressing the social determinants of health driving educational challenges, policymakers can take a comprehensive approach to enhance the well-being and academic success of all children in Delaware.

# Introduction

Delaware has ranked 45<sup>th</sup> in the nation for education outcomes in the *2024 KIDS COUNT Data Book,* an annual, 50-state report that assesses data on 16 indicators in four domains -- economic well-being, education, health, and family and community factors -- to determine how children across the country fare in comparison to one another. Based on the latest figures, Delaware ranks 8<sup>th</sup> in economic well-being, 25<sup>th</sup> in child health, 32<sup>nd</sup> in family and community, and 31<sup>st</sup> in overall child well-being.1 While there is room for improvement in each of these domains, the greatest opportunity for growth exists in education. Some shortcomings can be attributed to post-pandemic difficulties and those issues exacerbated by it, such as chronic absenteeism and poverty. However, educational struggles have existed and been of concern for Delaware – and, more broadly, the United States -- prior to 2020: a decade ago, Delaware ranked 23<sup>rd</sup> in education and had already fallen to 26<sup>th</sup> by 2019.2–4 Because education is impacted by broader societal factors and individual experiences, advocates can reframe intervention efforts to also target these needs and conditions in conjunction with educational reform.

# **Measuring Success in Delaware**

Delaware's ranking in the education domain is based on four criteria: the proportion of young children (ages three and four) not enrolled in school (55%), fourth graders not proficient in reading (75%), eighth graders not proficient in math (82%), and high school students not graduating on time (20%) (Figure 1).1 Two of the four measures in this indicator rely on students' scores on the National Assessment of Educational Progress (NAEP) tests in reading

and mathematics. Standardized testing scores such as these are one common tool for understanding how well students understand core concepts in reading, writing, and mathematics. Yet, while reflecting on students' scores is helpful, experts in the field caution against using test scores as the sole metric of success.

Figure 1. A 2024 State-to-State Comparison of Education1

# A 2024 STATE-TO-STATE COMPARISON OF **EDUCATION**



# **RANKINGS AND KEY**

BEST		BETTER	WORSE	WORST
1.	Massachusetts	13. Iowa	26. Washington	39. South Carolina
2.	New Jersey	14. Wyoming	27. South Dakota	40. North Dakota
3.	Connecticut	15. Colorado	28. Kansas	41. Michigan
4.	New Hampshire	16. Pennsylvania	29. Rhode Island	42. Louisiana
5.	Florida	17. Indiana	30. Mississippi	43. Oregon
6.	Utah	18. Ohio	31. Georgia	44. Arizona
7.	Virginia	19. Minnesota	32. Tennessee	45. Delaware
8.	Wisconsin	20. Hawaii	33. Kentucky	46. Nevada
9.	Vermont	21. Montana	34. Alabama	47. Alaska
10.	Illinois	22. Maryland	35. California	48. West Virginia
11.	Nebraska	23. Missouri	36. Arkansas	49. Oklahoma
12.	New York	24. North Carolina	37. Maine	50. New Mexico
		25. Texas	38. Idaho	

District of Columbia and Puerto Rico are not ranked.

Existing research emphasizes test scores' correlation with positive outcomes later in life such as higher earnings, greater work experience, choice of occupation, and less participation in illegal activities.5,6 While these findings are notable, they are not causal: unmeasured, confounding factors such as students' intrinsic motivation; their relationships with family, teachers, and faculty; and the communities in which they live are a few of many possible components influencing later life outcomes.7 For this reason, looking exclusively at test scores is limiting and falls short of capturing a complete picture of the competencies of students, teachers, and schools.8 Currently, Delaware uses multiple tools and measurements in an effort to fully understand its students' academic performance and growth opportunities.

