



—Josh Richie for Education Week

High school students in Coral Gables, Fla., work together on a tablet during a history class last school year.

Interactive Technology

EDITOR'S NOTE

Technology exhaustion is felt throughout the K-12 education sphere. This Spotlight will empower you with insights on what changes are on the horizon with the metaverse and parent privacy concerns; discover what the future of blended learning for educators will look like; dig into the top reason students still lack internet at home; learn about the right amount of screen time and how to counter the tide of toxic tech; and evaluate the case for virtual SEL for your students.

Teaching in the 'Metaverse'?
Roblox Looks to Make It
A Reality **2**

Ed Tech Usage is Up. So Are
Parent Privacy Concerns **4**

The Future of Blended
Learning: What Educators
Need to Know **4**

The Number One Reason Students
Still Lack Internet at Home:
Parents Can't Afford It **8**

How Much Screen Time Is
Too Much? The Answer Is
'It Depends' **9**

OPINION

How Schools Can Stem the
Toxic Tide of Technology **10**

The Case for Virtual Social
And Emotional Learning **12**

Published on November 29, 2021

Teaching in the ‘Metaverse’? Roblox Looks To Make It a Reality

By Benjamin Herold

With millions in grants to STEM organizations like Project Lead the Way, the gaming platform is moving into K-12 education.

Hoping to expand its presence in K-12 schools, gaming company Roblox announced in November 2021 a \$10 million fund to support the creation of online learning experiences that take advantage of its platform’s unique way of letting users play, explore, and socialize in an endlessly evolving virtual world.

“We’re ready to find and reward developers and organizations who can figure out how to really lean into our great physics, strong immersive 3-D capabilities, and multiplayer experiences to teach in a deeper way,” Rebecca Kantar, the company’s head of education and the director of its new Roblox Community Fund, said in an interview.

Founded in 2004, Roblox is worth an estimated \$70 billion or more. That mammoth valuation is based on soaring adoption numbers, especially among children. The company counts more than 47 million daily active users, nearly half of whom are under the age of 13.

What is Roblox? And why is it so popular?

Roblox itself is not a game per se, but a virtual environment in which players connect and interact online as they explore millions of “experiences” that range from caring for virtual pets to taking part in online fashion shows. Such experiences are created not by Roblox employees, but by a network of independent developers who earn money based on players’ engagement and in-game purchases.

The company’s popularity derives in large measure from the way it allows users to create customized digital avatars of themselves that remain consistent throughout the Roblox universe, allowing their online alter-egos to traverse a wide variety of shared virtual spaces. That functionality makes the company an early leader in the creation of the so-called “metaverse,” the still-hypothetical immersive online world touted by Silicon Valley



—Natasia Adzic/Stock

leaders such as Mark Zuckerberg—who rebranded Facebook as Meta Platforms Inc.—as the future of the internet.

Roblox aims to play a major role in the emerging metaverse. Expanding into classroom education is a key vehicle for making that happen, Kantar told investors at a November 2021 conference. The company’s stated goal is to reach 100 million students worldwide by the end of the decade.

Making such inroads with K-12 schools, however, is no sure bet. Previous online worlds that were popular with consumers—including Second Life, which peaked with 1.1 million monthly active users in 2007—mostly fell flat with educators. The same is true of much-hyped virtual reality gear such as the Oculus Rift, whose parent company was acquired by Facebook in 2014 for \$2 billion amid promises of shared immersive virtual experiences for students that have mostly yet to materialize.

Still, at least some longtime observers of the K-12 market are bullish in their belief that Roblox can help catalyze the kind of investment needed to make education in the metaverse a reality.

“I think it’s a fantastic display of leadership and the tip of the spear for a lot more capital to come,” said Chris Curran, the founder of

investment banking and strategy consulting firm Tyton Partners, which advises numerous education companies working in fields such as robotics and virtual reality. (Curran formerly chaired the board of Editorial Projects in Education, the nonprofit that manages Education Week.)

Roblox looks to expand its education footprint through partners

Roblox has a limited footprint in public education.

About 7 million users each month participate in one of Roblox’s “learn and explore” experiences, which often include educational content but are rarely tied to academic standards or used by schools. A handful of mostly out-of-school computer science education programs also use the company’s development environment, known as Roblox Studio, to teach children how to code their own video games. And a smattering of teachers like Ashlee Vice, of the Cyber Academy of South Carolina, a full-time statewide online public school operated by Stride Inc., have also incorporated Roblox into class projects.

“It’s absolutely incredible,” said Vice, who in spring of 2021 allowed some of her 4th graders to use the platform to build virtual theme

parks in order to demonstrate their knowledge of angles and other math concepts.

