

SPECIAL REPORT

1

# Unfinished Business:

Understanding the  
Digital Access Divide in  
American Schools



In partnership with

**Charter**  
COMMUNICATIONS

**Spectrum**  
ENTERPRISE™

# Table of Contents

Introduction ..... 4


Findings ..... 6

Ending thoughts and questions  
for further discussion ..... 20

About us ..... 23





A photograph of three students in a classroom. A young woman with long brown hair is smiling and pointing at a tablet held by a young man with short dark hair. Another student with glasses is visible in the background, looking at the tablet. The scene is brightly lit, suggesting a sunny day.

**“The digital access divide often both mirrors and exacerbates existing educational inequalities. Students without adequate access to digital resources struggle to participate fully in online learning, access educational materials, collaborate with peers, or develop the digital skills and literacies needed for post-graduation success. These disparities can impact a student’s ability to participate fully and benefit from digital learning opportunities often taken for granted by their historically better-resourced peers.”<sup>i</sup>**

# Introduction

**T**he phrase, “digital divide,” was first popularized in the mid-1990s to refer to individuals and families who did not have access to technology or the Internet at home. Over a series of years during that time period, the National Telecommunications and Information Administration (NTIA) within the U.S. Department of Commerce published a series of three reports under the title banner of “Falling through the Net” which documented the widespread inequalities in national technology access, noting particularly how people of color, older people and less affluent and less educated people especially in rural areas were especially vulnerable to not having Internet connectivity.<sup>ii</sup> Business, policy and education leaders soon adopted the phrase to also explain the potential inequity for students if they did not have technology and Internet connectivity at home. Though technology products and the ways to connect to the Internet have evolved significantly in the past 30 years, the focus on home access has been the predominant theme when referring to the digital divide.

Project Tomorrow’s Speak Up® Research reports have advocated for a broader definition of the digital divide to include access challenges at home and the obstacles K-12 students face in gaining access to high quality digital tools and resources to support classroom learning. In our report, co-published with Spectrum Enterprise® in 2022, *Beyond the Homework Gap: Leveraging Technology to Support Equity of Learning Experiences in School*, we advance a new expanded definition of equity in terms of examining learning experiences, learning opportunities for success and student agency as all important components when considering how to erase the inequities in education in addition to addressing limitations in technology access.<sup>iii</sup> This expanded definition has gained traction as more policy, business and education leaders now realize that simply providing every student with a Chromebook and a WiFi hotspot does not ensure equitable or high quality learning experiences.

In January 2024, the U.S. Department of Education released the new 2024 National Educational Technology Plan, titled “*A Call to Action for Closing the Digital Access, Design and Use Divides*.”<sup>iv</sup> The new plan defines the three key divides of access, design and use as follows:

*“The Digital Use Divide: addressing opportunities to improve how students use technology to enhance their learning, including dynamic applications of technology to explore, create, and engage in critical analysis of academic content and knowledge.*

*The Digital Design Divide: addressing opportunities for educators to expand their professional learning and build the capacities necessary to design learning experiences enabled by technology.*

*The Digital Access Divide: addressing opportunities for students and educators to gain equitable access to educational technology, including connectivity, devices, and digital content. This also includes accessibility and digital health, safety, and citizenship as key elements of digital access.”<sup>v</sup>*

In support of the release of the first new National Educational Technology Plan in 7 years, Project Tomorrow, in collaboration with Spectrum Enterprise, is creating a new series of reports to be released in 2024 that examine each of the three digital divides through the lens of the Speak Up Research findings. As they have for 20 years, the Speak Up Research findings provide a glimpse into the authentic views and values of K-12 students, teachers, administrators, parents, and families about the state of education, and particularly the role of technology within the learning process. Each report in this new series will provide foundational data to support the national emphasis on closing the access, design and use divides in American education, and identify specific areas of “unfinished business” that will help local, state,



and national leaders understand the need for urgency and targeted attention on the inequities inherent in the divides.

In this first report in the special series, we examine the state of the digital access divide in America's classrooms through the eyes and experiences of K-12 teachers and students. While other reports including from Project Tomorrow document the homework gap realities with home access that persist today, this report focuses on the inequities that still exist regarding access to technology and Internet access in the classroom despite significant investments in digital learning devices, online curriculum and content and Internet connectivity within schools. Where appropriate, we reference longitudinal data from the Speak Up Research dataset from 2003-2023 to provide additional context. School level demographic analysis of the research findings enables greater clarity to understand where gaps and unfinished business still exist relative to technology access. Using the 2024 National Educational Technology Plan as context, this report addresses the following three topics and questions specifically related to understanding:

- Student access to digital learning devices in the classroom and at home
- Student access to online and digital learning content and tools in the classroom
- Obstacles in school that inhibit access to effective digital learning experiences for students

Subsequent reports from Project Tomorrow and Spectrum Enterprise will address the other two digital divides defined by this year's National Educational Technology Plan: the digital use divide and the digital design divide. To help connect the dots between the 2024 National Educational Technology Plan, the findings in these Speak Up reports and any local plans or actions to be taken by school and district leaders, each report will include a list of discussion starter questions to support local planning efforts on how to address the divides.

