

Understanding Kindergarten Readiness

What is kindergarten readiness?

Kindergarten readiness is a snapshot of a child's development at the time they enter kindergarten. Knowing and understanding a child's current skills as they enter kindergarten is valuable to teachers, so they know how to best support them academically, socially, and emotionally. Research has shown that teachers' perceptions of children's academic readiness significantly impact later educational outcomes.¹ Teacher evaluations of children's approaches to learning, math, and science are strong predictors of success throughout elementary education.¹ In addition, assessing kindergarten readiness helps equip teachers with the information schools need to meet a child's unique needs.

Why is measuring kindergarten readiness important?

Assessing kindergarten readiness is important for both teachers and schools to understand students' instructional needs and determine the type and level of support required.² Educational research has shown that teachers' reports of children's readiness provide an understanding of children's development and are valuable tools for instructional planning. This is useful because typical assessments may be developmentally inappropriate for young children.³ It also helps inform teachers and administrators on the status of their early childhood programs and potential areas of improvement.⁴

Who gets measured?

Per U.S. Department of Education guidelines, Ascend tracks kindergarten readiness for children entering kindergarten on an annual basis at the two of the five Promise Neighborhood schools: S.A.N.D. and Wish elementary schools.

How is kindergarten readiness measured?

Per U.S. Department of Education and Connecticut State Department of Education (CSDE) guidelines, kindergarten readiness is measured with the [Kindergarten Entrance](#)

[Inventory](#) (KEI) assessment. The KEI was implemented across the state in 2006 to determine how prepared a child is for kindergarten.⁵

In October of each school year, kindergarten teachers rate each student's skills and behaviors within six domains – language, literacy, numeracy, physical/motor, creative/aesthetic, and personal/social skills – according to the following performance levels:

- A **Level 1** in any domain indicates that the student is still developing their skills and needs substantial instructional support.
- A **Level 2** indicates that the student is inconsistently demonstrating the skills and needs some instructional support.
- A **Level 3** indicates the student is consistently demonstrating the skills for that domain and needs minimal instructional support.

Some skills that fall under each domain include:

- **Language** – Participating in conversations, listening attentively, and following simple directions.
- **Literacy** – Holding a book correctly, recognizing letters, identifying their own name in print.
- **Numeracy** – Counting to 10, identifying simple shapes like circles and squares, and identifying patterns.
- **Physical/Motor** – Running, writing with pens or pencils, and performing tasks like cutting with scissors.
- **Creative/Aesthetic** – Drawing, participating in pretend play, and singing, clapping, or dancing.
- **Personal/Social** – Interacting with peers, using words to express their feelings, and following classroom routines.

Students with a Level 3 rating are considered “kindergarten ready.”

Kindergarten readiness is reported as the percentage of kindergarteners that meet Level 3 standards for each domain, as well as the percentage that meet Level 3 standards across all six domains.

For this result, the higher the percentage, the better, suggesting that the early childhood programs supporting students entering Kindergarten are positively impacting children and preparing them for early success in school.

Where does the data come from?

A data sharing agreement between the Connecticut State Department of Education (CSDE), the University of Hartford Center for Social Research, and Connecticut Data

Collaborative allows Ascend to track KEI assessment results for all students residing within the North Hartford Promise Zone as well as students who attend any Hartford Public School. This data lets Ascend track kindergarten readiness for the Ascend Promise Neighborhood schools, and for comparison, kindergarten readiness for other Hartford Public Schools. Trends in results for the KEI for each district and for the state as a whole are also made publicly available by the Connecticut State Department of Education (see Edsight.CT.gov).

How to Read the Graphs

The graphs below show the percentage of kindergarteners who were “ready for kindergarten” based on the KEI for each skill domain and then for all six domains combined from 2021-22 to 2024-25.

The **orange** line in the graph shows the percentage of kindergarteners attending the Ascend Promise Neighborhood elementary schools who were “ready for kindergarten,” the **blue** line shows the percentages for kindergartners attending other Hartford Public Schools, and the **pink** line shows the percentages for kindergartners attending other Connecticut public schools. The dashed **green** line represents the Ascend target value set for this indicator for the years covered by the Promise Neighborhood grant.

For kindergarten readiness, higher numbers are better!

What do the results show?

