

Unfinished Business:

Understanding the Digital Use Divide in American Schools

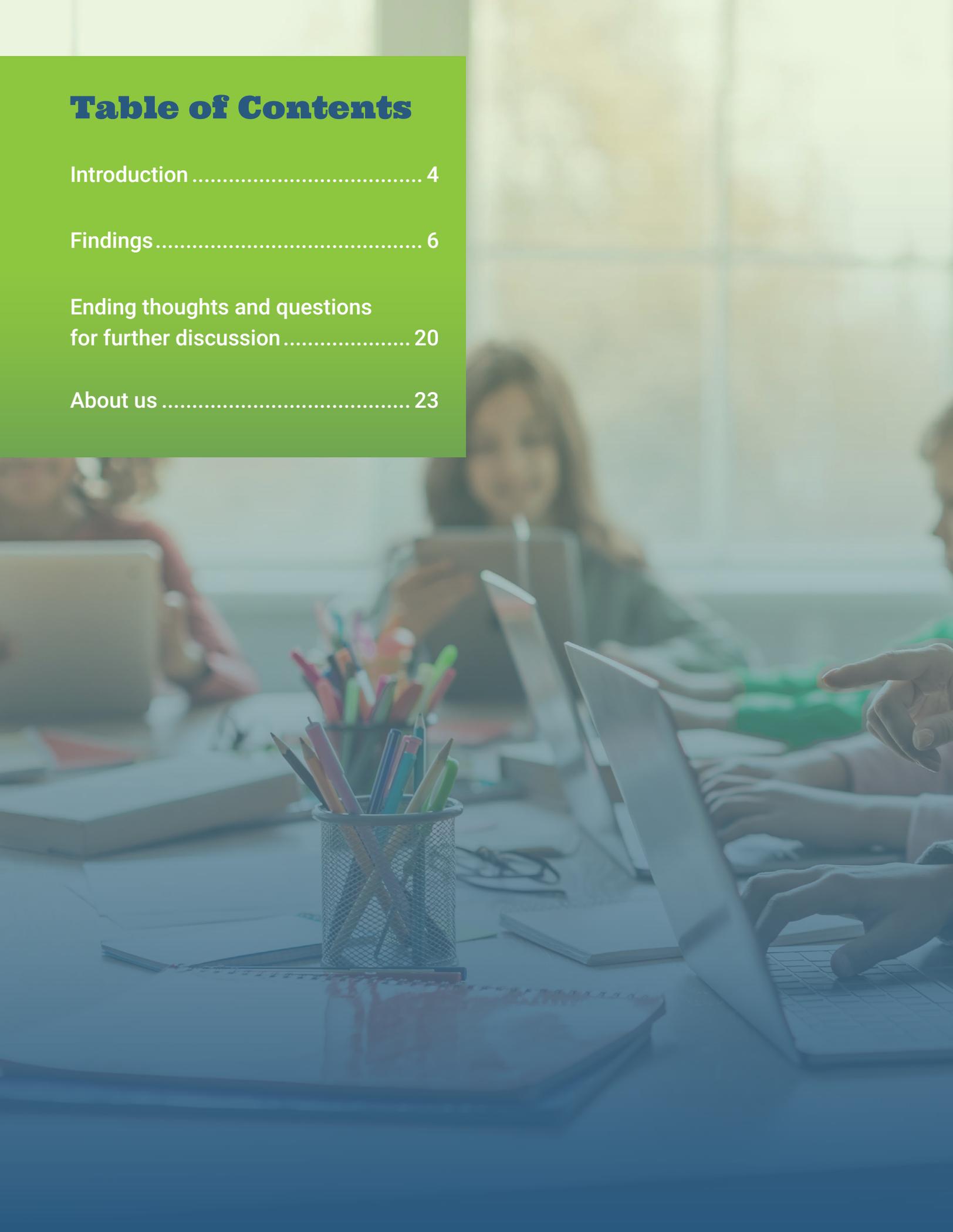


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“The digital use divide stands between students who have opportunities to engage actively with technology as part of their educational experiences and those who don’t. All learners deserve an education designed around the active use of technology rather than the passive technology uses they report being offered most frequently in school.”¹

2024 National Educational Technology Plan

“We need to more effectively support the integration of educational technology tools that facilitate active learning, critical thinking, and creativity. Tools such as virtual reality simulations, coding platforms, multimedia creation tools, and collaborative online platforms can enrich the learning experience and empower students to explore complex concepts in innovative ways.”

K-12 STEM Specialist Teacher (Wisconsin)

Introduction

As noted in the 2024 National Educational Technology Plan and in the statement above from the teacher in Wisconsin, we have more work to do as a nation to ensure that every student in every school can use technology to support active, not passive learning. Valuable work toward closing the digital access divide in our schools and communities has provided a solid foundation for looking beyond the simple use of online worksheets and school portals as examples of technology integration.

It is time now to understand what is needed to truly transform both the teaching and learning experiences in our classrooms. The goal must be for every student to have learning experiences in their classroom that engage them in the academic rigor and provide meaningful ways for them to develop critical thinking, problem-solving creativity and collaboration skills, the same skills deemed necessary for students' future success. That process starts with understanding how teachers are currently using digital tools within instruction, and then, how to identify best practices and resources to support teachers' mindset and practice changes as they adopt more active learning strategies as their north star.

For many years, Project Tomorrow® has studied how teachers adopt, adapt and sustain new learning practices in their classrooms, especially those practices that include emerging technologies. Our experience in helping teachers adopt more active learning experiences in their classrooms has taught us that there is no academic framework that can sustain these new transformational practices. Rather, the driver must be an increased understanding of what our K-12 students need in learning experiences today so that they are well-prepared for tomorrow. The 2024 National Educational Technology Plan helps to reframe that focus for teachers, leaders, parents

and policymakers. It is our goal with this new report, *Unfinished Business: Understanding the Digital Use Divide in American Schools*, to provide additional context for similar discussions in schools, districts and communities nationwide.

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." The new plan defines the three key divides of access, design and use as follows:

"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.