## Key Findings

- Despite a significant increase in student access to personally assigned digital learning devices in schools, there is still a divide when it comes to students being able to take their devices home for homework and extended learning.
- Students and teachers recognize the importance of future-ready skills development, such as learning to work independently, collaborating with others, and critical thinking. However, there is a gap between the skills desired by students and the digital tools and resources available to them in the classroom.
- Slow or inconsistent Internet connectivity in classrooms is a primary barrier to effective technology usage for both students and teachers. This issue is particularly acute in urban schools, where 66% of grade 9-12 students report it as a barrier.

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*For the past 20 years, Project Tomorrow, a national education nonprofit organization, has been investigating the role of digital tools, content and resources within schools and classrooms through the Speak Up Research Project. Since 2003, over 6.2 million K-12 students, parents, teachers, and administrators have shared their first-hand perspectives and ideas on the role of technology in education. Reflecting the priorities and concerns of school and district leaders, the research has also focused on the challenges associated with technology usage, including how to fund the necessary investments in infrastructure and tools. Project Tomorrow, in collaboration with Spectrum Enterprise, has leveraged the most recent Speak Up Research findings to provide new insights for educators, policymakers, and community leaders about key education issues.*

# Finding #1

## Understanding student access to digital learning devices in the classroom and at home

Ten years ago, only 1 in 5 teachers reported that their students had a personally assigned digital learning device (Chromebook, laptop, or tablet) that they could use in the classroom to support learning. An additional 21% of teachers said they could reserve a shared cart of devices for their classroom to support a particular lesson or unit of study. But according to 53% of the teachers in 2014, their students did not have regular access to any type of digital device to support learning within their classroom.

Student access to Chromebooks, laptops and tablets has since changed dramatically. In the latest Speak

Up findings from the 2022-23 school year, 84% of K-12 teachers report that their students have a personally assigned device to use in school, representing more than a threefold increase in student access to technology for learning in the past 10 years. With these new 2022-23 results, traditionally stubborn divides appear to be mostly erased. As demonstrated in Table 1, the percentage of teachers in urban schools reporting 1:1 programs in their classrooms (78%) is only slightly less than the percentage of teachers reporting the same from suburban schools (85%). Similarly, 86% of teachers in high poverty schools, represented by their school's Title 1 status, also say their students have an assigned device to use for schoolwork.

Table 1: Teachers’ reporting on student access to a personally assigned digital device for schoolwork

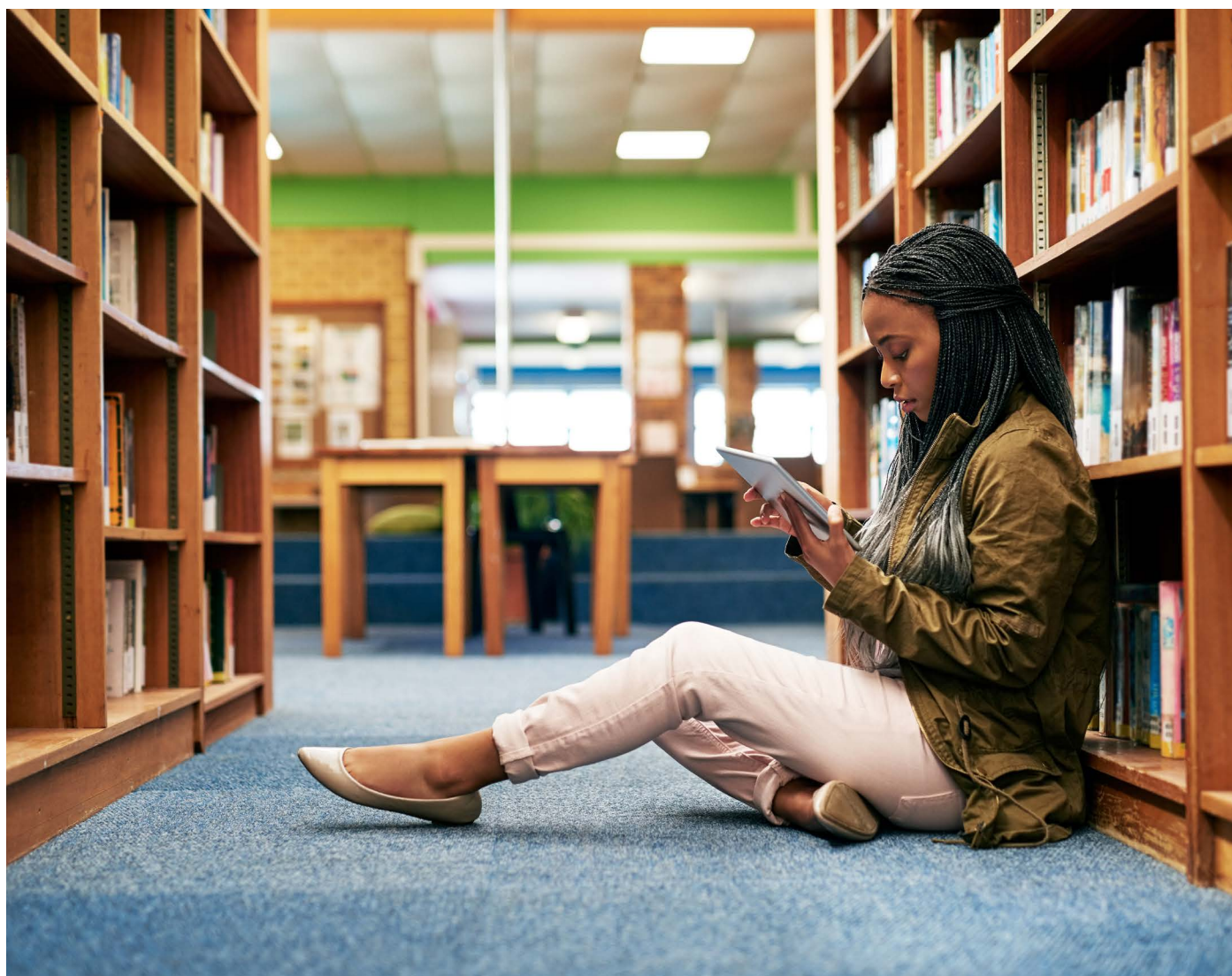
Yes, my students are assigned a digital learning device	Percentage of teachers				
	All teachers	Teachers in urban schools	Teachers in suburban schools	Teachers in rural schools	Teachers in Title 1 schools
In school access only	36%	53%	38%	33%	50%
Students can take their devices home	48%	25%	47%	51%	36%
Total percentage of students assigned a device	84%	78%	85%	86%	86%