Percentage of Kindergarteners Who Met Standards (Level 3) in All Six KEI Domains

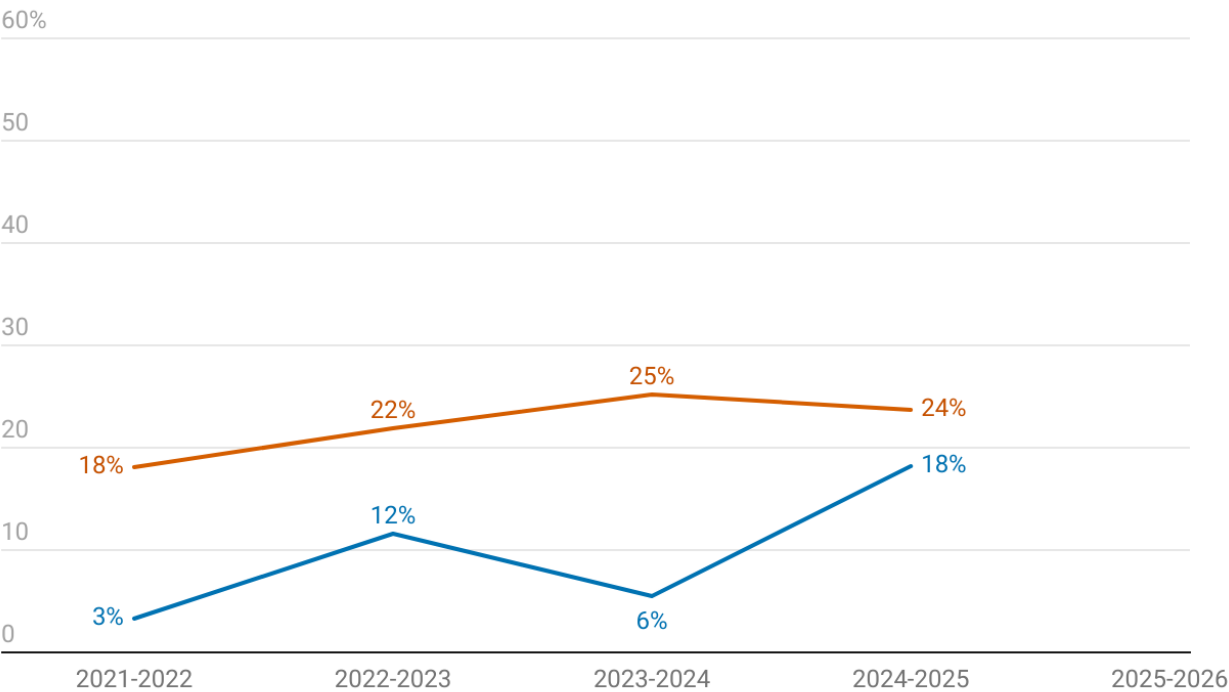
Kindergarten Readiness

Percentage of Students Ready for Kindergarten: **All Domains**

Select a skill below to view kindergarten readiness by topic area:

- Language
- Literacy
- Numeracy
- Physical
- Creative
- Personal
- Overall

— Promise Neighborhood — HPS District



Years refer to school years. For example, 2024-2025 refers to the school year from Aug 2024 through Jun 2025.

Chart: Connecticut Data Collaborative • Source: Connecticut State Department of Education • Created with Datawrapper

Note: Since the student-level CSDE data required to calculate the percentage across domains was first granted in 2024, there are currently no Ascend target values established for this percentage. CSDE does not make this result publicly available, so there is no statewide estimate of the percentage of students ready for kindergarten on all six domains.

- In 2024-25, 18.2% of students attending the Ascend Promise Neighborhood schools were “ready for kindergarten” across all six domains.
- Compared to 2023-24, readiness across all six domains increased by 12.7 percentage points for the Ascend Promise Neighborhood schools. This is the highest percentage of kindergarten readiness Ascend Promise Neighborhood schools have achieved so far.

- Ascend Promise Neighborhood schools have achieved a net improvement of 14.9 points over baseline for the percentage of students considered ready across all six domains.
- Compared to students attending other schools in the district, students attending Ascend Promise Neighborhood schools were still less likely to be ready for kindergarten across all six domains in 2024-25. However, the gap in kindergarten readiness has narrowed substantially since the start of Ascend, from nearly 15 points in 2021-22 to only 5.5 points in 2024-25.

What do the data tell us about children's readiness within each of the domains?

The graphs below explore trends in students' readiness separately for each of the six domains measured on the KEI to uncover important differences and opportunities for targeted interventions.