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 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."^{vi}

In support of the release of the first new National Educational Technology Plan in seven years, Project Tomorrow, in collaboration with Spectrum Enterprise®, is creating a new series of reports 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 an insider 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 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 second report in the special series, we examine how digital tools and resources are used within America's classrooms to create active learning experiences which help students develop learner self-efficacy and agency, as well as critical workplace skills. Using the feedback from over 7,600 K-12 classroom teachers from 2022 – 2024, this report prioritizes the experiences of teachers to understand what is needed to close the digital use divide. In addition to documenting how teachers are utilizing various technologies to support differentiated learning for their students, the report also provides new insights into what teachers need to more effectively leverage digital tools to engage their students in active learning. To create a complete picture of the current environment, we also conducted additional analysis on the Speak Up data findings to understand differences in teachers' activities and perspectives based upon their years of experience in teaching. Where appropriate, we reference longitudinal data from the Speak Up Research dataset from 2003-2024 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 effective technology usage to support active learning.

Using the 2024 National Educational Technology Plan as context, this report addresses the following three topics specifically related to understanding the challenges and opportunities of the digital use divide today in America's classrooms:

- How technology is being used to support active learning in K-12 classrooms
- How teachers are leveraging digital tools to address learner differences in their classroom
- What teachers need to create more active learning experiences for all students

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 includes a list of discussion starter questions to support local planning efforts on how to address the divides.

*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 6.3 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. The first report in the series, *Unfinished Business: Understanding the digital access divide in American schools*, can be accessed here: enterprise.spectrum.com/digitalaccessdivide*

“Active use of technology utilizes technology to discover, analyze, and apply learning rather than passively receiving information. It can empower students to take ownership of their learning, collaborate with peers, and use their skills practically and meaningfully. It reveals voice and choice in the learning process while enhancing engagement, critical thinking, creativity, and problem-solving abilities, preparing students for success in a technology-driven world.”ⁱⁱⁱ

- 2024 National Educational Technology Plan

Finding #1

Understanding how technology is being used to support active learning in K-12 classrooms

The Speak Up Research Project has reported on teachers' usage of technology to support classroom learning since 2004. Early implementations of classroom technology were focused on teachers' usage of the tools to support their own efficiencies. For example, from 2005 to 2015, the primary way that teachers (71%) reported using technology was to post information about classroom activities and due dates on a school portal. The dissemination of information was important, but the school portal was not necessarily an agent for active learning by students. Comparatively, only 23% of teachers in 2015 said they were using digital tools to create scientific investigation opportunities for their

students and only one-third said they used technology to facilitate student collaborative projects.

Teachers have traditionally focused on using technology to create classroom efficiency. Today, a mindset change is required to think about technology as the means for supporting more effective student learning. A key outcome from the pandemic and related virtual learning experiments in many school districts was a noted change in teachers' perceptions about the value of digital tools to support student learning in different ways. In our Speak Up report released in June 2023 with Spectrum Enterprise, *Beyond the classroom today: From Increasing Technology*

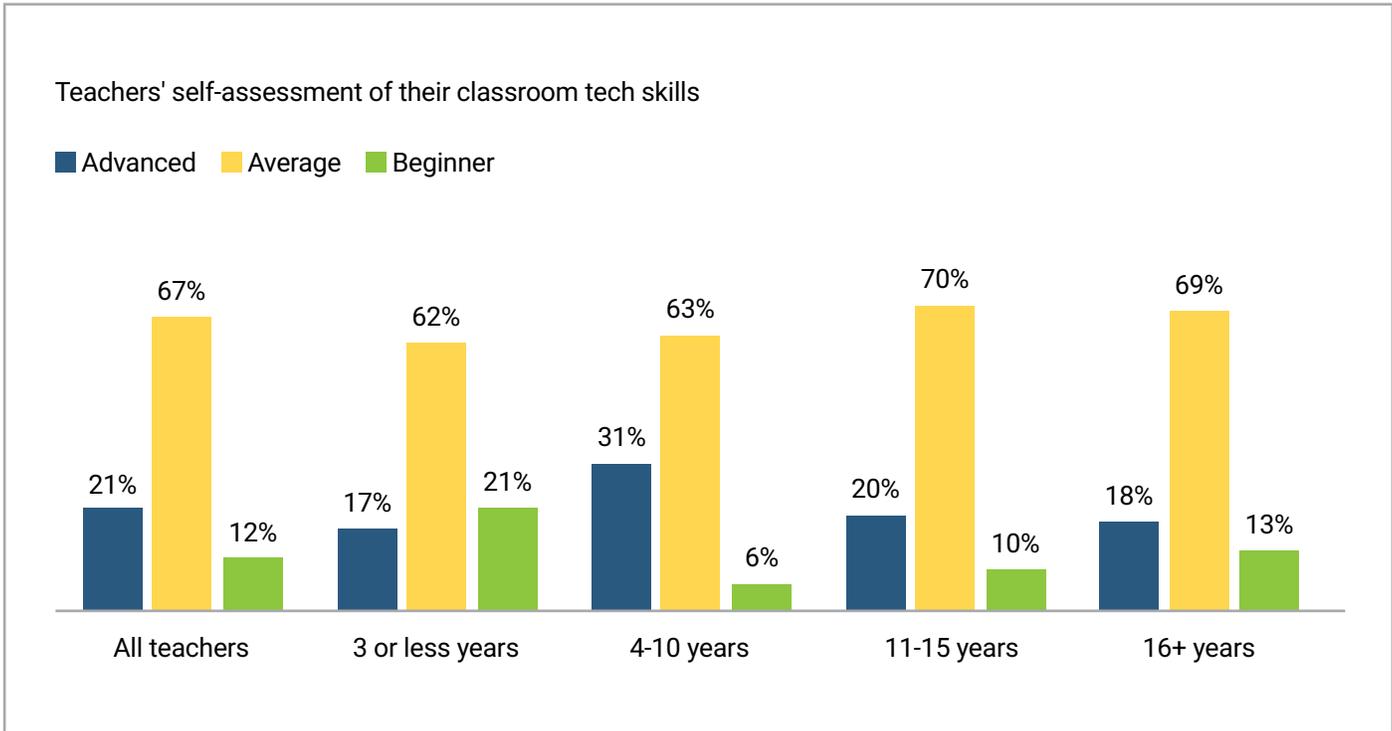


Access to *Improving Student Learning Experiences*, we documented this shift in thinking by comparing teachers' pre-pandemic attitudes with their 2022-23 attitudes.^{iv} As noted in the report, 59% of the teachers in 2022 said that technology helped them be better organized in their classroom. That same percent (59%) also noted that they were creating more interactive and relevant lessons now using technology – an increase of 37% since 2018. While the change is significant and laudable, it still represents unfinished business in terms of the digital use divide as 41% of the teachers did not agree that they are creating more interactive and relevant lessons today because of technology access. As noted in the 2024 National Ed Tech Plan, “all learners deserve an education designed around the active use of technology.”