The differentiation that still exists is in the ability of students to take home their school-assigned device to support homework and extended learning beyond the classroom. A majority of teachers in urban schools (53%) and Title 1 schools (50%) say their student access is confined to just in-school usage. The same is true for elementary teachers in general. While nearly two-thirds of middle school and high school teachers (65%) say their students have devices that they can use in school and at home, only 26% of elementary teachers say their students have at home access as well.

Understanding that there are certainly many reasons why a school or district might prohibit students from taking home their school-owned Chromebook, laptop or tablet,

this disparity of access between students in different communities and even across grade levels is potentially exacerbating longstanding educational inequities with unfortunate outcomes. For example, as documented in other reports from Project Tomorrow and the recent book, *Free Agent Learning: Leveraging Students' Self-Directed Learning to Transform K-12 Education*, nearly two-thirds of students in grades 6-12 are regularly using online and social media tools outside of school to extend their learning in areas of passion and curiosity.<sup>vi</sup> Understanding that for today's students, learning is a 24x7 enterprise, providing all students with an education-appropriate device to use at home for extended learning would be a way to ensure equitable access to academic content and experiences beyond the schoolhouse door.







## Finding #2

# Understanding student access to online and digital learning content and tools in the classroom

**A** key trend over the past few years in schools and districts has been the development of a “Portrait of a Graduate” or “Profile of a Learner” visioning document to serve as a guiding framework for connecting student learning goals and outcomes with future-ready skill development. The 2024 National Educational Technology Plan specifically calls out the importance of connecting the use of technology to a school or district’s portrait or profile document.

*After articulating the full range of outcomes desired for their learners and graduates, educators and policymakers can work backward to build a school model and technology plan that maps directly to the identified outcomes. While developing a shared vision is an essential first step, execution may require redefining some critical assumptions regarding learning and how technology can and should support that vision.<sup>vii</sup>*

*- 2024 National Educational Technology Plan*



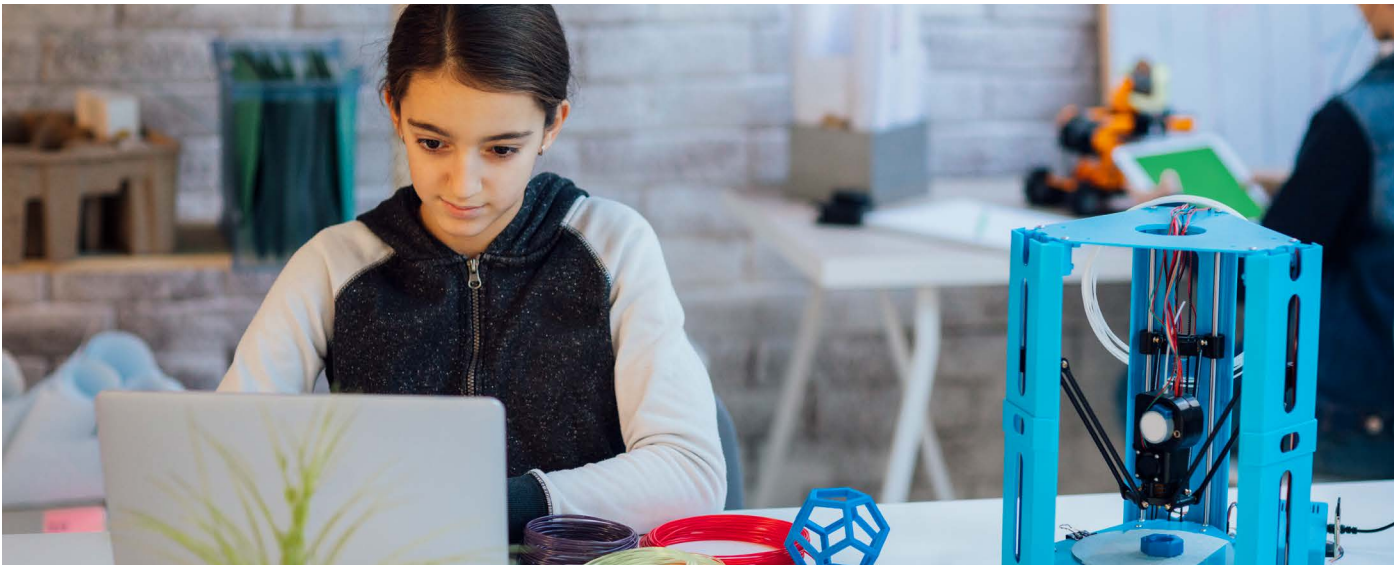
This role of student future-ready skill development within American education today is a top consideration of parents and families. Based upon responses in the 2022-23 Speak Up survey, 53% of parents and educational guardians say that their number one concern today about their child’s future is that they are not learning the right skills in school they will need to be successful in the future. As documented in past Speak Up reports, students are also very interested in learning experiences that have explicit connections to future-ready skill