It's that kind of experimentation that excites Kantar, the head of the Roblox Community Fund.

"There's huge opportunity to leverage the engagement and motivation that students already have for interacting with Roblox," she said.

Someday, Kantar said, that could lead to virtual classrooms that take place on Roblox instead of Zoom, or entirely new ways of teaching students how to read, or experiences that allow children in different countries to collaborate in real-time on virtual science experiments.

The company's short-term goals, however, are more modest. Kantar said, Roblox hopes to expand the use of Roblox Studio as a computer-science-education tool while also encouraging the development of curricular materials for topics that are well suited to being taught in immersive, interactive, and 3-D environments.

To that end, the company's initial grants will go to established education nonprofits that already have deep connections within the K-12 market, as well as plenty of experience designing learning materials aligned with existing educational standards. The focus is on the fields of science, technology, engineering and math. One of the fund's first awards, for example, is to Project Lead the Way (PLTW), an Indianapolis-based nonprofit that already provides curricula and training for hands-on STEM education to more than 12,000 U.S. schools.

With the funds, PLTW will expand its existing online module for teaching game design and development in Roblox Studio. The organization will also work with Roblox developers Funomena to create an "in-Roblox" world where users can explore careers in computer science, engineering, and biomedical science.

"Students no longer need to be tethered to a physical classroom to learn and engage," said Vince Bertram, Project Lead the Way's president and CEO. "By connecting their platform with leading experts in pre-K-12 education, we believe Roblox and PLTW are on course to transform the way students can learn in the metaverse."

Also included in Roblox's first round of grantees are videogame-maker Filament Games and the nonprofit organization FIRST Robotics, who together will develop an experience to help teach robotics online and run virtual competitions. The Museum of Science in Boston will also receive funding to create a Roblox experience that allows students to virtually plan a mission to Mars.

Curran of Tyton Partners said that partner-

ship model will likely be key to the success of not just Roblox's efforts, but the larger dream of immersive virtual STEM learning. Companies like Facebook/Meta, Microsoft, and Intel have poured billions of dollars into development of the hardware and software needed to make the metaverse possible, while the push for high-quality learning content has lagged.

"The piece that's nowhere near where it needs to be for any of this to be a reality is curriculum," he said.

Scammers, predators, and commercialization all concerns on the Roblox platform

There are plenty of reasons to question whether Roblox can help solve that problem. The platform has achieved its extraordinary reach by allowing independent developers to compete for users' attention in an open marketplace, but it seems unlikely that approach will organically deliver rigorous learning experiences for students.

Roblox's underlying business model, meanwhile, is based on getting users to spend money (in the form of an in-game currency called Robux) to upgrade their avatars and unlock additional experiences and virtual goods—a poor fit for public schools subject to a web of federal and state laws aimed at protecting children's data privacy and limiting commercial appeals in the classroom.

And other problems abound. The company has long faced criticism for allowing adult users, including some sexual predators, to make online contact with children. Robux scammers are pervasive. Complaints about Roblox's cybersecurity and data-privacy practices have also occasionally surfaced.

Company officials said they are taking measures to address those problems through internet filtering and monitoring, the teaching of digital citizenship, and other approaches.

Astronomical growth often begets such challenges. But even as the company tries to patch its vulnerabilities, it's looking to grow even larger.

Among the imminent changes that could impact schools: Audio technology that could enable better online collaboration by making virtual conversations within Roblox feel more life-like, and a new "Classroom Mode" that aims to help teachers manage students engaged in specific learning experiences.

In another world, such advances might suggest an openness to incremental growth and ensuring that schools' needs are actually getting met before a product or service becomes too large. But with the competition for

“

Students no longer need to be tethered to a physical classroom to learn and engage. By connecting their platform with leading experts in pre-K-12 education, we believe Roblox and PLTW are on course to transform the way students can learn in the metaverse.”

VINCE BERTRAM

Project Lead the Way's president and CEO

control of the metaverse heating up, the allure of a much grander vision may prove difficult for the company to resist.

"Roblox Education will be a self-sustaining ecosystem, where education organizations are constantly building and releasing new content on Roblox," Kantar told the company's investors in November 2021. "Increasingly, we expect this to be organic growth, where everyone is teaching and learning in the metaverse." ■

Start your day with us.

EdWeek Update

Stay on top of everything that matters in K-12

[SIGN UP](#)





HOW MODERN DISPLAY TECHNOLOGY IS CHANGING K-12 EDUCATION SPACES

By Victoria Sanville
LG Business Solutions USA

K-12 school districts and service providers throughout the country have stepped up heroically to try and facilitate remote learning during the pandemic. And despite hardships, giving teachers access to online learning platforms for creating and organizing lesson plans has begun opening the door to new pedagogies and innovative software tools that improve learning outcomes both in and out of the classroom.