Percentage of Kindergartners Who Met Standards (Level 3) in Language Skills

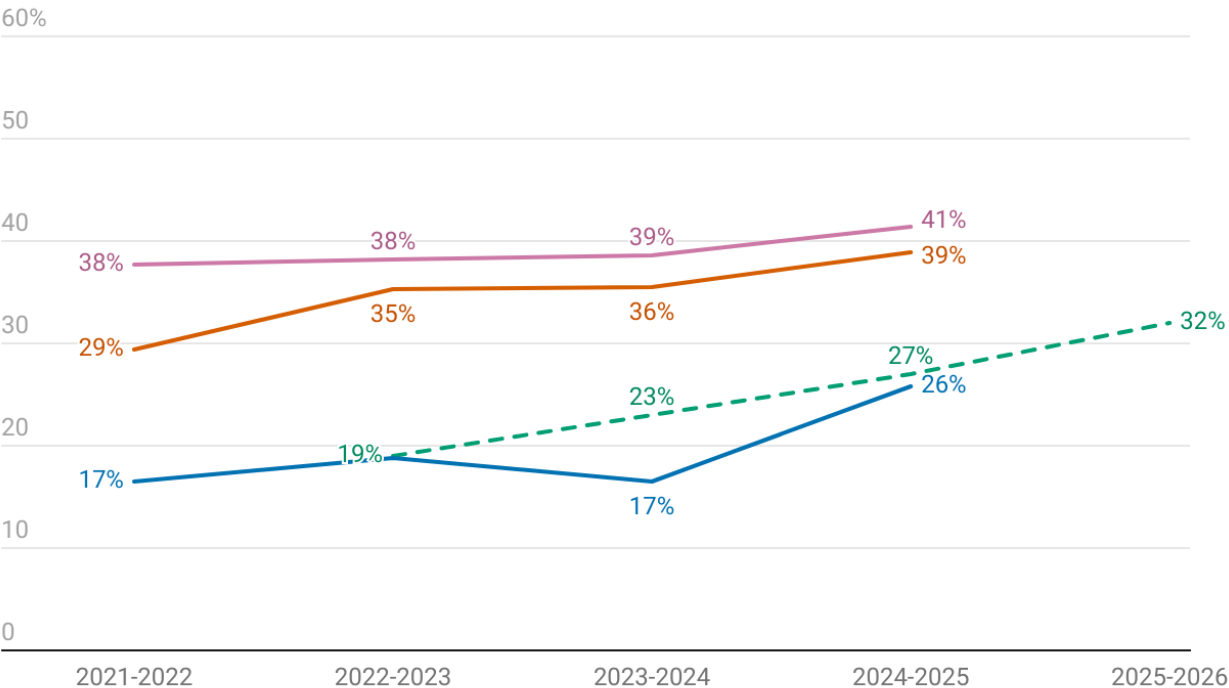
Kindergarten Readiness

Percentage of Students Ready for Kindergarten: **Language Skills**

Select a skill below to view kindergarten readiness by topic area:

Language Literacy Numeracy Physical Creative Personal Overall

Promise Neighborhood HPS District Connecticut Target



Years refer to school years. For example, 2024-2025 refers to the school year from Aug 2024 through Jun 2025.

Chart: Connecticut Data Collaborative • Source: Connecticut State Department of Education • Created with Datawrapper

- In 2024-25, 25.8% of students attending the Ascend Promise Neighborhood schools were “ready for kindergarten” in terms of Language skills.
- Compared to 2023-24, readiness in terms of Language skills increased by 9.3 percentage points for the Ascend Promise Neighborhood schools, the highest percentage of Language readiness Ascend Promise Neighborhood schools achieved so far.
- Ascend Promise Neighborhood schools achieved a net improvement of 9.3 points over baseline for the percentage of students considered ready in the Language domain and has nearly reached the target value in 2 of 3 years since the grant started.
- Compared to students attending other schools in the district, students attending Ascend Promise Neighborhood schools remained less likely to be ready for

kindergarten in terms of the Language domain in 2024-25. The gap in kindergarten readiness for this domain has not narrowed since the start of Ascend.