To understand teachers' current capacities for changing their instructional practices in support of more active learning, a good starting point is a skills self-assessment using digital tools and resources to support student learning. On the 2023-24 Speak Up surveys, teachers

were asked to assess their classroom technology skills. Two-thirds of classroom teachers (67%) rate their skills as average compared to their peers with only 21% identifying their skills as advanced compared to other teachers (Chart A). An additional 12% say they are beginners in terms of understanding how to use technology effectively to support student learning. Despite the experiences of using more technology than ever before since the pandemic, teachers ten years ago were less likely to say they were beginners and more likely to assess their skills as advanced. From the 2013-14 Speak Up dataset, 32% of classroom teachers said they were advanced tech users and only 4% put the beginner label on their skills. The balance of 64% identified as average, which is consistent with our current 2023-2024 data. The difference may be explained by looking at the tech capacities relative to the years of experience in our teaching workforce today. As noted in Chart A, approximately one in five teachers with three or less years of classroom teaching experience (21%) say they are beginners with using technology effectively to support student learning.

Chart A: Teachers' self-assessment of their classroom technology skills – by years of teaching experience



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This discussion about the current state of teachers' skills in using technology is important for understanding the digital use divide because of the relationship between teachers' perceptions of their own tech capacity and their actual effective use of digital tools in support of student learning. Notably, per our analysis, teachers' self-assessment of their tech skills correlates to their in-classroom activities using technology to specifically support active student learning experiences.

- 53% of classroom teachers who assess their tech skills as advanced report creating digitally empowered active learning experiences for their students on a weekly basis. Only 27% of teachers who identify as tech beginners are implementing the same types of active learning activities with their students.
- Additionally, 56% of these tech-advanced teachers are also using digital tools regularly to engage students in learning activities. Only 34% of tech-beginner teachers are doing the same.

When asked about their frequency creating active learning activities for students that promote critical thinking and retention rather than activities that rely upon students just passively receiving information, 32% of all K-12 teachers say they are doing those types of learning activities daily (Table 1). An additional 29% report incorporating active learning experiences less frequently including within an occasional project or unit. Within the elementary teacher ranks, 17% report they are rarely or never facilitating active learning experiences for their students. When we try to size the digital use divide, it is our estimation given these statistics, that approximately four in ten K-12 students are not exposed to active learning experiences on a regular basis. Thus, they are being deprived of opportunities to develop the critical thinking, creativity, and problem-solving abilities that will be essential for preparing them for success in a technology-driven world, as noted in the 2024 National Ed Tech Plan. This again constitutes unfinished business in terms of closing the digital use divide.

Table 1: Teachers' frequency creating active learning experiences for students – by grade level assignment

Frequency of creating active learning experiences for their students	Percentage of teachers with this level of frequency			
	All teachers	Gr K-5	Gr 6-8	Gr 9-12
Daily	32%	31%	29%	29%
Weekly	27%	26%	30%	31%
High frequency (Daily + Weekly)	59%	57%	59%	60%
1 x month	15%	14%	18%	16%
Only within a unit or project	14%	14%	13%	14%
Low frequency (Monthly + Project only)	29%	28%	31%	30%
Rarely/never	12%	17%	10%	10%

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Beyond frequency of usage, it is also important to understand the types of digital tools and resources being used to support active learning in the classroom. Just as we know about differences in the quality of screen time by students, the same applies to teachers' usage of technology for learning. The inclusion of an ed tech product or solution does not necessarily mean that the learning experience is a meaningful activity or represents active learning. For example, 75% of high school students and 66% of middle school students say their primary use of technology use in their school learning life is taking an online test or quiz. Elementary school students in grades 3-5 also report a high level of online test taking today (82%). Comparatively, only 24% of students in grades 6-12 report having access on a weekly basis to digital tools that would allow them to create multi-media content to substantiate knowledge or support skill development. And while students report frequent usage of their own digital tools to support active learning outside of school, teacher facilitation or sponsorship in the use of similar tools in the classroom, especially within the context of active learning, is often a barrier reported by the students.^v In examining the data on teachers' reporting on the digital

tools they use within their classroom instruction, three key findings emerged (Table 2). First, among tools that have the potential to support active learning by students (compared to tools like online tests or learning management systems that are adult support tools), less than 50% of all teachers are currently using these tools on a weekly basis. Second, teachers who identified their tech skills at the beginner level are less likely to be using those tools than their peers. Third, teachers who say they are actively designing and implementing active learning experiences for their students are more likely than all other groups of teachers to be using these digital tools to support those experiences. For example, 42% of all teachers in the Speak Up sampling say they are using online and digital games with their students on a weekly basis. A slightly smaller percentage of tech-beginner teachers (38%) are doing the same. But 69% of teachers who are committed to active learning within their classroom report using online and digital games to support more effective learning experiences for their students. The same percentage of teachers say they are also using online videos to create more active learning experiences for their students.

Table 2: Digital tools used by teachers in the classroom

Digital tools and resources for classroom usage	Percentage of teachers who say their classroom usage is at least weekly		
	All teachers	Teachers who assess their tech skills as beginner	Teachers who say they are using tech to create active learning experiences for their students
Online and digital games	42%	38%	69%
Online videos	46%	35%	69%
Online reading sites and reading subscriptions	41%	35%	61%
Software/apps to support student content acquisition	38%	23%	60%
Online databases for student research	30%	20%	53%
Two-way communication tools for student feedback	28%	16%	46%
Data analysis or visualization tools	30%	15%	36%
Tools for students to create multi-media content	20%	4%	33%

It follows therefore that teachers creating active learning experiences in their classroom through the utilization of digital tools like games, videos, apps, online data bases and multi-media creation tools have changed their mindset to put a greater focus on student learning, not just on their own classroom organization and efficiency. It is also apparent that more work needs to be done to support all teachers in this adoption process so that more students can have similar active learning classroom experiences as espoused in the 2024 National Educational Technology Plan.