The Delaware School Success Framework (DSSF) is a statewide tool for measuring school success and communicating it to the public, evaluating schools in key areas like academic achievement, academic progress, school quality, student success, graduation rates, and English language proficiency.9 Since 2014, academic metrics have been based on students' scores on the Delaware State System of Assessments (DeSSA) and the Smarter Balanced Assessments in Mathematics and English Language Arts/Literacy, the newest in a series of testing systems that have been utilized by the state.10 Schools with low scores according to the DSSF can then be identified and supported via comprehensive support and improvement (CSI) or targeted support and improvement (TSI), which often results in funding increases.9 While the DeSSA and DSSF are used as evaluative systems within the state, the National Assessment of Educational Progress (NAEP) serves a similar function on a national scale. The NAEP is administered to a random selection of schools and students in grades 4, 8, and 12, whose results are used to inform decisions on educational reform in the country.11 The NAEP and DeSSA are two testing measures that Delaware's children are evaluated on, but non-test measures such as those incorporated into the DSSF are a promising focus of emerging research on how to better measure and define student success.

#### **Best Practices: What Experts Support**

Ongoing debate surrounds the best ways to measure student success. Test scores have long been a part of the American education system and have become a convenient way for educators to communicate student progress. The system largely revolves around a proficiency binary, with those deemed proficient also deemed successful. This metric is simple to convey to parents and other interested parties, as it solely involves meeting a threshold or falling below it rather than weighing multiple, qualitative factors to first define what success is and then whether a child is reaching expectations. However, those who favor incorporating more qualitative measures into student achievement acknowledge that the task is not simple; instead, they value the measures' intricacies as a more comprehensive way of acknowledging nuances that influence schools and students. Academicians, educators, school administrators, policymakers, parents, and the public all hold varied opinions about what is best for children based on their own observations, beliefs, and roles within a child's educational journey. Hence, defining best practices is challenging given the subjectivity that experts in different domains may abide by.

Still, regardless of where individuals stand on divisive topics like using test scores to measure student and school success, experts recommend abiding by certain guiding principles in all situations. First, and most importantly, discussions on student success should be framed by relevant empirical evidence. Data serve as a starting point to have informed conversations and, eventually, to make informed decisions on educational policy. Moreover, experts recommend

that individuals familiarize themselves with the basics of data and statistics to better understand a measure's own inherent strengths and weaknesses. Depending on the context in which they are used, some measures' predictive validity could appear stronger than others. For example, where test scores show strong predictive validity, one must consider whether non-test measures such as school climate, attendance, and leadership quality may factor into the outcome observed.12

#### **Societal Drivers of Poor Outcomes**

The pandemic resulted in a considerable amount of lost learning, the true extent of which is only now becoming apparent. COVID-specific challenges such as school closures, distance learning, sick days, and changing school policies are partially responsible for declining test scores and student proficiency, but the ways in which the pandemic impacted existing societal drivers of poor outcomes is noteworthy.

Social determinants of health (SDOH) are "nonmedical factors that influence health outcomes," and are organized into five key categories: health care access and quality, neighborhood and built environment, social and community context, economic stability, and education access and quality (Figure 2). They are impacted by larger forces and systems such as socioeconomic status, geographic location, political structures, and social norms, creating a wide network of interconnected and often bidirectional influences. In addressing disparities in SDOH, progress is made toward health equity, "a state in which every person has the opportunity to attain their highest level of health," regardless of age, gender, race, ethnicity, or zip code.13 These factors existed long before the pandemic and have been correlated with poor educational outcomes over time.14 That said, COVID-19 compounded upon families' existing hardships and underscored the impact of SDOH on public health as Delaware saw educational inequities widen.

#### **Chronic Absenteeism and Homelessness**

More than one-fourth (27%) of Delaware's children were chronically absent in the 2021 to 2022 school year.15 A student is considered chronically absent when not present for 10% or more of school days, though many school districts throughout the state do not distinguish between chronic absence and truancy despite the important differences that exist between these two situations. Chronic absence encompasses absences for any reason – both excused and unexcused – such as chronic illness, lack of reliable transportation to school, housing insecurity, and student disengagement. Truancy, however, includes only those absences that are unexcused and often seeks to remedy the situation through penal measures.16 Put simply, "children cannot learn if they don't attend school," and the more encompassing measure of attendance is chronic absence.1

Research has found that attendance is often a stronger predictor of academic success than test scores.17 Online learning was a necessary adaptation that schools made during the peak of the public health emergency, but in-person attendance has not yet caught up with pre-pandemic levels. Some question if the pandemic has permanently altered the way that children and their families view education, now thinking of school as an obligation that can be completed distantly, or even as a non-obligation altogether. However, the importance of in-person instruction should not be understated. Attending class in-person, on time, and ready to learn as often as possible not only ensures that children extract the most that they can from each given lesson and are meeting age-appropriate academic benchmarks, but also allows children to form relationships with teachers and peers, establish routines, build social-emotional intelligence, and access school

services and extracurriculars.18 When a child misses school, they are missing valuable instruction time and time spent refining skills that will help them be successful adults and employees.