development, particularly when those experiences include the use of digital tools, content, and resources. Table 2 documents what students in grades 6-12 identify as the most important skills they believe they need to develop to be successful in the future. As noted, students place a high premium on building up a personal capacity to learn on their own and developing an ability to work effectively and collaboratively with different types of people.

**Table 2: Students’ identification of the most important future-ready skills**

<b>Most important skills students believe they need to develop to be successful in the future</b>	<b>Percentage of students</b>	
	Gr 6-8 Students	Gr 9-12 Students
How to learn on one’s own	78%	83%
Learning to work with different types of people	75%	79%
Teamwork and collaboration skills	71%	72%
Creativity skills	70%	65%
Critical thinking and problem-solving skills	68%	75%

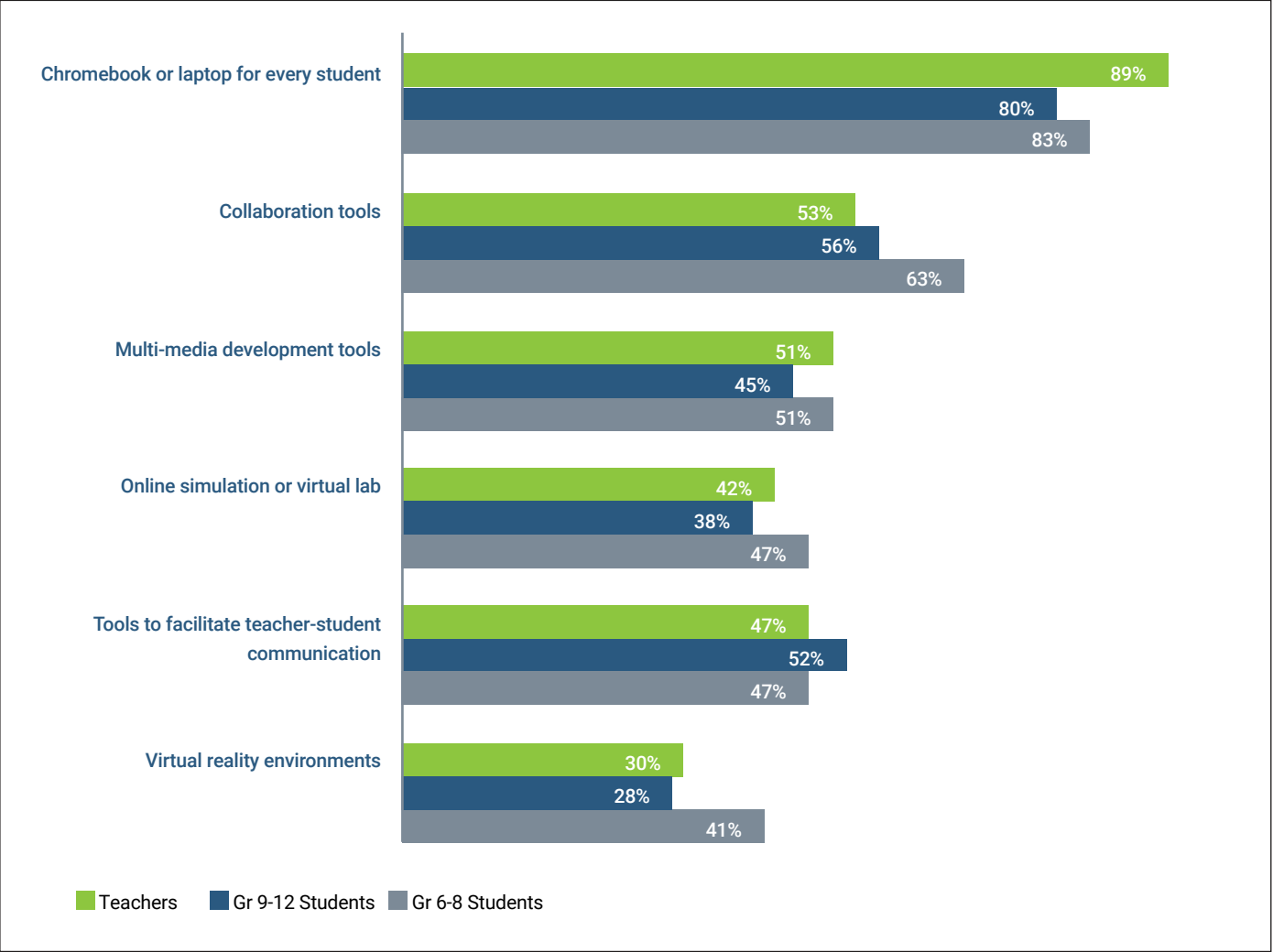
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When students are asked to identify the types of digital tools and solutions that they believe would be most impactful in their vision for the ultimate school, their choices represent technologies that can help them develop these highly valued skills. For the most part their teachers mirror similar choices. Chart A illustrates some of the most highly ranked digital tools that students and teachers believe will have the greatest impact on student learning outcomes.

