

# **Understanding Student Access to Technology**

## **What is student access to technology?**

Student access to technology is defined as having access to a connected computing device, the internet, and/or other digital tools (e.g., software, apps) inside and outside the classroom to support learning. Devices such as desktops, laptops, tablets, cell phones, or smart phones are included in this definition.

## **Why is measuring access to technology important?**

Technology in school, when successfully integrated, has been shown to change the learning environment, providing students with more online-based resources, independent learning opportunities, and problem-solving skills.<sup>1,2</sup>

It's equally important to have access to technology at home as well. Studies have shown that students who have access to the internet at home score higher in reading, mathematics, and science.<sup>3</sup>

Ultimately, having access to a computer and the internet in school and in the community allows students to complete their class assignments, to access other online resources and information that may support their learning, and to develop the digital literacy skills necessary to succeed in school and in their career.

## **Who gets measured?**

Per U.S. Department of Education guidelines, Ascend tracks student access to technology on an annual basis for students and families of students in grades 6 through 12 at three of the five Promise Neighborhood schools: Milner and M.L. King, Jr. middle schools and Weaver High School.

## How is access to technology measured?

Per U.S. Department of Education guidelines, access to 21<sup>st</sup> century learning tools is measured by the percent of students who have access to broadband internet and a connected computing device for educational use in school and at home.

At the Ascend Promise Neighborhood schools, the percentage of students who agree or strongly agree with the statement below is used as an indicator of whether the students have access to technology or not:

- I have the technology I need to do my schoolwork.

The percentage is calculated by:

1. Counting how many students agree or strongly agree to the statement.
2. Dividing that number by the total number of students who responded to the statement.
3. Multiplying by 100 to get a percentage.

Higher percentages are better, showing that more students have access to technology.

## Where does the data come from?

The information comes from the Hartford Public School (HPS) School Climate and Culture Survey (SCCS). The SCCS is administered in the spring to all students in 3<sup>rd</sup> – 12<sup>th</sup> grade enrolled in an HPS school. Per U.S. Department of Education guidelines, we only report survey results for students in 6<sup>th</sup> – 12<sup>th</sup> grade.

## How to Read the Graph

The graph below shows the percentage of 6<sup>th</sup> through 12<sup>th</sup> graders who agree or strongly agree to the technological access survey item.

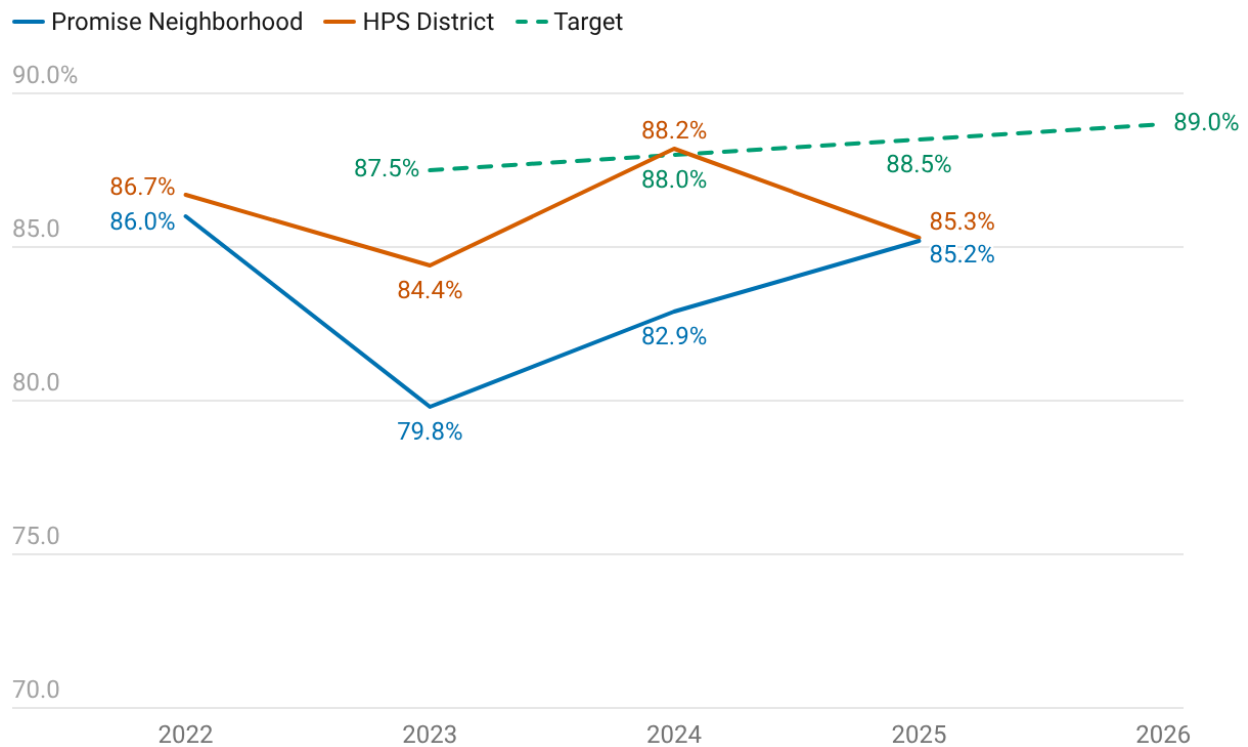
The **orange** line in the graph shows the percentage of students who agree or strongly agree to the survey item for Ascend Promise Neighborhood schools, and the **blue** line shows other Hartford Public Schools. The **green** line represents the target value set for this indicator for the years covered by the Promise Neighborhood grant.