Percentage of Kindergartners Who Met Standards (Level 3) in Literacy Skills

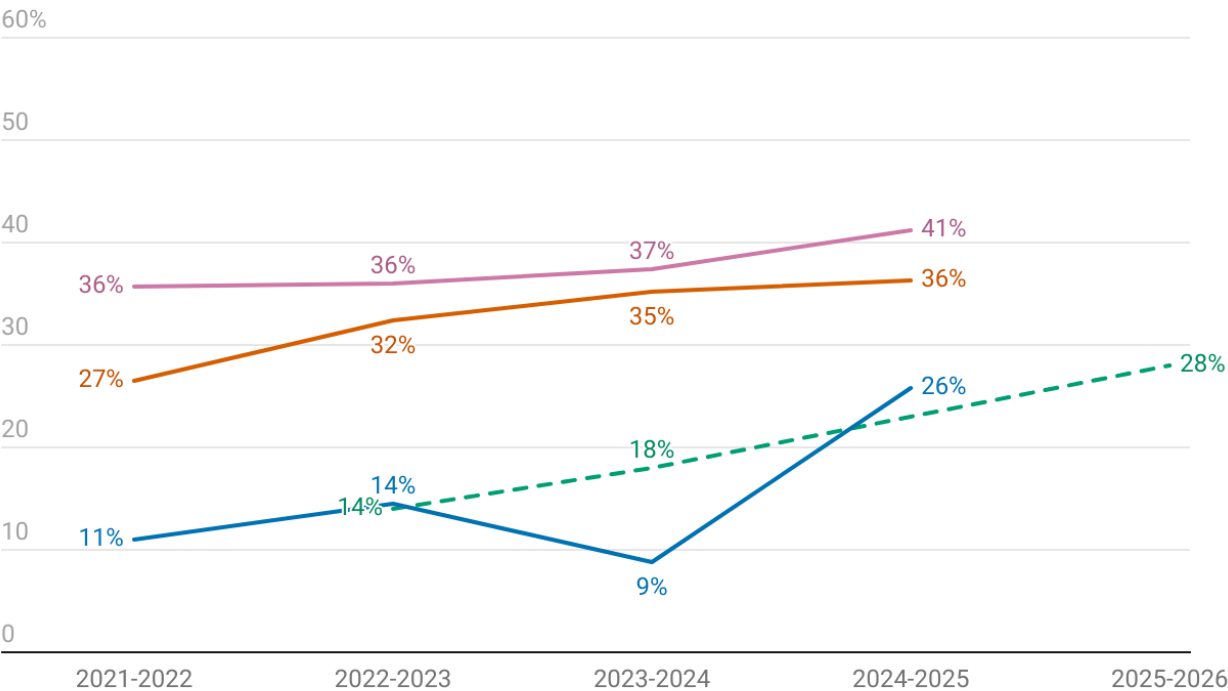
Kindergarten Readiness

Percentage of Students Ready for Kindergarten: **Literacy Skills**

Select a skill below to view kindergarten readiness by topic area:

- Language
- Literacy
- Numeracy
- Physical
- Creative
- Personal
- Overall

Promise Neighborhood HPS District Connecticut Target



Years refer to school years. For example, 2024-2025 refers to the school year from Aug 2024 through Jun 2025.
Chart: Connecticut Data Collaborative • Source: Connecticut State Department of Education • Created with Datawrapper

- In 2024-25, 25.8% of students attending the Ascend Promise Neighborhood schools were “ready for kindergarten” in terms of Literacy skills.
- Compared to 2023-24, readiness in terms of Literacy skills increased by 17 percentage points for the Ascend Promise Neighborhood schools, the highest percentage of Literacy readiness Ascend Promise Neighborhood schools achieved so far.

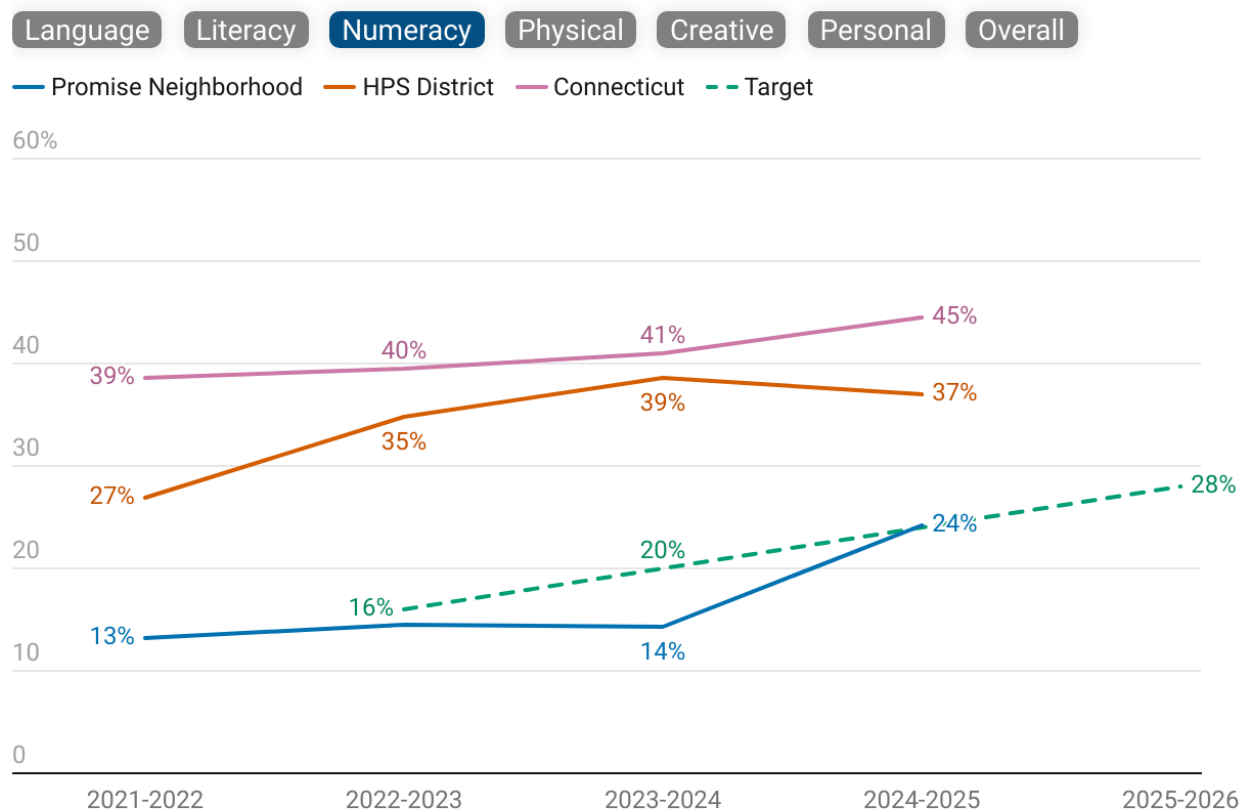
- Ascend Promise Neighborhood schools achieved a net improvement of nearly 15 points over baseline in the Literacy domain. They have exceeded the target value in 2 of 3 years since the grant started.
- Compared to students attending other schools in the district, students attending Ascend Promise Neighborhood schools remained less likely to be ready for kindergarten in terms of the Literacy domain in 2024-25. The gap in kindergarten readiness for this domain has not narrowed since the start of Ascend.