**Chart A:** Desired technologies that students and teachers say would benefit student outcomes





The connections between the desired technology tools and students' list of important skills are important to underscore in this analysis. A personally assigned device facilitates students' own learning – at school and home. Having easy access to their teacher using digital and online tools supports students in their own learning pathways. Collaboration tools help facilitate teamwork skill development and provides unique opportunities for students to learn how to work with others from different backgrounds. Multi-media development tools provide students with ways to develop their creativity skills. Online simulations, virtual labs and virtual reality environments provide new experiences where students can develop critical thinking and problem-solving skills in contextually relevant learning environments.

The 2024 National Educational Technology Plan explicitly calls out the value of connecting the dots between the types of skills identified on many school and district Portraits of a Graduate and the technology tools that can empower those new capacities. Based upon our latest Speak Up results, students report that the technologies that they use most often in class are the school's learning management system (53%) and watching an online video (43%). While these tools may have some value within the instructional process or organization of student tasks, they are not the best tools for helping students develop future-ready skills. The digital access divide conundrum is that beyond access to a Chromebook or laptop in school, the other technologies identified by the students and teachers are primarily aspirational at this point.





### Collaboration tools

- Only 40% of students in grades 6-12 say they are using collaboration tools on a weekly basis today in school. Despite widespread use of products such as Google Classroom, 1 in 6 students say they have no access to tools like this to support their learning.

### Multi-media development tools

- Only 14% of students in grades 6-12 say they are using tools to develop media projects on a weekly basis in school. 56% of students say have never used media creation tools as part of instruction in their classroom.

### Online simulation or virtual lab

- Only 22% of students in grades 6-12 say they can access an online simulation or participate in a virtual lab on a weekly basis in school. A majority of students report having no access or only rare access (maybe once or twice a year) to these types of learning tools.

### Augmented or virtual reality environments

- Only 5% of students in grades 6-12 say they are using VR headsets or content on a weekly basis today in school. Representing how this emerging technology has not yet penetrated the school walls, over 8 in 10 students (83%) say they have had no experience using AR or VR as part of school learning.

### Tools to facilitate teacher-student communication

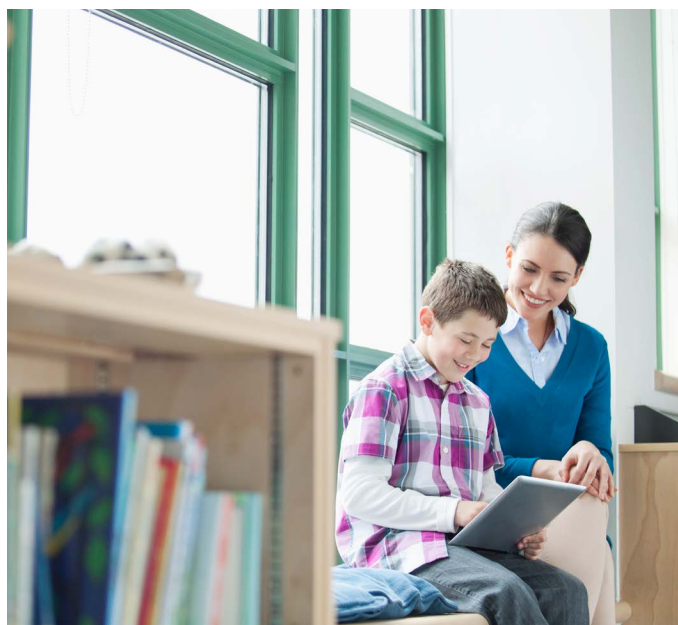
- Only 25% of students in grades 6-12 say they email their teachers weekly and 7% say they use text messaging to ask their teachers questions about homework, clarify expectations or confirm due dates for assignments and tests.



Teacher usage of a wide range of digital and online tools has significantly increased over the past few years. Nearly a majority of teachers say that they use an online curriculum (52%), online and digital game products (49%), software and apps to help students develop content knowledge (46%) and online reading sites and subscriptions (45%) on a weekly basis in their classroom. However, from the analysis we also know that most students in grades 6-12 do not have regular access to the types of digital tools, content, and resources that they believe will help them develop future-ready skills. This lack of regular access to those highly desired learning experiences is consistent across all community types with one exception. High school students in suburban communities (50%) report weekly access to collaboration tools that allow them to use digital feedback from others (teachers and peers) on their work to make revisions and/or improvements. Only 31% of high school students in rural communities and 40% of high school students in urban communities have that same weekly access to such tools.



In describing the importance of closing the digital access divide, the 2024 National Educational Technology Plan emphasizes that students without adequate access to digital resources will fail to develop the digital skills and literacies needed for post-graduation success.<sup>viii</sup> Part of the unfinished business in our schools therefore is to reconcile this gap between skills desired and the types of digitally enhanced learning experiences that enable our students to develop and nurture the capacities and competencies they need for their future success. This gap is certainly worth further investigation to understand if the issues are structural or attitudinal.