A key driver for that adoption may be the aspirations of students themselves for more active learning experiences in their classroom. When asked to identify the types of digital tools and resources that help students be most successful with their learning, middle school and high school students noted many of the same digital tools currently being used by teachers who are creating active learning in their classrooms today including:

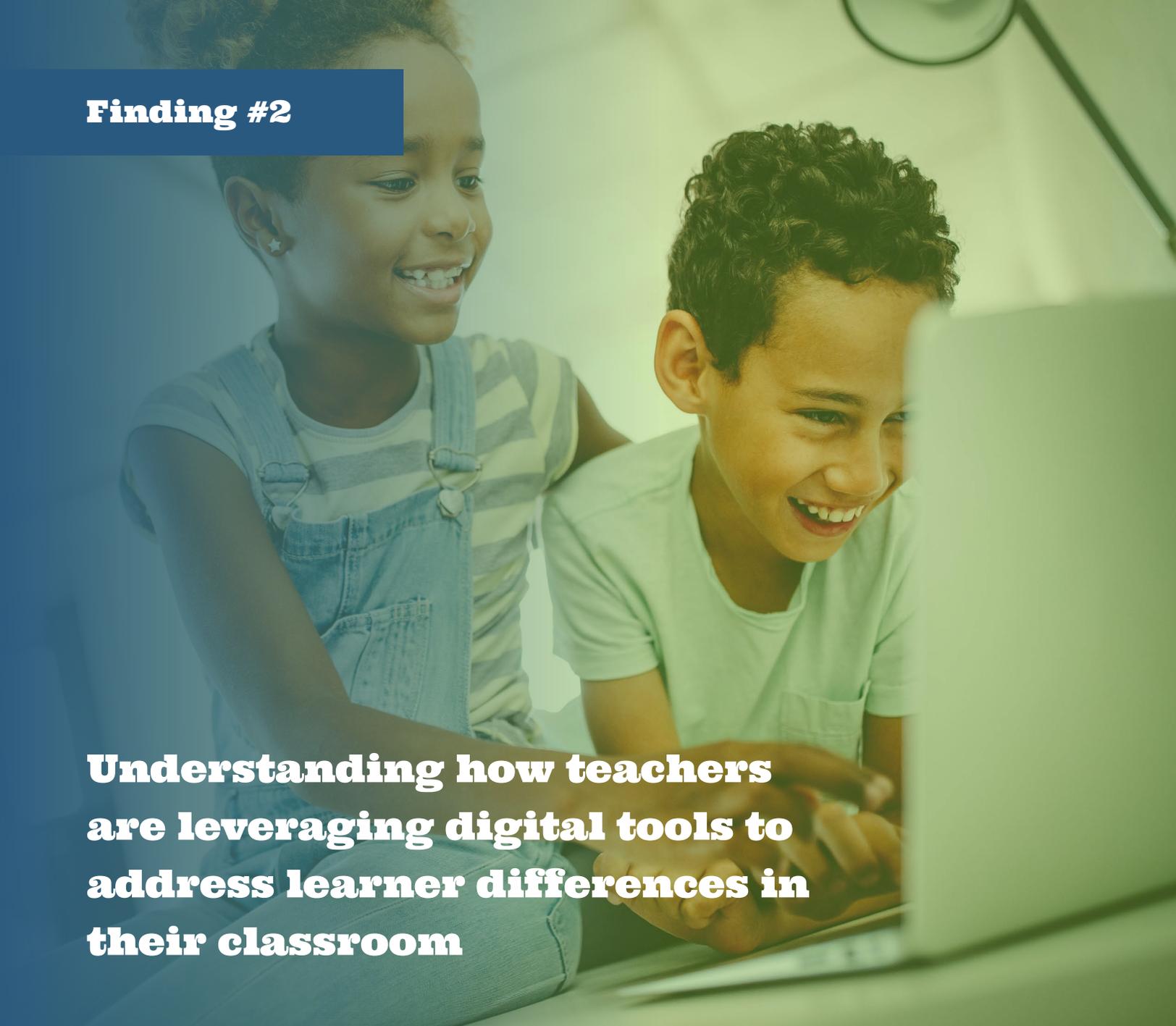
- Online videos to bring greater context to classroom learning – chosen by 78% of students in grades 6-12
- Two-way communication tools for student feedback – chosen by 77% of students in grades 6-12
- Online databases to support student-initiated research – chosen by 76% of students in grades 6-12
- Multi-media creation tools and online games – chosen by 69% of students in grades 6-12

“Decades of research from the learning sciences have shown the importance of considering individual learner variability and encouraging active learning experiences. Technology has the potential to support learner needs and create learning opportunities in ways that we could not have imagined 40 years ago, but only when paired with the understanding of how learning can and should look different in the present. Without thoughtful consideration of the learning goals to be supported by technology use and what that should look like, the digital use divide will continue to grow and exacerbate existing inequities already worsened by the pandemic.”^{vi}

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Finding #2

Understanding how teachers are leveraging digital tools to address learner differences in their classroom