Percentage of Kindergartners Who Met Standards (Level 3) in Numeracy Skills

Kindergarten Readiness

Percentage of Students Ready for Kindergarten: **Numeracy Skills**

Select a skill below to view kindergarten readiness by topic area:



Years refer to school years. For example, 2024-2025 refers to the school year from Aug 2024 through Jun 2025.

Chart: Connecticut Data Collaborative • Source: Connecticut State Department of Education • Created with Datawrapper

- In 2024-25, 24.2% of students attending the Ascend Promise Neighborhood schools were “ready for kindergarten” in terms of Numeracy skills, the lowest percentage for any of the domains.
- Compared to 2023-24, readiness in terms of Numeracy skills increased by nearly 10 percentage points for the Ascend Promise Neighborhood schools, the highest percentage of Numeracy readiness Ascend Promise Neighborhood schools achieved so far.
- Ascend Promise Neighborhood schools achieved a net improvement of nearly 11 points over baseline in the Numeracy domain. They exceeded the target value for this domain for the first time since the grant started.
- Compared to students attending other schools in the district, students attending Ascend Promise Neighborhood schools remained less likely to be ready for kindergarten in terms of the Numeracy domain in 2024-25. The gap in kindergarten readiness for this domain has narrowed only slightly since the start of Ascend.

Percentage of Kindergartners Who Met Standards (Level 3) in Physical/Motor Skills