## Finding #3

# Understanding the school obstacles that inhibit access to effective digital learning experiences for students

**D**espite the significant investments made in school technology over the past few years including providing device access to more students and building up network infrastructure to support digital learning in the classroom, obstacles still thwart the best district efforts to create the types of learning experiences that students in 2024 need and deserve. Rather than simple annoyances, these obstacles or barriers are impacting the ability of teachers and students to use technology in classroom settings and may explain why technologies to support student skill development or other advanced technologies are not being used more frequently within learning. The Speak Up Research indicates that there may be a perception problem between the central office and the classroom. Technology leaders such as CIOs, CTOs, and Director of Technology (45%) report that they believe that the primary obstacle to more effective use of digital tools in the classroom is the lack of teacher training, access to ongoing support resources,

or personal motivation to change instructional practices to support digital learning. Students and teachers identify other obstacles as having a bigger impact, however.

Nationwide, middle school and high school students (53%) report that slow or inconsistent Internet connectivity in their classroom is the primary barrier to using technology more effectively for learning. Unfortunately, this finding is not a new revelation. Ten years ago in 2014, 48% of students cited the same obstacle as the number one impediment to classroom learning. In the Speak Up surveys, slow or inconsistent classroom connectivity has been the top issue for students for over 10 years. Now the latest Speak Up findings from the 2022-23 school year indicate that teachers are feeling the impact of slow and inconsistent Internet connectivity on their classroom instruction, as well. The connectivity issue was cited by 44% of teachers as a primary obstacle to using technology more effectively in their classroom. However, there is



a difference of opinion between students and teachers and that of their technology leaders, only 26% of whom believe their students and teachers would choose slow or inconsistent Internet connectivity as a barrier to more effective usage.

Students and teachers also point to other barriers or obstacles to more effective technology usage in the classroom as depicted in Table 3 and Table 4. Hurdles include school filters that block websites needed for teaching and learning, students not being able to use their own mobile devices in school and teachers’ frustration with student devices not being charged for usage in class. Getting beyond the national statistics, the disaggregation of the data findings by community type reveals some equity challenges as well. For example, the lack of high speed, consistent Internet connectivity within classrooms appears to be a particularly acute problem for urban schools. Grade 6-8 students from urban schools (66%) and Grade 9-12 students from urban schools (84%) say Internet connectivity is the primary obstacle, an almost a 20-percentage-point differential from their peers in suburban schools. High school students in urban schools



(60%) as well as those in rural schools (57%) are also more likely to note that their school blocks websites they need to support schoolwork than students in suburban schools (47%). These differences indicate structural access limitations that are impacting student learning potential.

**Table 3: Students report on the obstacles that prevent more effective use of technology within their classroom**

Primary obstacles to more effective technology use	Percentage of students									
	All students		Students in urban schools		Students in suburban schools		Students in rural schools		Students in Title 1 schools	
	Gr 6-8	Gr 9-12	Gr 6-8	Gr 9-12	Gr 6-8	Gr 9-12	Gr 6-8	Gr 9-12	Gr 6-8	Gr 9-12
Internet is too slow or inconsistent	46%	60%	66%	84%	44%	65%	43%	53%	45%	64%
My school blocks websites I need for schoolwork	42%	52%	36%	60%	42%	47%	35%	57%	39%	50%
Not allowed to use my mobile devices at school	32%	33%	46%	38%	30%	29%	39%	36%	36%	31%



The findings from teachers in urban schools follow a similar pattern. While 41% of teachers in suburban schools note that Internet connectivity is a barrier to their more effective tech usage in their classroom, 58% of their colleagues in urban schools are facing the same problem, a 17-percentage point difference between the two teacher groups. Teacher views on the challenges with student devices not being charged or websites or apps blocked that they need for instruction is consistent across the community types.

The difference in opinion between students and teachers, and district level technology leaders about the quality of the Internet connectivity in classrooms indicates the need to address unfinished business in terms of district infrastructure to support more advanced technologies and

potentially, more regular usage of those high bandwidth tools and apps. This starts with a more realistic viewpoint on the classroom environment.

Teachers were asked in the Speak Up 2022-23 surveys if any additional conditions stand in their way or limit their effectiveness using technology. As would be expected, time constraints are the top vote getter in this category for 41% of teachers including 47% of elementary school teachers. Also noted was the lack of planning time with colleagues. Over one-third of teachers (37%) noted this as a contributing condition; 49% of teachers in urban schools reported the same. Only 22% of teachers say they need professional learning on skills and strategies for using technology effectively within instruction.

**Table 4: Teachers report on the obstacles that prevent more effective use of technology within their classroom**

Primary obstacles to more effective technology use	Percentage of teachers				
	All students	Teachers in urban schools	Teachers in suburban schools	Teachers in rural schools	Teachers in Title 1 schools
Student devices are not charged for class	51%	45%	49%	52%	40%
The Internet is too slow, inconsistent or unreliable	44%	58%	41%	44%	44%
The school blocks websites or apps needed for teaching	32%	34%	32%	31%	26%

