

# Adapting to the Future of Learning

Using what we learned from teaching during the pandemic to leverage EdTech to improve teaching, learning and equity



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# How the Pandemic is Shaping the Future of Learning

In spring 2020, the planet was thrown into disarray. As an educator, you were right there in the thick of things. But even as you and your colleagues were thrown into the chaos brought on by the abrupt shift to remote learning, one thing held true – you never stopped teaching.

Once we all began to adjust to the new reality, you sorted things out, and you persevered. You looked at what you had and transformed it into what you needed. You got access and devices into the hands of students. You turned video conferencing platforms into virtual classrooms. You emailed, DMed and video chatted. You might have even written snail mail letters or done drive-bys past your students' homes just to wave at them from the car window. As an educator, you rose to the challenge and found new ways to help students learn.

Now with the world returning to normal we could sit back, congratulate each other and simply return to our classrooms and resume teaching the way we did before the pandemic. Or, we could look forward, examine the experience with a critical eye and use the lessons we've learned to launch the new digital future of learning.

A survey conducted by EdTech Evidence Exchange and the University of Virginia, reports that 86% of teachers believe that the need for new or updated technology will increase over the next three years – not just because of COVID 19, but to improve learning outcomes while reducing socioeconomic and racial disparities.

In this eBook, we look at the lessons of the pandemic teaching experience and examine ways we can continue to embrace technology to launch the future of digital learning.

In 2015, only **11.5%** of 8th graders used a computer for schoolwork more than 3 hours a day.<sup>1</sup>



# Closing the Digital Divide

The digital divide existed long before COVID-19 but the pandemic made it even more critical that we take steps to close it.

According to a series of national studies completed in June 2020, October 2020 and January 2021 by Common Sense Media, Boston Consulting Group and their partners:<sup>2</sup>



**50 million** K-12 students shifted to remote learning from home because of COVID-19



**16 million** of these students lacked adequate digital access for distance learning



**9 million** lacked both internet and computers/devices



**8%** of California's teachers lacked adequate high-speed internet for remote education



# CLOSING THE DIGITAL DIVIDE

School districts and individual schools have been working hard to close the digital divide since the start of the pandemic.

According to two separate U.S. Census Bureau surveys of people 18 years and older in households with children in public or private schools:<sup>3</sup>



**31 million** computers or digital devices were provided by school districts or schools (Feb. 2021)



**2 million** had internet access paid for by their school or school district (Feb. 2021)



**1.1 million** had internet access paid for by a source other than the family (June 2020)

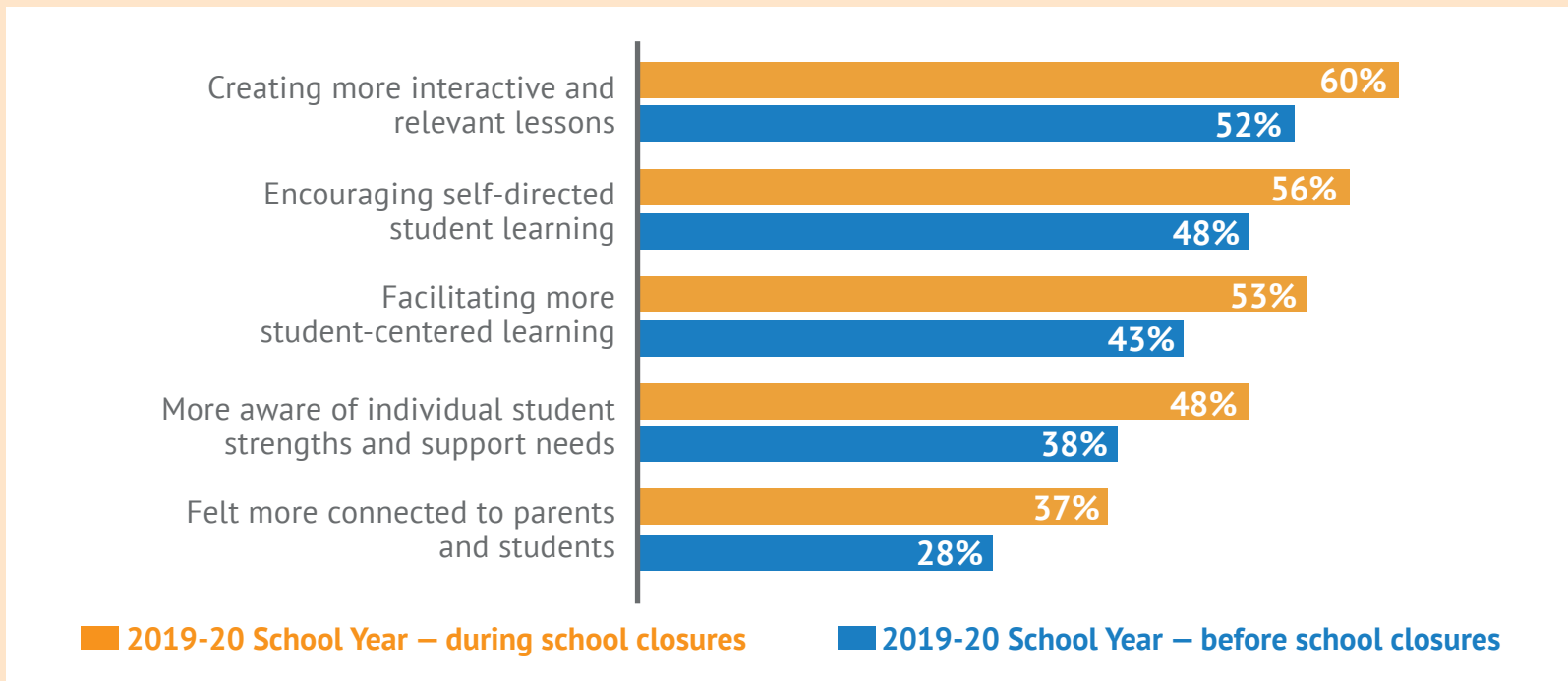
As we move into a tech-forward future it will be important to understand how technology access and funding affects schools disproportionately. Access to technology has never been equal, and that's not likely to change. Low income, at-risk communities and rural will continue to struggle for access to technology and resources – particularly after the COVID-19 stimulus funds run out. So, the question remains: how do we get on board the technology train, while still creating equitable learning environments for all students, regardless of where they live.