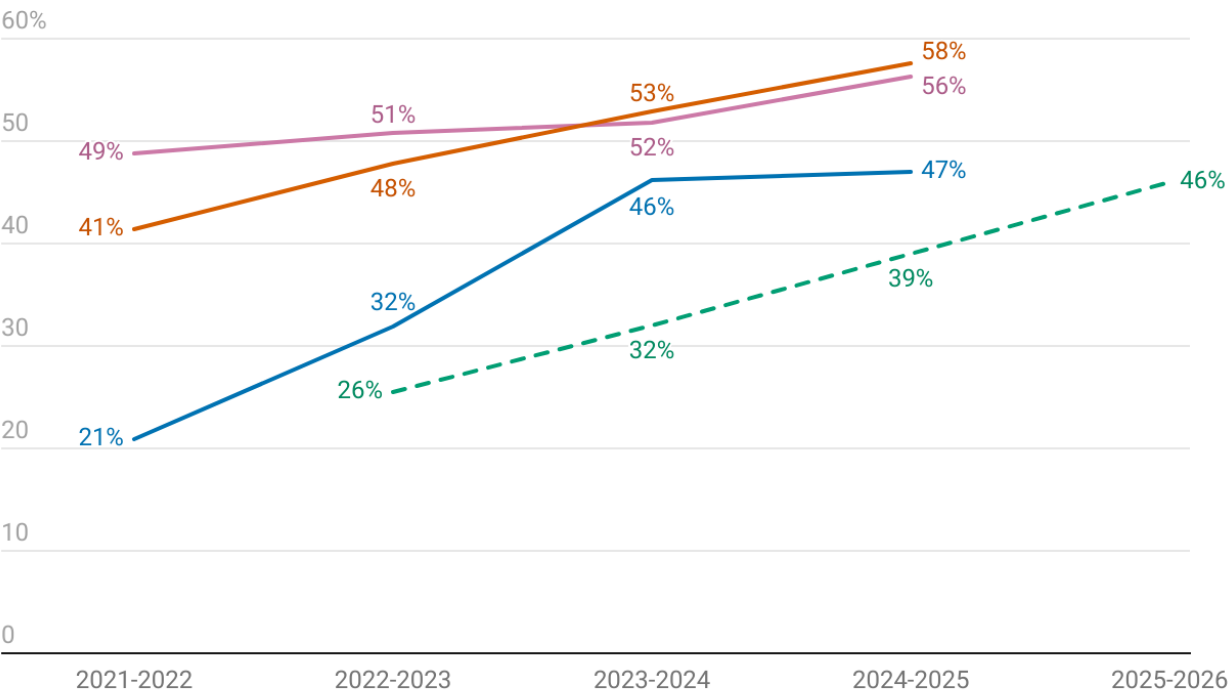
Kindergarten Readiness

Percentage of Students Ready for Kindergarten: **Physical/Motor Skills**

Select a skill below to view kindergarten readiness by topic area:

Language Literacy Numeracy **Physical** Creative Personal Overall

Promise Neighborhood HPS District Connecticut Target



Years refer to school years. For example, 2024-2025 refers to the school year from Aug 2024 through Jun 2025.

Chart: Connecticut Data Collaborative • Source: Connecticut State Department of Education • Created with Datawrapper

- In 2024-25, 47% of students attending the Ascend Promise Neighborhood schools were “ready for kindergarten” in terms of Physical/Motor skills, the highest percentage of any of the domains.
- Compared to 2023-24, readiness in terms of Physical/Motor skills increased by 0.8 percentage points for the Ascend Promise Neighborhood schools, the highest percentage of Physical/Motor readiness Ascend Promise Neighborhood schools achieved so far.
- Ascend Promise Neighborhood schools achieved a net improvement of nearly 26.1 points over baseline in the Physical/Motor domain. They exceeded the target value for this domain for all three years since the grant started.

- Compared to students attending other schools in the district, students attending Ascend Promise Neighborhood schools remained less likely to be ready for kindergarten in terms of the Physical/Motor domain in 2024-25. The gap in kindergarten readiness for this domain, however, has narrowed from 20.5 points in 2021-22 to 9.3 points in 2024-25.

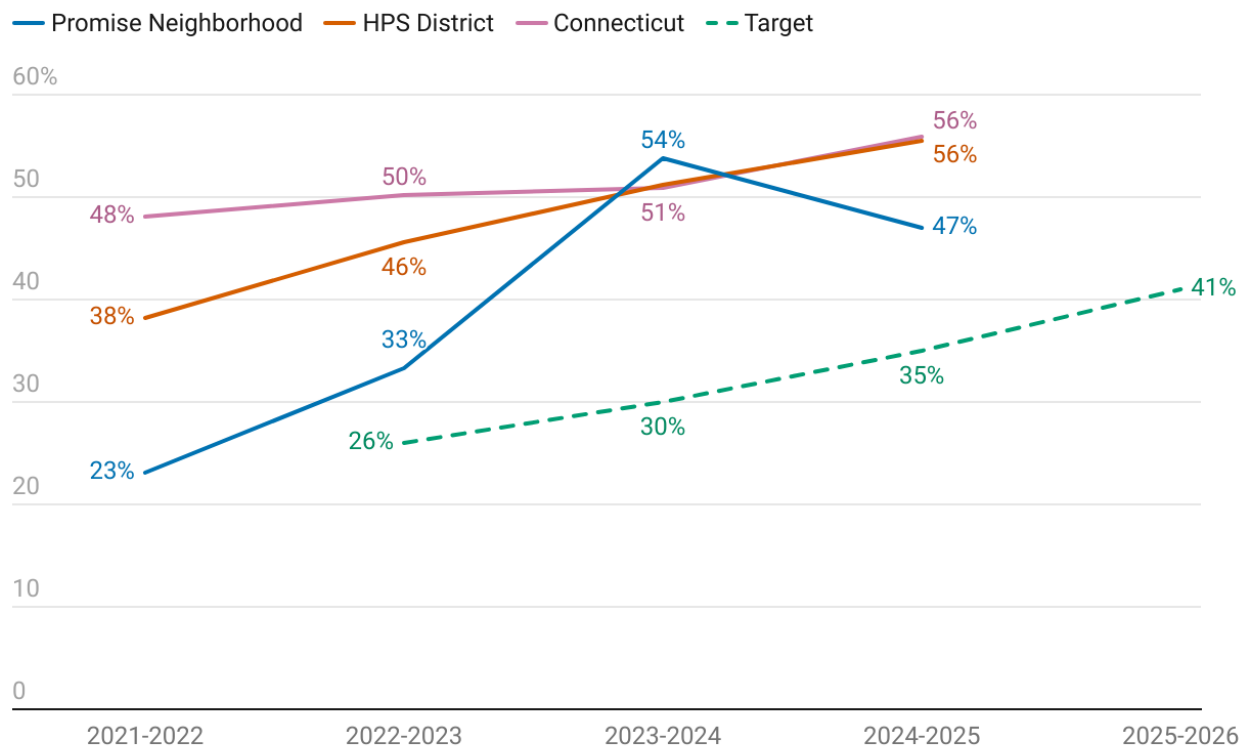
Percentage of Kindergartners Who Met Standards (Level 3) in Creative/Aesthetic Skills