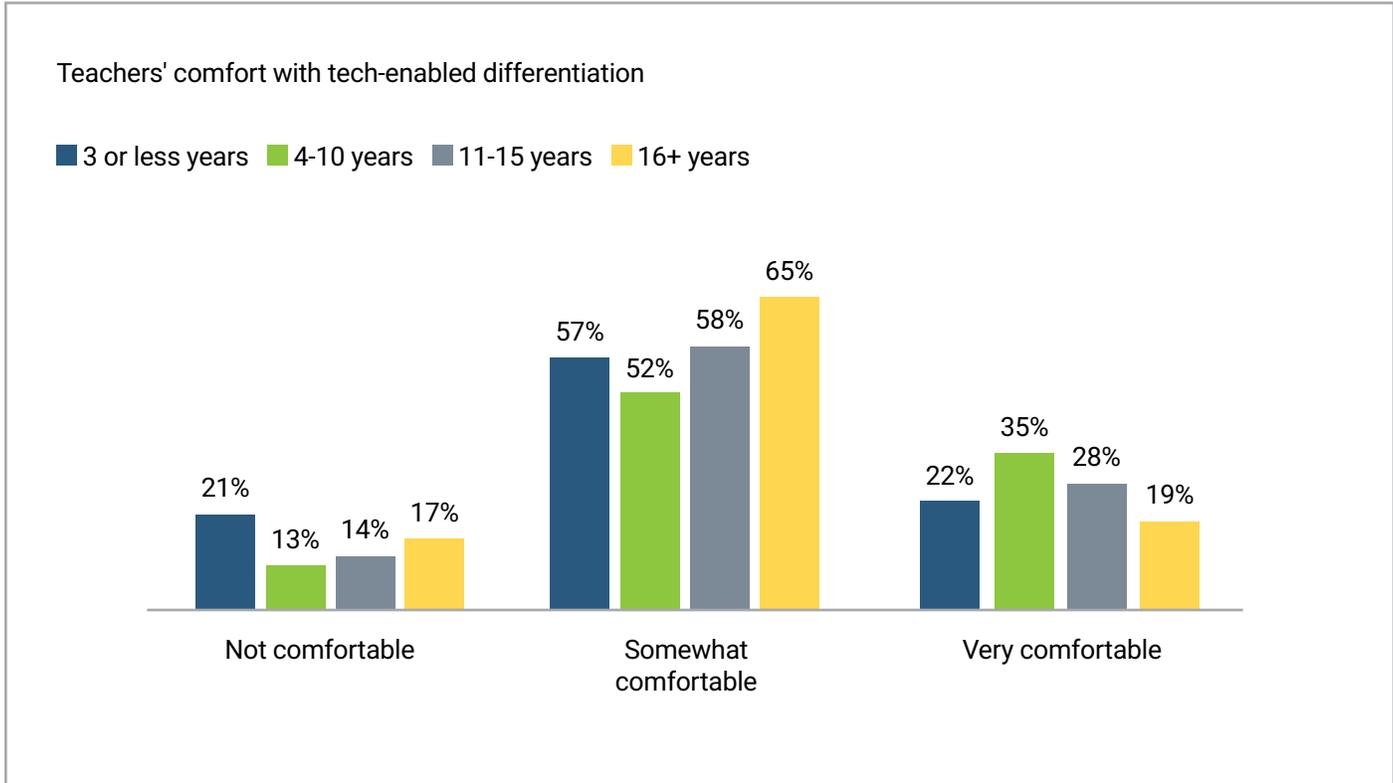
Similar to appreciating the connection between teachers' self-assessment of their tech skills and their capacities for developing and implementing active learning experiences for students, understanding teachers' comfort with using digital tools to differentiate instruction provides additional insights about the digital use divide.

A key component of the 2024 National Educational Technology Plan recommendations is a new focus on understanding individual learner variability and how to leverage technology assets to support learning experiences that are appropriate and meaningful for every learner. The discussion in the Plan about the adoption of Universal Design Learning principles supports a more thorough understanding of how teachers are using technology to differentiate learning for their students.

Teacher comfort with a new learning model is a metric that Project Tomorrow has researched for many years to understand the sustainability of learning interventions within K-12 education. In this context, teachers' years of experience as an educator is reflected in their overall comfort with using technology to support differentiated learning for all students. Teachers with less than three years of teaching experience are markedly less

comfortable with tech-empowered differentiation than their peers with 4 or more years of experience (Chart B). Only 22% of these new teachers say they are very comfortable using digital tools for that goal compared to 35% of their colleagues with 4-10 years of classroom experience. This finding was consistent across grade level assignment as well as across urban, rural or suburban communities.

Chart B: Teachers' comfort with using digital tools to differentiate instruction – by years of teaching experience



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However, when asked about the frequency in which they are leveraging technology tools to support differentiated learning for their students, the variation between elementary and middle school teachers and high school teachers was significant. Nearly three-quarters of teachers with Kindergarten through Grade 8 assignments report using digital tools to differentiate learning experiences for their students on at least a weekly basis (Table 3). Within

the high school teacher cohort, 64% of those educators reported the same level of overall weekly frequency but the percentage that were differentiating instruction to meet student needs daily was only 38% compared to 50% of their colleagues in K-8 classrooms. Equally significant was the 36% of high school teachers who said they were differentiating their instructional practices only infrequently or not at all.

Table 3: Teachers’ frequency using technology to differentiate learning in their classroom for all students – by grade level

Frequency of differentiating learning for all students	Percentage of teachers with this level of frequency			
	All teachers	Gr K-5	Gr 6-8	Gr 9-12
Daily	50%	51%	49%	38%
Weekly	23%	22%	23%	26%
High frequency (Daily + Weekly)	73%	73%	72%	64%
1 x month	11%	9%	13%	14%
Only within a unit or project	8%	7%	7%	12%
Low frequency (Monthly + Project only)	19%	16%	20%	26%
Rarely/never	8%	10%	7%	10%

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Using digital tools and resources to create academic activities that support learner variability is a key component of closing the digital use divide. For learning activities to be active experiences for students to develop the skills needed for their future success, it is imperative that those experiences must be accessible for all students. It is also important for the teachers to recognize that technology usage for differentiated instruction should address individual student needs, students’ preferences for learning methods or approaches and students’ abilities to be successful with those activities as well as being sensitive to unique backgrounds or cultural requirements.

The types of digital tools and tech-enabled strategies used by teachers to differentiate instruction varies by years of experience as an educator. This finding mirrors what was noted about teachers’ comfort with using technology

to differentiate instruction in Chart B. Teachers with 4 or more years of classroom experience are more likely than their new-to-teaching colleagues to be using various digital assets to provide remediation activities for their students, ensuring that students have a variety of tools and options to use for learning, enabling adaptive technologies and providing alternatives to written text, including videos and audio recordings, all in service of differentiating learning experiences for their students (Table 4). The ability to provide student access to digital features, such as text-to-speech or speech-to-text, is a good example of ensuring accessibility so that all students benefit from the types of active learning experiences available with technology usage. Notably, 48% of teachers with 11-15 years of experience have already embraced those types of digital accessibility tools.