# Transforming the Educational Experience Through Digital Learning

Digital learning is more than simply a new way for teachers to present information to students. It allows educators to empower students to direct their own learning and take ownership of it. Educators become learning guides, designing, planning and overseeing interactive, technology-driven learning experiences.

## WAYS TEACHERS FELT TECHNOLOGY IMPACTED THEIR EFFECTIVENESS



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## Increasing student engagement

We all know that student engagement is vital for educational success.

The omnipresence of technology has created a digital culture that educators can leverage in ways that boost student engagement. This includes engagement with their lessons, with their teachers and with their devices.

However, just as with traditional learning, we can't force digital learning upon students and expect them to embrace it without question. If we find ways to make digital learning feel organic to our students, we can increase their classroom focus and overall retention. A great way to achieve this is to connect with them on their digital terms. Learn what apps and platforms they use in their own lives and how they use them, then adapt your lesson plans to incorporate similar tactics.

We also should look for innovative ways to positively influence student engagement through digital learning in our pedagogical practices. For example:

- Utilize pre-recorded videos to enhance teacher-driven learning
- Create online-based projects to drive hands-on student-driven learning
- Engage students in learning using the platforms they love and use outside of the classroom like Instagram and having students create their own TikTok style videos
- Leverage student-teacher forums to foster two-way learning
- Create a teacher-monitored, peer review platform to let students present work and get feedback from their classmates to increase student agency



## Delivering personalized learning

The dynamic flexibility and versatility of digital learning allows teachers to differentiate content for individual students. Technology increases our transparency into the progress and learning ability of each student, so we can easily adapt curricula to meet the needs of each individual student and create an equitable classroom environment.

With digital learning, we can ensure every student is getting the supports they need to make their learning experience more meaningful and effective. Here are a few ways EdTech helps personalize learning:

- Support to different cognitive and cultural learning needs by creating personalized lessons that incorporate a variety of languages, learning modalities and output options
- Accommodate flexible learning schedule for students
- Create alternate forms of participation for students beyond classroom discussion, including written and visual
- Increase the frequency and intensity of one-on-one student-teacher communications using direct messaging, chat, text messages, and other communication tools when bell-to-bell instruction isn't sufficient

**73% of school district administrators**

have a favorable perception on digital teaching tool effectiveness for personalizing instruction<sup>6</sup>





## Increasing equity

Technology can be an important lever for improving educational equity which is why we first need to ensure all students have access to devices and high speed internet (i.e., ensure digital equity). Once students have access to technology it can be used in powerful ways to create more equitable learning environments.

Technology allows us to break down barriers. Through the use of applications like Immersive Reader and Google Translate we can overcome many language and learning differences.