*For technology access, higher numbers are better!*

## What do the results show?

### Access to Technology

Percentage of Students Who Have the Technology They Need To Do Their Schoolwork\*



*Years refer to the year it was collected. For example, 2025 refers to results from the spring 2025 survey.*

*\*Per U.S. Department of Education guidelines, only survey results from students in 6th-12th grade are reported.*

Chart: Connecticut Data Collaborative • Source: Hartford Public School District Climate and Culture Survey • Created with Datawrapper

- In spring 2025, 85.2% of students in 6<sup>th</sup> through 12<sup>th</sup> grade attending the Ascend Promise Neighborhood schools reported having access to the technology needed to do their schoolwork.
- Compared to the spring of 2024, access to technology increased by 2.3 points for the Ascend Promise Neighborhood schools in spring 2025.

- Overall, access to technology has increased the past two years, almost returning to the rate of agreement observed at baseline after the decline in the spring of 2023.
- Students in 6<sup>th</sup> through 12<sup>th</sup> grade attending the Ascend Promise Neighborhood schools reported having access to learning technology at similar rates to their peers at other schools in the district, closing the gap observed in 2023 and 2024.

## Why is this happening?

Technology access among students attending either the Ascend Promise Neighborhood schools and the Hartford Public Schools district is fairly high and has generally been consistent from 2022 to 2025. This may be because of the current technology protocol within HPS schools, which varies across grade levels:

- **Prekindergarten and kindergarten:** iPads are provided to be used within the school.
- **Grades 1-5:** Chromebooks are provided to be used within the school.
- **Grades 6-8:** Chromebooks are provided to be used within the school; though, there are check-out privileges for students to take the device home if they need it to complete their homework.
- **Grades 9-12:** Windows laptops are provided to each student that they can take home.

Although the technology landscape has changed since the COVID-19 pandemic, the district continues to provide its students with the devices they need to complete their assignments in school. However, parents and caregivers from the community have shared that better access to free Wi-Fi in the North Hartford Promise Zone would help students finish their homework when they're not in school.

A combination of technology and Wi-Fi access is needed to ensure students have the resources they need to complete their assignments within and outside the classroom.

## How can Ascend help improve student access to technology?

Several programs within Ascend support technology access for children in our neighborhood:

[Ascend Family Navigators](#), from The Village for Families and Children, provide additional supports for the Ascend Promise Neighborhood schools. They:

- Hold regular hours within each school to work with students and families
- Collaborate with Family & Community Service Support Providers (FCSSPs) and other school-based staff to identify barriers to attendance and to support families with basic needs
- Connect students and their families to services and resources within the community

[Hartford Public Schools](#) offers multiple programs, services, and supports to students and their families as part of the Full-Service Community School model implemented at each of the Promise Neighborhood schools. These services may be provided by either school staff (e.g., FCSSPs, School Social Workers) or community-based organization partner(s), or both working in conjunction with each other. They provide the following types of support to students and to other members of their families:

- [Integrated Student Supports](#) (at all schools) promote students' academic success by developing and coordinating supports that target academic and non-academic barriers to achievement, including providing resources and supports to meet basic needs.
- [Family Engagement](#) services (at all schools) involve outreach and engagement with family members, including providing direct assistance to family members of the student. A few examples include Parent Engagement Groups, home visits, back-to-school events, and parent-teacher conferences.
- [Referrals](#) to outside organizations (at all schools) address needs that require a higher level of care or access to resources available outside of the school, such as housing, employment, food, and energy assistance.
- [Family Resource Centers](#) (at S.A.N.D. and Wish elementary schools) provide access to a continuum of services that foster the optimal development and education of children beginning at birth. They provide early childhood education, child care, and family support services to meet the specific needs that are presented when engaging with families.
- [Career and Workforce Development](#) (at M.L. King, Jr. and Milner middle schools and Weaver High School) includes programs and services that support post-secondary education and career development, in-school or out-of-school, such as those that link students to higher education, vocational training, or work-based

learning opportunities, or connect classroom learning to career pathways. This area also includes efforts to engage parents and provide financial resources for continued learning and/or student transition assistance.

The [Urban Ecology Program](#) at Keney Park educates students and community members about environmental challenges and opportunities in urban settings.

The [Youth Play Institute](#) at Hartbeat Ensemble is a professional workforce internship that allows students to engage in community research, acting technique, original playwriting, and sound and light design to connect the community beyond traditional barriers of race, gender, class, and geography.

The data reveals an opportunity to further engage these programs to increase student access to technology.

### *References*

1. Forum on Education Statistics. *Technology in Schools. Suggestions, Tools and Guidelines for Assessing Technology in Elementary and Secondary Education*. <https://nces.ed.gov/pubs2003/2003313.pdf>. Published November 2002. Accessed August 18, 2025.
2. Gray L and Lewis L. *Use of Educational Technology for Instruction in Public Schools: 2019-20*. <https://nces.ed.gov/pubs2021/2021017Summary.pdf>. Published November 2021. Accessed August 18, 2025.
3. KewalRamani A, Zhang J, Wang X, et al. *Students Access to Digital Learning Resources Outside of the Classroom*. <https://nces.ed.gov/pubs2017/2017098.pdf>. Published April 2018. Accessed August 18, 2025.