Table 4: Digital strategies/tools used by teachers to differentiate learning – by years of experience

Strategies	Percentage of teachers reporting use of these strategies			
	3 or less years	4-10 years	11-15 years	16+ years
Provide remediation activities	39%	62%	60%	62%
Provide students with a variety of tools and options	44%	56%	59%	54%
Enable access to adaptive tools like text-to-speech and speech-to-text	33%	46%	48%	42%
Use videos or audio recordings to support student needs	36%	46%	54%	59%
Setting personalized learning goals with students	27%	29%	28%	29%
Use Generative AI tools in my classroom	23%	18%	18%	11%

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The use of Generative AI (GenAI) tools to support student learning is an emerging dynamic in K-12 education. School and district leaders are exploring ways to leverage the potential of GenAI tools, like ChatGPT or Copilot, for educational purposes. The data showing that 23% of teachers with less than three years of experience are already using those tools to differentiate learning for their students may be an interesting datapoint for further discussion. As with the other tech-enabled accessibility features, GenAI tools that support translation, provide text alternatives, or even change the color of online text could help to engage learners in more active learning experiences that transcend common barriers or obstacles in their school environments.

“The adults associated with an education system—whether educators, administrators, classified staff, policymakers, or parents/caregivers—tend to view education through their own experiences as students. Despite advances in learning science and the advent of technologies that empower educators to design learning experiences to meet the needs of diverse student populations, this information often does not make its way into schools. Instead, teachers often teach based on their own learning experiences. Whether or not their educational experiences met their learning needs, changing practices without explicit training in new instructional models can be difficult. In addition, teachers need to experience these new instructional models as learners through ongoing professional training and teacher preparation programs.”^{vii}
 - 2024 National Educational Technology Plan

Finding #3

Understanding what teachers need to create more active learning experiences for all students

For an experienced classroom teacher, the idea of changing the way they teach can be daunting. Such teachers have a significant investment in their classroom instructional practices based upon their experiences and expertise with their content and their pedagogy. This is true whether the teacher is introducing short vowel sounds to first graders or helping 9th graders understand how to solve for “x” in an algebraic equation.

Teachers across the country have long reported through the Speak Up surveys about their use of technology to support instruction in the classroom. In many ways, these use cases include new products or solutions, but not necessarily new practices. For example, from this year’s research, 64% of K-12 classroom teachers say they use an online curriculum with their students daily; only 8% say they have no access to that type of digital product. Whereas an online math curriculum may be a new resource, the practice of teaching fractions to 4th

graders may not have changed in that classroom; the inclusion of an e-book rather than a hard copy textbook is a modality change, not effectively a fundamental shift in practice. The access to technology is essential but insufficient in helping teachers change their practices to incorporate more active learning. The discussion today therefore must be different than simply using technology to support instruction. Rather we need to think about what teachers need to be able to leverage appropriate digital tools and resources as agents of transformation in the classroom to create new learning environments that prioritize active learning, student development of critical thinking and creativity, and enable greater student agency and self-efficacy. That type of transformation, stimulated by technology, requires teachers to reflect on their current practices and re-engineer lessons and activities in unprecedented ways. The 2024 National Ed Tech Plan provides many examples for teachers to use in support of those efforts. Additionally, the Speak Up Research

provides context for understanding what teachers need to support this transformation process.

As teachers are using technology more in their classroom, they are increasingly realizing that just-in-time tech support is more important than ever. Increased classroom tech support has been on teachers' wish lists for many years. In the 2017-18 school year, 55% of classroom teachers noted that more tech support was their top wish list item. For this past school year, 72% of teachers now say it is a "must have" for them to be able to more effectively use digital tools and resources to support active learning experiences in their classroom (Table 5). Additionally, teachers (66%) want more support from their districts and resource providers including a curated set of resources organized to make usage easy for them whether they are teaching 3rd grade science or 10th grade American History. Six in ten teachers (60%) also want to have ready access to the resources that have already been approved by their districts, an increase of 54% in the number of teachers asking for that support since 2017-18.



These significant increases over the past six years indicate that many teachers are motivated to use technology more effectively, and they have a clear understanding of what they need to support that transformation process.

Table 5: Teachers' wish list for support tools and resources to use technology more effectively within learning

Support tools and resources	Percentage of teachers who say these tools would be very helpful		
	2017-18 school year	2023-24 school year	Percentage growth in number of teachers interested in these support tools in this same time period
Technology support when I need it	55%	72%	31%
Curated set of resources organized by content area, standards, and skill level	36%	66%	45%
List of recommended resources approved by my district	39%	60%	54%
Online tools that help me organize and keep track of digital resources I am using	37%	51%	38%
Information about classroom management strategies using digital resources	32%	42%	31%
Teacher evaluations of how specific digital resources performed in their classroom	26%	33%	27%



Project Tomorrow first reported on how teachers were self-directing their professional learning around technology use efficacy in 2009. Teachers reported using similar tools in 2009 to what we see today including watching online videos, seeking help from other teachers through social networking sites and participating in online conferences or webinar-type events. The difference today is that these types of self-initiated professional learning activities are commonplace now and not just the purview

of the early tech adopter teacher. As noted in Table 6, a teacher with 16 or more years of experience is just as likely as a novice teacher with less than three years of experience to turn to an online video or TED Talk to learn about new ways to use student portfolios in their class for example. And the experience of supporting lesson plan development with information sourced online or through a purchased resource from a teacher site is a universal practice now.