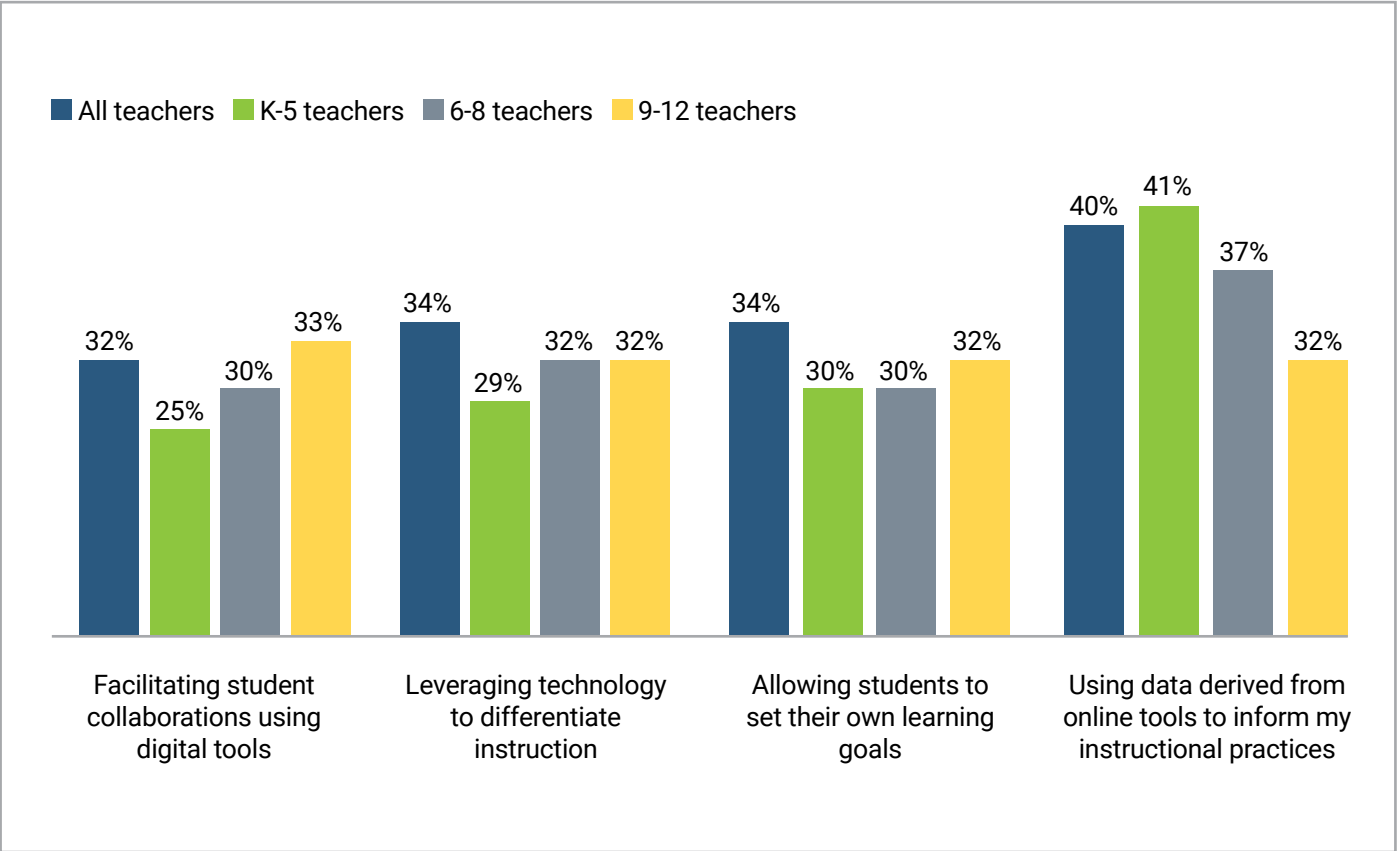


But professional learning and developing confidence and comfort with new instructional models, especially those with digital components, are two different things. Project Tomorrow has long reported the importance of ensuring that teachers are not just skilled in how to use technology (such as facilitating an online curriculum, setting up digital quizzes, creating videos of lessons or labs, or using a learning management system) but must also develop a new mindset and set of valuations around technology usage for it to be highly effective. Those new beliefs and values arise when teachers have developed personal comfort using the new digital tools and have confidence in their own abilities to re-engineer their instructional practices to take advantage of the features and functions afforded by these tools. Based upon the findings from the 2022-23 school year, we have more work to do to help teachers develop these new capacities, and thus, be able to design and implement more active learning experiences

for their students. While the digital design divide will be discussed in the second report in this series, the lack of teacher comfort is represented as an access divide issue as well.

In general, only about one-third of teachers say they are very comfortable with new instructional practices that are enabled by technology tools. For example, 32% of teachers report feeling very comfortable with facilitating student collaborations using a wide range of digital tools including class discussion boards, shared online documents and online post-it walls (Chart B). While elementary teachers (25%) are slightly less likely to feel comfortable with these new practices than their colleagues in high schools (33%), there is still significant room for growth in terms of developing a personal capacity for implementing these new practices with students. The same is true for the other practices as noted in Chart B.

**Chart B: Percentage of teachers who feel very comfortable with these instructional practices**





The increased access to digital tools and content in the classroom alongside the desire in many districts to understand the return on investment for technology is driving deeper discussions about how to enhance teacher effectiveness with digital tools. This return-on-investment analysis requires a starting point however to understand both teachers' readiness for using technology effectively and the expectations for student outcomes from that usage. Understanding teachers' comfort and confidence in using these new tools, as well as their technical skills with their instructional practices, is an important component for this discussion. Project Tomorrow will continue to collect feedback from teachers to evaluate their growth and changes in mindset regarding technology-enabled instruction. The 2024 National Educational Technology Plan offers an additional important idea for consideration: the development of a Portrait of an Educator.

