# The State of Technology in Education

2020-2021 Report

Without question, much has changed in the education landscape since our team conducted last year's report. The U.S. has experienced a reality shifting pandemic, bringing nearly every facet of our lives indoors and online. And with these sweeping changes, education, and, more specifically, edtech has been at the center of this seismic shift.

This survey of nearly 1,200 American teachers and administrators explores the role technology currently plays in today's K-12 schools and how edtech solutions impact learning and engagement in the classroom – wherever those classes are taking place.



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#### Where Does Edtech Stand?

In 2020, educators have leaned more heavily on technology than ever before. And over the last few months, many things have come to light about the state of technology in education. Roadblocks like lack of learning technologies, students without access to at-home Internet connectivity, and teachers desperately needing more professional training are widening the digital divide. Administrators have been hard-pressed to provide both short-term solutions and forward-thinking guidance. Some schools have shined, while others faltered.

This has left us wondering – what is the current state of edtech in the classroom and how will it evolve in a post-COVID-19 world where hybrid learning and other teaching methods are constantly changing?

After diving into candid insights, key trends, and edtech predictions from real-life teachers and administrators, Promethean believes that our education system is evolving at an unprecedented rate, and making effective edtech investments will be critical in the year ahead. By finding the right mix of both training and technology, schools will successfully engage students as many districts incorporate hybrid learning into their classroom environments moving forward.

This installment of our annual report shines a light on experiences from the frontlines of education this year and what is most important as we forge the path ahead in the COVID-19 era. What is the current state of edtech in the classroom and how will it evolve in a post-COVID-19 world where hybrid learning and other teaching methods are constantly changing?

# **Pandemic Preparedness**

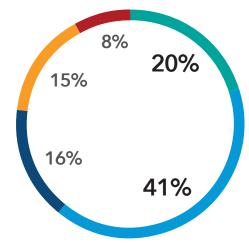
When students and teachers went home from school in spring 2020, it was hard to imagine they wouldn't return to their classroom for months to come. But in fact, many schools went into the fall semester with some form of virtual instruction.

Key trends began to emerge, and the most common? Districts did not have the infrastructures in place to facilitate online learning on a broad scale.

A disappointing **20%** of all respondents surveyed over the summer considered their schools "very prepared to implement remote learning." More common **(41%)** was that they were only somewhat prepared – having the right IT, but not the processes in place.

So how did educators cope with the shift to online? Nearly all (95%) of educators surveyed reported using online strategies for students' lessons, including 8 in 10 that made their lesson content available online and one-third that brought experts and online experiences into the education mix.

But more and more, the digital divide began to present itself.



- 20% Very prepared to implement remote learning
- **41%** Somewhat prepared, having the right IT, but not the processes
- **16%** Somewhat prepared, having the right processes, but not the right IT
- 15% Ill-prepared
- 8% Not prepared at all

# The Widening Gap in Learning

Remote learning demonstrated the digital divide still runs deep in many school districts. Teachers ranked "students lack access to technology" and "engaging students" as their biggest professional challenges in a remote teaching scenario. All respondents stated that the digital divide would be their biggest barrier to maximize student success in the coming school year.

**31%** digital divide across the student population

26% the impact of "summer slide"

25% budget cuts

13% lack of teacher training on technology

6% lack of technology resources at the district level

Yet, delivering educational benefits through technology was a top-three priority for the upcoming school year for many of the districts. Which begs the question, how can districts deliver the same benefits to every student virtually, regardless of their at-home access to connectivity and personal devices?

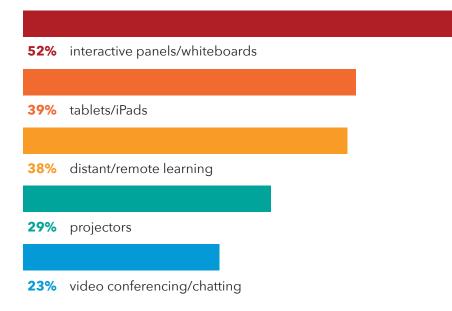


The investment in training and technology will be critical in overcoming the digital divide to ensure that every teacher and student has the tools they need to maintain high learning standards.

# **Tackling Technology**

Finding the right technology mix can be a difficult task for school leaders. Between budget restrictions and a wide array of options in the market today, identifying the best solutions for your schools requires research, testing, and strategic implementation. But luckily, there are a few tried-and-true favorites that many educators leverage across the country, including:

In a time in education where everything seems uncertain and new, sometimes the best technology investment is in solutions that educators already understand. If your school lacks the basics, then a new tech investment might be a necessity. For schools that already had some technology infrastructure, finding the most effective ways to use what you already have is often the path of least resistance and most success.