Table 6: Teachers’ methods for self-directing professional learning to improve effectiveness with technology use in their classroom – by years of experience

Professional learning methods	Percentage of teachers reporting use of these methods				
	All teachers	3 or less years	4-10 years	11-15 years	16+ years
Found info online to support a lesson	73%	67%	75%	73%	74%
Purchase lesson plan from a teacher site	61%	57%	67%	62%	62%
Follow education experts on social media	58%	54%	61%	63%	60%
Listen to a podcast	43%	39%	45%	43%	45%
Watch online videos	38%	36%	33%	42%	38%
Participate in a virtual conference or webinar	37%	28%	34%	34%	39%
Sought help from other teachers through social networking	34%	37%	32%	38%	34%
Did research using a Generative AI tool	26%	31%	30%	31%	22%

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Teachers continue to highly regard the views of their colleagues in supporting their instructional practices, including how to more effectively leverage technology to support active learning. Three-quarters of classroom teachers (76%) say their primary way to learn about new apps, websites or products to support student learning is most often from another teacher in their school or district. The power of a personal trusted reference is significant. However, the newest way that teachers are seeking information may potentially change that dynamic.

In a first reported national finding, one in four teachers (26%) now say they are doing research about new classroom practices and how to use digital resources and tools more effectively by tapping into a Generative AI tool like ChatGPT or Copilot. In understanding new use cases for GenAI, it is noteworthy that at least 30% of teachers with less than 15 years of experience say that they

have now adopted GenAI tools as professional learning vehicles, almost the same percentage as participating in a virtual conference or webinar.

In addition to reflection on how to change their classroom practices and access to professional learning resources (both district-provided as well as self-initiated), teachers continue to place a high premium on the value of experiential learning using technology with their students. Teachers in the 2023-24 Speak Up surveys identified many benefits for themselves and their students when they use technology effectively to stimulate or sustain active learning. It is valuable to note that when asked about those outcomes, 58% of classroom teachers say that they are more proficient with the use of technology in their instructional practice today because of those experiences. Teachers from urban, suburban and rural communities, as well as those with different years of experience in teaching share that universal view (Table 6).

Table 7: Increased proficiency with use of technology as an outcome from how teachers are using digital tools within their classroom practices

Percentage of teachers in these communities who agree with this outcome			Percentage of teachers with different experience levels who agree with this outcome			
Urban	Suburban	Rural	3 or less years	4-10 years	11-15 years	16+ years
63%	56%	55%	52%	60%	57%	60%

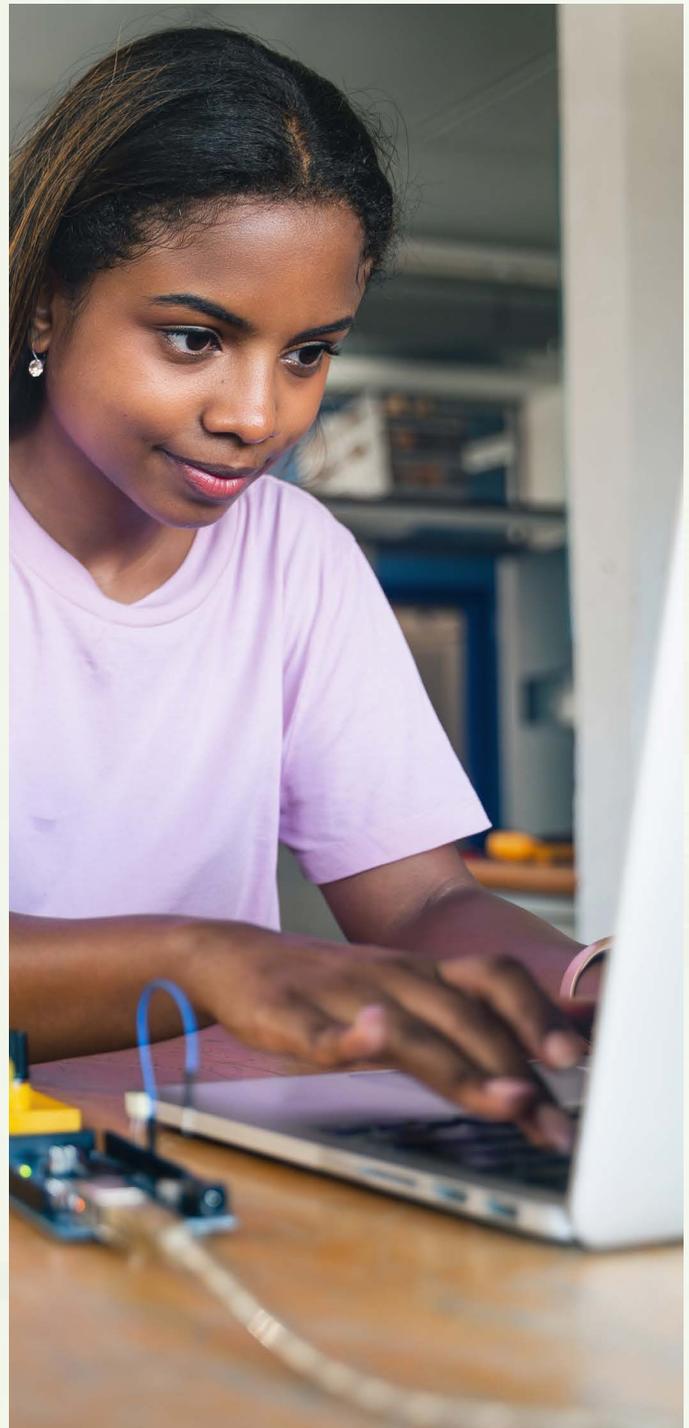
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As we collectively think about how to support teachers in their mindset changes about using technology to support active learning for all students, understanding what teachers need in terms of resources and experiences within their own everyday practices are valuable first steps in our quest to address the unfinished business of the digital use divide in our classrooms.



Closing thoughts and questions for further discussion

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 collaborated on this series of three reports based upon the latest Speak Up Research findings to identify key areas of “unfinished business” that need to be addressed within each of those digital divides. In this second report of the series, we have provided Speak Up data insights to inform local and national discussions around closing the digital use divide. Specifically, the Speak Up findings shine a new spotlight on how digital tools and resources are used within America’s classrooms to create active learning experiences which help students develop learner self-efficacy and agency, as well as critical workplace skills. These active learning experiences stand in stark contrast to classroom environments where technology is still being used primarily for organizational or information consumptive uses; use cases that do not yield the same benefits for student learning and workforce preparation. This report examines how teachers’ technology skill level and years of experience may contribute to these differences. We encourage school and district leaders to utilize this report to enable more active learning experiences for all students through the appropriate use of emerging digital tools and resources. That process starts with understanding teachers’ needs for resources and support. The following questions can jumpstart those important local conversations with students, teachers, administrators, school board members and community partners.