With just a little research on the internet, teachers can learn about their students' cultures and backgrounds and craft lesson plans and activities that are culturally responsive.

Technology gives students, and teachers, the opportunity to be creative about how learning is demonstrated. From videos and podcasts to creating apps, websites and music, technology allows students to express themselves in the ways most comfortable for them and supports deeper engagement, comprehension and collaboration.

Digital learning programs provide data into what students are learning, how they're learning, and where they may need support. Teachers can use this wealth of information to identify issues, adjust instruction and target interventions. Insights from EdTech data can also identify areas of system-wide inequity so that educators can take corrective action.

### **On-Demand Webinar** **Ensuring Techquity In All Learning Spaces**

As we emerge from the pandemic there is an opportunity to reimagine teaching and learning. In this powerful presentation, educator and advisor Ken Shelton shares how to move beyond digital equity to use EdTech to create inclusive, culturally conscious, and truly equitable learning environments.

[WATCH NOW](#)

## Supporting student well-being

The mental and emotional health of students are crucial issues whose importance has been magnified by the isolation caused by pandemic remote learning. While the internet has the power to connect people, it can also create a world in which students feel isolated. Technology gives teachers the ability to monitor student behavior for warning signs, support students' mental health and offer learning opportunities that help students build strong social-emotional skills.

## Increasing parent and family engagement

Today's digital world is built on communication and connection. Digital tools enable educators to enlist greater parent and family participation when it comes to their child's education.

A dedicated parent blog with an online event calendar can keep busy parents in the know. Online videos can provide general guidance about school procedures or updates on initiatives. Email is a good way to deliver periodic progress reports and reminders of approaching benchmarks in their child's studies.

Online surveys offer busy families a way to share their opinions and give input if they're not able to attend in-person or even online PTA or other school meetings.

Use text or direct messaging to create more individual and personal connections with families. Share a photo of their child in class with a note about what a good job they did that day on a project. Offer a video conference instead of requiring a face-to-face meeting at the school for parent-teacher meetings to provide greater convenience and even break down some of the social and cultural barriers that may exist. Google Translate and other language tools can help you communicate with families in their first languages.



## Tips for Choosing Your Go-To Digital Learning and EdTech Tools

### First things first, establish the sandbox where your EdTech needs to play

Diligent planning is the cornerstone of creating successful digital learning. Approach it the same way you'd approach a traditional lesson plan and build your foundation one brick at a time. This will help you focus on what's important and keep you from becoming overwhelmed by the endless profusion of potential apps, platforms and hardware available for education.

“

*We noticed that teachers and administrators got so inundated with technology that we were ignoring the new technology in favor of one or two systems that work. We call this EdTech fatigue.”*

– Kayla Solinsky, Executive Director,  
Macbeth Online Academy (Grades 1–12)

**Set your goals and decide what you want to accomplish.**

Do students need access to watch and create videos? Are you wanting to create online learning collaboratives? Will you be messaging with students during class time? How closely will you need to monitor and direct your students' online activity? What depth and detail of data do you need regarding faculty usage of specific apps and websites? The more questions you ask, the more detailed your goals can be and the easier it will be to find the right combination of resources and EdTech for your digital learning environment.

**Examine the tools you used during pandemic remote teaching.**

While pandemic learning may have felt discombobulated and haphazard, you can still learn a lot from the experience when you step back and examine it objectively. Look at the websites, apps and other platforms you used and analyze them for what worked, what didn't and also what showed promise.



**Outline any additional challenges you'll have to consider.**

It's never as easy as picking the EdTech you want then going out and buying it – there are always some potential roadblocks along the way. Before you fall head-over-heels in love with any solution, break down the challenges you, your students and other stakeholders might present. Do you and your students have access to adequate bandwidth and the right devices? Do you need wifi or hardline internet access? Does any of the tech require specialized hardware? Does any of it require special programming to make it work for your purpose? What kind of training will be required for the teachers and students to use it effectively? What potential learning equity issues will need to be addressed? Who has to approve the purchase? Who has to authorize your use of the tech?

**Collaborate with other stakeholders to align their needs and wishes.**

Just as digital learning is a highly participatory endeavor, effectively defining your digital learning approach requires input from a wide variety of sources. Knowing the strategies and technology other people find useful is a great way to compile a list of potential EdTech to consider.

Be collaborative in your approach. Strive to learn from as many segments of the education puzzle as you can. Represent the full range of stakeholders on your committees and teams. Utilize formal surveys to gather data from students, teachers, administrators, and families in your district. Create town hall style events for people to share their experiences and opinions. Pick the brains of your peer network across the country. You can even test drive an EdTech platform you might be considering by using them to conduct your information gathering sessions.