*Developing a Portrait of an Educator, aligned to the Portrait of a Learner/ Graduate, connects educator habits and capacities with expected student learning. Setting a clear vision for educators aligns hiring practices, professional learning opportunities, and educator evaluations with these competencies. Moreover, such educator profiles can set clear expectations for educator needs and abilities regarding edtech. From there, state and district leaders can backward design professional learning systems to ensure all educators have the time, space, and capacity necessary to develop key learning design abilities.<sup>ix</sup>*

*- 2024 National Educational Technology Plan*







## Ending thoughts and questions for further discussion

**T**he January publication of the 2024 National Educational Technology Plan by the U.S. Department of Education is stimulating new discussions nationwide about the longstanding imperative to close the digital access divide, the digital design divide and the digital use divide in our nation's schools and communities. To support those new discussions, Project Tomorrow and Spectrum Enterprise have collaborated on this series of three reports based upon the 2022-23 Speak Up Research findings to identify key areas of "unfinished business" that need to be addressed within each of those digital divides. In this first report of the series, we have provided Speak Up data insights to inform local and national discussions around closing the digital access divide. Specifically, the Speak Up findings enable new levels of awareness and perspective on students' access to digital learning devices, both in school and at home, students' access to online and digital tools and content to support learning in their classrooms, and the school-based obstacles that may be limiting both student and teacher abilities to fully leverage the most effective digital learning instructional practices. These insights naturally lend themselves to further reflection and conversation. We encourage school and district leaders to utilize this report as a starting point for new discussions within your local community to both expand definitions of digital access and to seek new solutions to address the digital access divide in classrooms specifically. The following questions can help jumpstart those important local conversations with your students, teachers, administrators, school board members and community partners.





**1** How does your district define equitable digital access within your schools and community? Are there structural, cultural, or attitudinal obstacles and barriers that are inadvertently limiting the access of some students and teachers to high quality digital tools, resources, and content to support learning? How are you identifying those potential obstacles or barriers? What needs to be in place within your schools and community to mitigate or eliminate those impediments to equity?

**2** How effectively are your classroom teachers using technology to support student learning? Is your district team prioritizing the use of digital tools to support classroom efficiency and/or student engagement over student development of future-ready skills? What is needed to support teachers' shift in thinking and practice so that the technology usage in the classroom is supporting students' skill development and preparation for future post-graduation success?

**3** Are your district visioning statements and guidelines such as a Portrait of a Student and Portrait of an Education aligned with your goals for ensuring equitable and accessible technology usage in the classroom for all students? What do you need to do to help your staff, your parents and families, and greater community "connect the dots" between digital access and student outcomes? Why is it important for all members of your community to be on the same page regarding the unfinished business of how to address the digital access divide in your schools?









# About Project Tomorrow

Project Tomorrow’s nonprofit mission is to support the effective implementation of research-based learning experiences for students in K-12 schools. Project Tomorrow is particularly interested in the role of digital tools, content, and resources in supporting students’ development of college and career ready skills. The organization’s landmark research is the Speak Up Research Project which annually polls K-12 students, parents, educators, and community members about the impact of technology resources on learning experiences both in school and out of school, and represents the largest collection of authentic, unfiltered stakeholder voice on digital learning. Since 2003, over 6.2 million K-12 students, parents, teachers, librarians, principals, technology leaders, district administrators and members of the community have shared their views and ideas through the Speak Up Project. Project Tomorrow is very proud to be part of the collaborative team that developed the 2024 National Educational Technology Plan with the U.S. Department of Education. Learn more about our mission and work at [www.tomorrow.org](http://www.tomorrow.org).

# About Spectrum Enterprise

Spectrum Enterprise, a part of Charter Communications, Inc., is a national provider of scalable, fiber technology solutions serving many of America's largest businesses and communications service providers. The broad Spectrum Enterprise portfolio includes [networking and managed services solutions: Internet access, Ethernet access and networks, Voice, and TV solutions](#). The Spectrum Enterprise team of experts works closely with clients to achieve greater business success by providing solutions designed to meet their evolving needs. For more information, visit [enterprise.spectrum.com](http://enterprise.spectrum.com).

Resources
<sup>i</sup> US Department of Education, “ <a href="#">A Call to Action for Closing the Digital Access, Design and Use Divides, 2024 National Education Technology Plan</a> ,” January 2024, p. 59.
<sup>ii</sup> Ronald H. Brown, “ <a href="#">FALLING THROUGH THE NET: A Survey of the ‘Have Nots’ in Rural and Urban America</a> ,” July 1995.
<sup>iii</sup> “ <a href="#">Beyond the Homework Gap: Leveraging Technology to Support Equity of Learning Experience in School</a> ,” Project Tomorrow, April 2022.
<sup>iv</sup> “ <a href="#">A Call to Action</a> .”
<sup>v</sup> “ <a href="#">U.S. Department of Education Releases 2024 National Educational Technology Plan</a> ,” U.S. Department of Education, January 22, 2024.
<sup>vi</sup> “ <a href="#">Free Agent Learning: Leveraging Students’ Self-Directed Learning to Transform K-12 Education</a> ,” Project Tomorrow.
<sup>vii</sup> “ <a href="#">A Call to Action</a> ,” p. 18.
<sup>viii</sup> Ibid, p.59.
<sup>ix</sup> Ibid, p.37.



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