Yet not all missed instruction time is because a child does not want to physically be in school often, children face barriers to attending school that are out of their control and even their parents' control. For example, chronic and mental illnesses, unsafe commutes to school, bullying, poverty, and homelessness are a few of many reasons a child may be chronically absent. Each issue is challenging to address, but homelessness presents unique hardships that are deeply intertwined with attendance. Homeless children are more likely to be chronically absent from school, as well as to move schools and have lower academic achievement than securely housed children.19 Absences can often be attributed in part to an unhoused child's lack of necessities like access to nutritious food, clean clothing, school supplies, and reliable transportation. Systemic inequities built into school policies also contribute to homeless children's difficulties, such as enrollment policies that require documentation homeless families do not have, or a lack of properly informed staff and resources within schools.20 Racial equity is of concern as well, with Black families more likely to experience homelessness than any other racial or ethnic group.21 Understanding and addressing this reality is especially relevant as the number of homeless students as identified by the McKinney-Vento definition is on the rise in Delaware; since 2019, the number of homeless students has increased by 21% throughout the state, totaling a startling 1,878 students in the 2021-2022 school year.22

#### **Poor Nutrition**

A balanced diet is essential for children's brain development and peak academic performance. Attending school hungry or undernourished interferes with children's ability to learn, negatively impacting their cognitive functioning and causing inattention. The preoccupation that accompanies sourcing their next meal not only diverts children's focus on learning, but also does lasting harm to their mental health and relationships with food.23 Research has indicated that, "moving in and out of food security as well as experiencing persistent marginal food security or food insecurity contributes to adverse child development outcomes across cognitive and behavioral domains," which poses challenges for educators (pp. 14-15).24 Food insecurity exists along a spectrum, and multiple loci within this range contribute to negative educational outcomes for children that must be addressed by schools and staff. The issue is then further complicated if poor nutrition is not identified as the root cause of a child's academic or behavioral difficulties, delaying proper intervention or unnecessarily expending school resources on alternative solutions.

Initiatives to address children's nutritional needs such as SNAP, WIC, and School Nutrition Programs (SNP) have been increasingly utilized during and since the pandemic, both in Delaware and nationwide. Temporary increases to SNAP benefits significantly decreased food insecurity throughout the state, but since benefits were returned to pre-pandemic levels in 2023, Delaware has seen a surge in demand at organizations like the Food Bank. This demand is largely serving Delaware's youth, given that children under 18 are more likely to be food insecure than adults across all three of the state's counties (Figure 2). In total, 14.4% of youth in Delaware lack consistent and/or sufficient access to food, and those who are of school age are more likely to experience the negative educational outcomes associated with inadequate nutrition.8 Figure 2. Children Are More Likely to Experience Hunger than Adults8

# Children Are More Likely to Experience Hunger than Adults Food insecurity, Delaware and Counties, 2021



Source: Feeding America analysis of Current Population Survey data on food insecure households and survey data by the American Community Survey (ACS) on household income, unemployment, poverty, race & ethnicity, and homeownership.

#### Poverty

Socioeconomic status (SES) is known to be correlated with children's academic success, and some studies have found that SES is over "three times more important than race in predicting [academic] outcomes."25 Notably, a student's success is also impacted by the economic wellbeing of their peers' families. Just as children are shaped by other students' language or behavior in their classes, "there are likely a variety of mechanisms by which peers can either negatively or positively influence individual student achievement," including their classmates' own socioeconomic standing.26 Intuitively, this finding makes sense: wealthier families are more likely to have disposable income that can be used to make investments in their communities and schools, and all children educated in well-resourced schools are more likely to fare favorably regardless of their families' own financial standing. But even more, school funding is structured in a way that perpetuates inequities between districts because of the disparities that persist in housing. About 92% of public schools' funding is derived from state (47%) and local (45%) sources, and the funding from local communities is almost entirely from property taxes in the district.27 Homeownership is the primary means through which Americans amass wealth, but historically exclusionary policies have prevented families of color from obtaining mortgages and purchasing homes.28 Consequently, predominantly white areas are better resourced because district lines tend to be drawn in ways that create pockets of concentrated wealth, or "small affluent islands of well-funded schools within larger poorer areas that serve mostly students of color."29 This results in widening wealth and educational gaps that then become racialized because of the systems that perpetuate them.