“

*Never assume. Don't assume a student has less or more than they have, whether what they need is tangible or intangible. Ask the right questions to learn about their needs related to bandwidth and resources in the home.”*

– Sarah Dollah-Said, Founding Director of Language and Equity Programs, Elgin Math and Science, Academy Charter School



## Leveraging Data to Ensure the Effectiveness of Digital Learning

It's simple, data will let you know what kind of ROI you're seeing from your digital learning tools.

According to statistics from [educationdata.org](http://educationdata.org), 65% of administrators indicated their district stopped utilizing a digital tool they had adopted because it did not improve student learning outcomes.<sup>7</sup>

This doesn't mean the other 35% only had effective digital tools, it just means that at least 65% of the polled districts were savvy enough to monitor the effectiveness of their EdTech investment.



You may have a classroom management solution in place to help teachers monitor student activity online but comprehensive solutions can do more than that, they can provide critical insights into how digital learning tools are being used at the student, class and even school level. The NetRef classroom management solution:

- Tracks each student's website and app usage data
- Provides data about students' at-home bandwidth
- Provides detailed usage breakdowns that include what sites were visited, how much time was spent on each site and where on the site the student went
- Tracks classroom use of websites and apps
- Calculates the ROI each site or app is delivering

Data fuel the “why” behind every “what” you do. Armed with robust usage data, you can easily determine what tools are effective and what you should consider sunseting; or identify what new platforms or apps you should look into. The right data lets you pinpoint what necessary infrastructure and resourcing changes need to be made to ensure techequity. It helps you establish what tools are cost-effective for budgeting and planning purposes. It also helps you determine what adjustments your scheduling, modality and learning models need; and isolate what areas to focus on for professional development.

“

*I look at our top users and then put them in charge of some PD [Before,] I didn't even think about guiding your professional development by usage.”*

## Lafayette County School District (MS): Using EdTech to Support Teachers

Learn how one school district's instructional technologist leveraged EdTech acquired for classroom management into a professional development planning tool to increase teacher success with digital learning.

READ THE STORY



# Ensure Effective Digital Learning



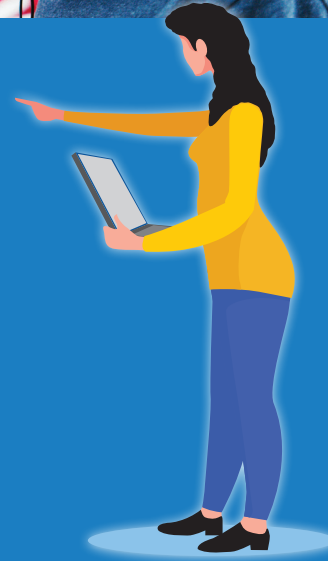
As the future of education goes digital, how teachers interact with students and manage their classrooms is changing. NetRef is an essential companion to support effective digital learning. Use our tools to:

- Keep students focused on learning when using devices
- Gauge student engagement
- Uncover gaps in software adoption and internet access
- Plan professional learning
- Ensure your EdTech investments are delivering a return on learning

## Try NetRef Free and Discover Comprehensive Support for Digital Learning

We know seeing is believing. You can see, and use, NetRef at no cost for a month. Teachers can test out the classroom management features and school and district leaders can use the in-depth reports to inform EdTech budgeting and PD decisions.

GET STARTED



## References

<sup>1</sup>“Distance Learning Statistics [2021]: Online Education Trends”. 2021. *Educationdata*.

<sup>2</sup>“Connect All Students: How States And School Districts Can Close The Digital Divide | Common Sense Advocacy”. 2021. *Commonsensemedia.Org*. <https://www.commonsensemedia.org/kids-action/publications/closing-the-k-12-digital-divide-in-the-age-of-distance-learning#>.

<sup>3</sup>“Distance Learning Statistics [2021]: Online Education Trends”. 2021. *Educationdata*. <https://educationdata.org/online-education-statistics>.

<sup>4</sup>“Empower Teachers: Reimagining Human Connections Technology And Innovation In Education At The World Bank”. 2021. World Bank.

<sup>5</sup>2021. *Tomorrow.Org*.

<sup>6</sup>“Distance Learning Statistics [2021]: Online Education Trends”. 2021. *Educationdata*.

<sup>7</sup>“Distance Learning Statistics [2021]: Online Education Trends”. 2021. *Educationdata*.

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