Kindergarten Readiness

Percentage of Students Ready for Kindergarten: **Creative/Aesthetic Skills**

Select a skill below to view kindergarten readiness by topic area:

Language Literacy Numeracy Physical **Creative** Personal Overall



Years refer to school years. For example, 2024-2025 refers to the school year from Aug 2024 through Jun 2025.

Chart: Connecticut Data Collaborative • Source: Connecticut State Department of Education • Created with Datawrapper

- In 2024-25, 47% of students attending the Ascend Promise Neighborhood schools were “ready for kindergarten” in terms of Creative/Aesthetic skills, the highest percentage of any of the domains.

- Compared to 2023-24, readiness in terms of Creative/Aesthetic skills decreased by 6.8 percentage points for the Ascend Promise Neighborhood schools.
- Ascend Promise Neighborhood schools achieved a net improvement of nearly 23.9 points over baseline in the Creative/Aesthetic domain. They exceeded the target value for this domain for all three years since the grant started.
- Compared to students attending other schools in the district, students attending Ascend Promise Neighborhood schools were less likely to be ready for kindergarten in terms of the Creative/Aesthetic domain in 2024-25. The gap in kindergarten readiness for this domain, however, has narrowed from 15.1 points in 2021-22 to 8.5 points in 2024-25.

Percentage of Kindergartners Who Met Standards (Level 3) in Personal/Social Skills

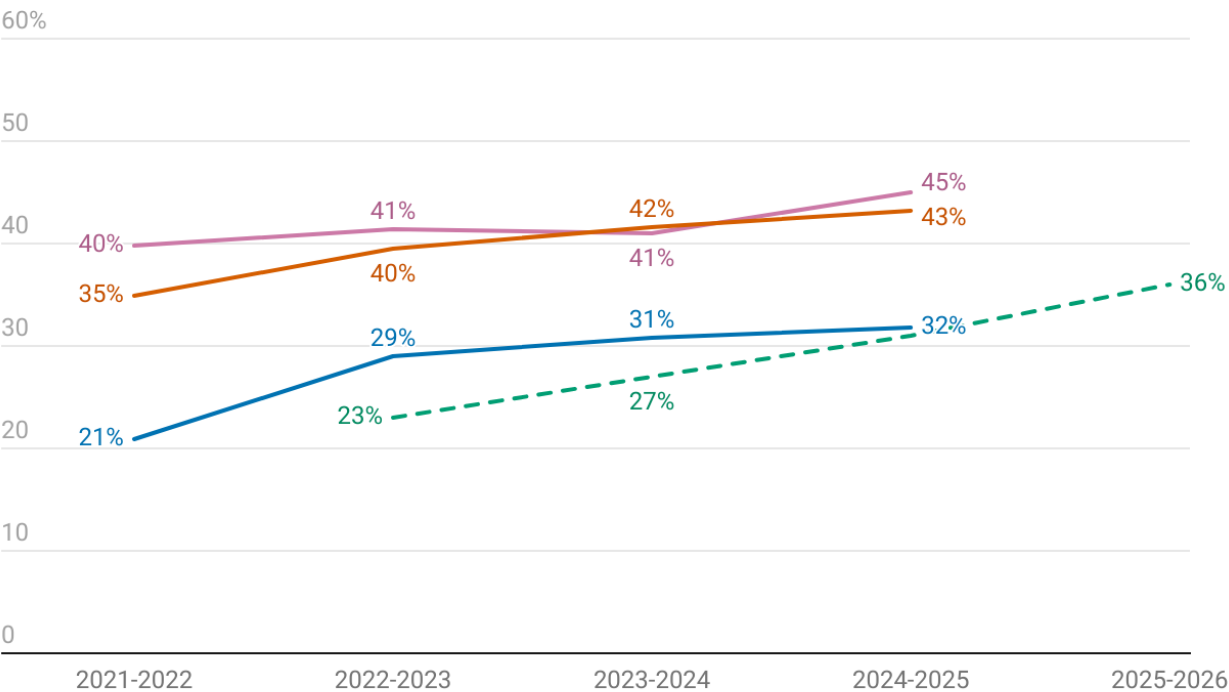
Kindergarten Readiness

Percentage of Students Ready for Kindergarten: **Personal/Social Skills**

Select a skill below to view kindergarten readiness by topic area:

Language Literacy Numeracy Physical Creative **Personal** Overall

Promise Neighborhood HPS District Connecticut Target



Years refer to school years. For example, 2024-2025 refers to the school year from Aug 2024 through Jun 2025.