Around 13% of Delawarean children live at or below the federal poverty level, a figure slightly lower than the national average (16%). In total, 26,000 children across the state face not only the academic challenges directly associated with attending school in under-resourced districts, but also those challenges that poverty makes more likely.30 Living in poverty limits access to healthcare, safe housing, and a balanced diet, each of which can affect a child's educational success by negatively impacting their attendance, cognitive functioning, and mental health. In short, it is not only poverty itself that can harm children's achievement, but also the conditions poverty creates.

#### Lack of Individualized Services

In addition to their many other responsibilities, schools are also tasked with providing resources to students that require additional assistance, such as tutoring and mental health supports. Despite individualized instruction being among the most effective educational interventions and a source of mentorship, access to tutoring services is unequal across class and racial lines. In the past, federally funded tutoring programs such as America Reads were not sustained nationally due to a "lack of central funding, data collection, guidance, and structure," and those that did succeed were able to do so because of exceptional leadership and/or local funding.31 Public schools also provide safe spaces for children to seek mental health support or confide in trusted adults. When children are mentally well and cared for, school climate improves alongside individual outcomes. Still, public schools often lack adequate funding for mental health and counseling services, particularly within rural communities.32

#### Adverse Child Experiences (ACEs)

Adverse childhood experiences (ACEs) are traumatic events experienced by children under 18 that are correlated with negative long-term outcomes. This can include experiences such as parental incarceration; witnessing intimate partner violence or violence within the community; a family member's death by or attempted suicide; witnessing or experiencing child abuse or neglect; and living in a household with substance misuse or mental health problems, among others. In 2022, it was reported that 43% of children in Delaware experienced at least one ACE. Of non-Hispanic Black/African American children, 51% experienced one or more ACE as compared to only 36% of non-Hispanic white children, underscoring the racial disparities that exist among children experiencing ACEs.33 Not only do ACEs impact one's adult outcomes, but adolescents with an ACE history are more likely to be chronically absent, have lower academic achievement, be suspended from school, and have lower educational aspirations.34 Adversity in

childhood is not only of public health and safety concern, but also of developmental and educational concern.

# Improving Delaware's Educational Outcomes

Addressing the social determinants of health that contribute to poor educational outcomes allows Delaware to fare better on a national scale. Ensuring that children perform their best in primary school promotes future economic stability because it creates the foundation for a healthy, prosperous workforce that can be drawn upon. It is worth noting that a tension exists between prioritizing individual and structural factors among experts, but both are valuable and worthy of addressing in education reform. Peak performance starts at an individual level, with each child arriving at school on time, ready to learn, and having had enough food and sleep prior. Meeting individual students' needs appears more manageable than confronting the complexities of contributors like chronic absenteeism, poverty, and homelessness, but approaching larger, structural issues has far-reaching impacts in domains outside of that which is the primary focus. Regardless of which route policymakers favor, taking any steps to make education more equitable is an ongoing process that often calls for incremental changes, and any recognition and disruption of inequities in SDOH is beneficial.

## Conclusion

Children's achievement is determined by far more than what they are taught in the classroom or how they score on a test. Emphasizing education's role as a social determinant of health allows advocates to look deeply at the various contributors to poor academic outcomes and focus their attention on the root causes of Delaware's shortcomings. In reducing disparities in housing, healthcare, and economic security, education outcomes can be equalized, nurturing an environment in which all children are provided the opportunity to grow and thrive regardless of their class, gender, race, ethnicity, or zip code. With proper investment, attention, and intervention, Delaware can change its educational landscape from one that ranked 45<sup>th</sup> in the nation to one that reflects the full potential of the state's students and educators.

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