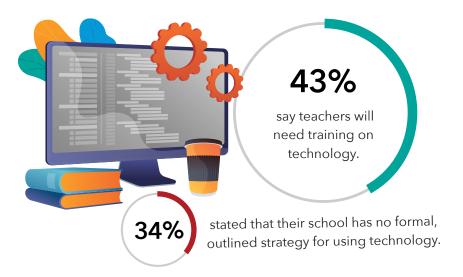
Interestingly, **77%** of all respondents felt that desktop computers and laptops were the most frequently used technology in schools. However, when asked to select the top three technologies used in their schools from a list, interactive panels/ whiteboards and tablets/ iPads were frontrunners.



## **Let's Talk Training**

While remote learning requires technology, successful virtual instruction is not possible without buy-in and understanding from its primary user – teachers.

When asked what schools will need to prioritize first to make remote learning successful, 43% of respondents said teachers will need training on technology. But in that same vein, roughly one-third (34%) of respondents stated that their school has no formal, outlined strategy for using technology.



An effective implementation strategy begins with ensuring that all instructors are competent and confident with the solutions they are expected to utilize, from interactive displays and 1:1 devices to software that powers online learning. Further, schools need to offer continued professional development opportunities with edtech to help educators master the evolutions in classroom technologies and their capabilities.

Finding new ways to use technology to engage students equally – either in class or within a hybrid learning environment – will be the ultimate 2020 (and beyond) challenge.

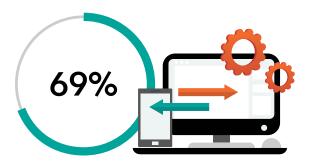
#### **Innovation Nation**

Luckily, according to our year-over-year (YoY) findings, when it comes to innovation, today's teachers are up for it. An overwhelming majority (69%) said in both of the last two years that they are "constantly striving to innovate by using technology as a tool for education."

As for their view of technology in the classroom, a majority of teachers YoY feel it is a great way to engage students (49% in 2020), closely

followed by that it is "best used where it can be appropriately adapted to the learning situation."

Trust in the potential of edtech coupled with a passion for innovating can result in a true impact on the learning environment. Knowing this as we look ahead, what can we expect in the next decade of education?



I am constantly striving to innovate by using technology as a tool for education



I use technology competently in my personal life, but lack confidence implementing it to its full effectiveness in school



I struggle with using technology to the level that I feel is required in education today

### 2020 (to 2030) Vision

In the wake of this year's experiences, educators are now redefining how they teach, and students are adapting to new ways of learning – it's happening fast, under duress, and the changes we see now will shape education for years to come.

Unsurprisingly, **82%** of all respondents selected "technology use will be routinely combined with traditional resources and teaching methods" as the most likely trend we will see over the next ten years.

What will be interesting, too, is what technologies will be adopted and utilized most as students re-enter the classroom, and hybrid learning becomes a more integrated part of school processes. For example, "snow days" will likely be a thing of the past as virtual learning days are possible during inclement weather, and sick or traveling students can now keep up at home.

No longer is learning contained to the classroom, and our respondents echoed that sentiment as they selected the biggest growth in education over the next three years would be:

63% Remote learning54% Virtual learning50% Online content and resources

Interestingly, robotics and coding dropped dramatically YoY from the 2019 report, going from **49%** to **14%**. It's clear that while forward-thinking technologies are exciting in normal times, the focus has shifted to getting back to basics when delivering the in-classroom experience remotely.

Technology use will be routinely combined with traditional resources and teaching methods.







virtual learning



online content

#### **Conclusion**

#### So, where does education technology stand in 2020-2021?

We've seen that while many schools executed some form of online learning, most were not prepared to do so. A majority of educators are ready and willing to drive education with technology but need the right training and solutions. The digital divide is far from closed, and in an increasingly hybrid environment, it may only continue widening. And while futuristic solutions like robotics once felt like a necessity in the classroom of the future, today's teachers and administrators predict that the real challenge over the next few years will be mastering online and remote learning.

In short: edtech needs to be ubiquitous enough to have value for inperson instruction or in a virtual environment.

Gone will be the expectations that a solution can operate solely in a classroom – its features will need to meet students and teachers where they are (and be increasingly successful at doing so). Teachers will need to understand technology better, and administrators should make ongoing training a priority. Above all else, we cannot let remote and hybrid learning remain a footnote in our school and district strategy planning. In a post-COVID world, the classroom is no longer contained within four walls, and edtech will be the key to expanding beyond them.



# **About Promethean**

Promethean is a true partner for educators and innovators, with more than two decades helping people learn and grow together. We believe collaborative discovery is at the heart of the learning experience. Our award-winning interactive displays and lesson delivery solutions transform learning and workspaces into creative, connected environments to foster collective success. With headquarters in Seattle, WA, and offices worldwide, Promethean is a member of the NetDragon Websoft Holdings Limited (HKSE: 0777) group of companies.

#### Visit us at PrometheanWorld.com

Promethean commissioned a survey of American school administrators and teachers in 2020 that included nearly 1,200 respondents. The margin of error for this survey is plus or minus 3.2%

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