Chart: Connecticut Data Collaborative • Source: Connecticut State Department of Education • Created with Datawrapper

- In 2024-25, 31.8% of students attending the Ascend Promise Neighborhood schools were “ready for kindergarten” in terms of Personal/Social skills, the third highest percentage of any of the domains.
- Compared to 2023-24, readiness in terms of Personal/Social skills increased by 1.0 percentage point for the Ascend Promise Neighborhood schools.
- Ascend Promise Neighborhood schools achieved a net improvement of nearly 10.9 points over baseline in the Personal/Social domain. They exceeded the target value for this domain for all three years since the grant started.
- Compared to students attending other schools in the district, students attending Ascend Promise Neighborhood schools were less likely to be ready for kindergarten in terms of the Personal/Social domain in 2024-25. The gap in

kindergarten readiness for this domain, however, has narrowed from 14 points in 2021-22 to 11.4 points in 2024-25.

What are the key points from the data?

- Overall, kindergarten readiness at the Ascend schools has generally improved since the start of the grant for all six domains. The gains achieved in 2024-25 reversed the downturns witnessed in 2023-24 for five of the six domains.
- Further inspection of the results by domains indicates that the greatest improvements have been achieved in the physical/motor and creative/aesthetic domains, followed by literacy, numeracy, personal/social and language skills.
- Despite drops in readiness for core academic skills in 2023-24, the percentages of children who met readiness standards in 2024-25 were above targets set by Ascend in all but Language skills.
- Although kindergarten readiness for the Promise Neighborhood schools still lags behind the rest of the district, the gap is generally narrowing. This suggests a potentially greater rate of improvement for Promise Neighborhood schools compared to the rest of the district.

Why is this happening?

The results across domains are mixed for the Ascend schools. The strongest performance, the biggest improvements, and the greatest narrowing of the gap between Ascend schools and the rest of the district are in areas of Creative/Aesthetic, Physical/Motor, and Personal/Social skills. Students at Ascend schools still lag behind the rest of the district in terms of core academic skills such as language, literacy, and numeracy. This pattern of differential development across domains is consistent with research on school readiness among diverse populations. Research has found that children may demonstrate varying paths of growth across cognitive, language, and socio-emotional development areas,⁶ and suggests that interventions should target the core competencies of language, literacy, and numeracy.

How can Ascend help kindergarten readiness?

The City of Hartford continues to engage in early childhood initiatives and support Ascend efforts. For example, the City of Hartford supported early care and education providers affiliated with the Hartford School Readiness Preschool Program, Hartford School Readiness Quality Enhancement Initiative, and the Staffed Family Childcare Network. However, these programs struggled with staff retention, staff turnover, and building meaningful relationships with families. Research on early childhood education consistently identifies staff turnover as a significant challenge for program quality, with studies showing that even in highly resourced early childhood programs, annual staff turnover can reach 30%, and such turnover can potentially reduce the quality of care and teaching provided to children.⁷ As a result, these programs found it challenging to engage in the Ascend network and had limited capacity to effectively respond to family goals, needs, and priorities.

Despite this, Ascend continues to engage organizations and programs that serve young children as part of the pipeline and has highlighted them during the monthly community conversations Ascend hosts. During 2024, the following programs were featured:

- United Way of Northeastern and Central Connecticut's [Dolly Parton Imagination Library](#) is a free subscription program that provides one book per month to children from birth to age five. Through this program, children get to build out their own home library.

- [Hartford Public Library](#) provides a variety of children's programming to support them academically and provide a safe space for fun activities.
- The City of Hartford's [Hartford Talks](#) program is a language development program that uses a "talk pedometer" developed by the LENA Research Foundation. This program encourages both families and children to have conversations with each other and thus expose them to more words.

Ultimately, the data reveals a chance to engage programs within the Early Care and Education domain to provide support to students, especially in the core academic skill areas of language, literacy, and numeracy. Evidence from comprehensive research demonstrates that early childhood intervention programs give way to significant benefits in academic achievement, behavior, and educational progression, with well-designed interventions creating valuable returns to society ranging from \$1.80 to \$17.07 for each dollar spent on the program.⁸ There is also an opportunity to engage other Ascend network resources, such as 211 Child Development Infoline, to reach and support more families within the community.

References

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