1 How do you define active learning within your classrooms? How are you positioning the use of your district's suite of technology tools and resources to support more active learning experiences for all students, including students with learning differences or those students who need either acceleration or remedial support?

2 What metrics are you using to evaluate the effectiveness of technology in support of student learning goals? How are you ensuring that technology tools are being used effectively to support student learning, educational goals and efficiency in classroom operations?



3 Beyond the challenges of providing more time for teacher planning, what other obstacles or barriers are thwarting teacher attempts to use technology more effectively in their classroom? Are those obstacles structural limitations, such as bandwidth capacity or more reliable devices, or do your teachers need a different type of professional learning to change their mindset about the value of digital tool usage within instruction?

4 How can you more comprehensively address the diversity of teacher needs for support in using technology to enable active learning across all classrooms? And to close the digital use divide between active and passive learning, what do your school building leaders need to know to appropriately support their teachers and staff in thinking of technology as a valuable learning asset to prepare students for future success?

5 What can you do right now to inform, influence and inspire your teachers and building leaders to understand that closing the digital use divide is an equity imperative for your schools, your district and your community?





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 6.3 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.

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.

Resources

ⁱ [“A Call to Action for Closing the Digital Access, Design and Use Divides, 2024 National Education Technology Plan,”](#) US Department of Education, January 2024, p. 32.

ⁱⁱ [“U.S. Department of Education Releases 2024 National Educational Technology Plan,”](#) U.S. Department of Education, January 30, 2024.

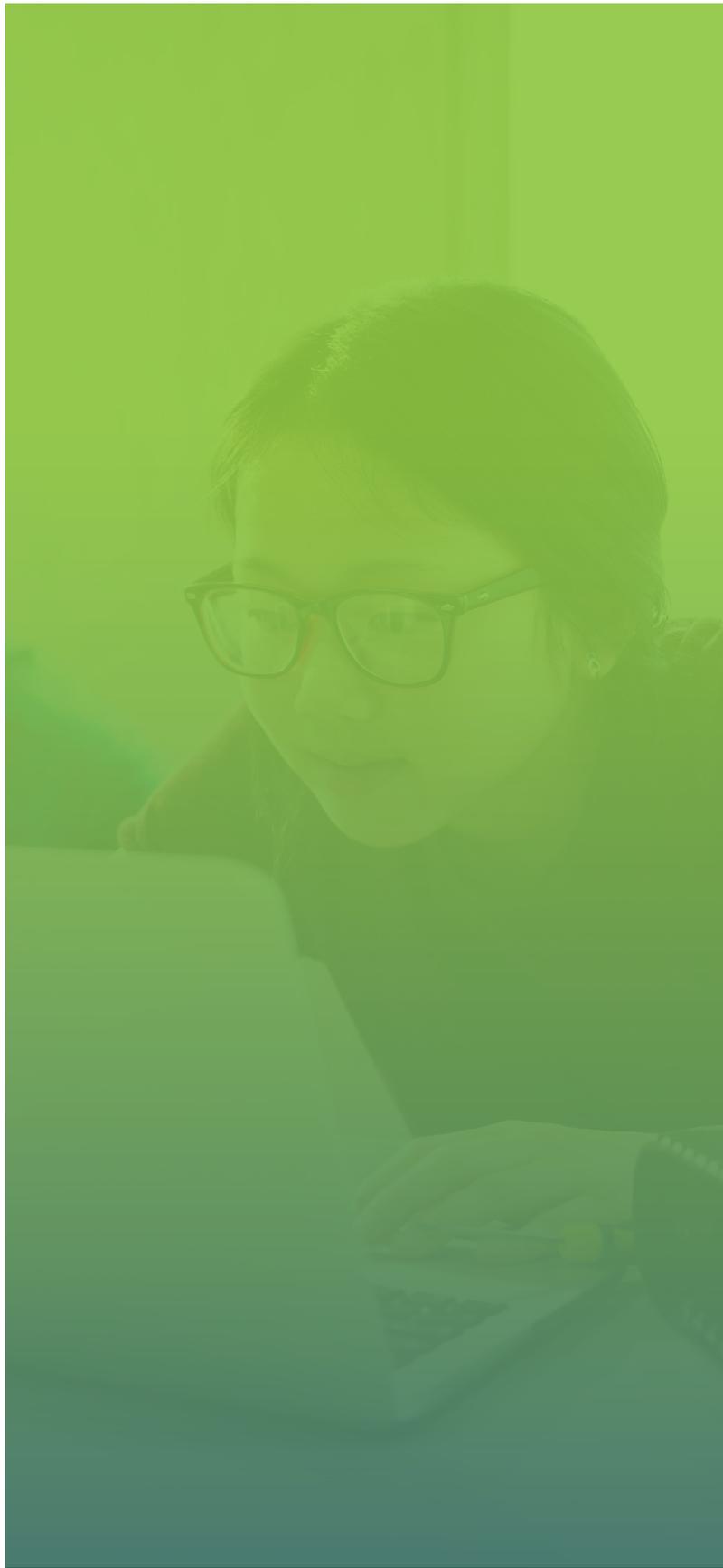
ⁱⁱⁱ [“A Call to Action for Closing the Digital Access, Design and Use Divides, 2024 National Education Technology Plan,”](#) US Department of Education, January 2024, p. 15.

^{iv} [“Unfinished business: Understanding the digital access divide in American schools,”](#) Project Tomorrow and Spectrum Enterprise, April 2024.

^v Evans, Julie A., [“Free agent learning: Leveraging students’ self-directed learning to transform K-12 Education,”](#) Hoboken, NJ: Jossey-Bass, a Wiley Brand, 2022.

^{vi} [“A Call to Action for Closing the Digital Access, Design and Use Divides, 2024 National Education Technology Plan,”](#) US Department of Education, January 2024, p. 16.

^{vii} [“A Call to Action for Closing the Digital Access, Design and Use Divides, 2024 National Education Technology Plan,”](#) US Department of Education, January 2024, p. 23.



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