As students begin to re-enter classrooms this fall, much of the focus is now on addressing learning loss, mental health, and socialization needs that have developed over the last year. Federal funds distributed to schools are focused on addressing those key themes, as well as making sure the school is safe—with cleaning robots, HVAC systems, air purifiers, and more.

All told, through such necessary technology initiatives, schools have also begun to prepare students for a future

in which digital literacy is crucial. One-to-one computing initiatives have caught on in a big way. Efforts to give individual students laptop computers with which to learn, access online resources, and complete schoolwork have been embraced enthusiastically by millions. Putting the power of discovery in the hands of students, as well as access to cloud-based productivity tools, has proven to be a positive investment of precious budget dollars.

The next evolution in K-12 edtech will take these one-to-one computing models and make them one-to-many or many-to-many experiences, from the classroom to a school's common spaces. It will unlock what's on a laptop or tablet screen and make it so everyone in a classroom can learn from it, and it will create immersive visual experiences that more accurately reflect the digital lives people live away from school. By integrating new display technologies into learning spaces and common areas, K-12 schools can begin to create a more engaging, collaborative environment, while at the same time preparing students for the technologically enhanced, active-teamwork models that await them in the labor force or higher education.

INTERACTIVE WHITE BOARDS IN CLASSROOMS

In recent years, schools have dipped their toes into the waters of digital presentation technology — digital whiteboards, short-throw projection systems, etc. But the future isn't about presentations; it's not defined by teachers showing on a screen what students need to learn. It's about students and teachers actively and easily engaging with what's on a screen — manipulating it, collaborating over it, even determining what "it" is.

Modern display technology allows for this classroom engagement. Interactive digital boards (or Interactive white boards)—large-format displays with integrated touch functionality — serve two important purposes. Touchscreen technology allows elementary school students to interact with learning material, while boards with screen-sharing capabilities allow upper classes to see the work that a single student performs on her personal computing device — she's able to wirelessly share what's on her screen via the interactive white board.

One size does not need to fit all. Technology purchases need to be strategic and support specific user cases. For example, early grades may benefit more from touchscreen technology that allows students to discover the material and gamify the learning experience, much as they've grown accustomed to with educational tablets and other touch devices found in the home.

In later grades, screen-sharing and "casting" — the process of sending information from a one-to-one device to a group digital board — can support more advanced project-based learning. For example, LG's 86TR3DJ interactive digital boards enable screen sharing with laptops and mobile devices, while all are connected to the same network, regardless of the operating system, to enable incredibly immersive class environments.

What's more, depending on a school's policy and where it stands on BYOD (bring-your-own-device) initiatives, interactive white boards

that support casting can also receive and display information from students' personal devices, reflecting their digital lifestyle and as such further enhancing the learning experience.

Interactive white boards can also support the growing field of active-learning pedagogies. Learning spaces can still be designed to be modular and reconfigurable, promoting group and ad hoc collaborations. That's because unlike traditional presentation systems, which are usually anchored to a spot in a room, displays can be mounted or placed on a mobile cart that students or teachers can place anywhere — even embedded in movable furniture. They can be shared among workspaces and be rolled down the hallway to a cafeteria or empty room if the classroom requires multi-purposes rooms for social distancing purposes. And because they often come with their own wireless connectivity and processing power, they often offer anywhere access to cloud-based learning tools and resources.



ENGAGING STUDENTS AND FACULTY ALIKE WITH TECHNOLOGY

Sherlock Elementary in Cicero, Illinois, is one of many committed to using technology to enhance the learning environment. To underscore that point and build excitement among students, faculty, and parents, it adopted some of the most cutting-edge display technology available from LG to create bright, architecturally unique video walls in the school's lobby. Video displays based on OLED (organic light-emitting diode) technology actually curve and wrap around columns, displaying vibrant content that attracts people to the school's mission and sends the message that Sherlock School is serious about preparing its students for a technology-rich future.

Display technology for common spaces comes in many shapes and sizes to support a school's unique needs, infrastructure and strategies. Digital signage displays, for instance, can be implemented on a very targeted basis or throughout a building as a dynamic, easy-to-use method of conveying up-to-date information, messaging, and more pro-active security alerts. For example, LG's UL3G series can be leveraged as a teaching tool in addition to an emergency takeover tool for IT directors. The more intricate or pervasive a digital signage network becomes, the more it's advisable to seek smart, networked, commercial grade displays that are reliable and manageable from a central location. Studies show up to 80 percent of K-12 administrators are quick to recognize the education benefits of technology and two-thirds say using technology to

boost engagement in schools and classrooms is a priority. Today's display technology forms the foundation of engagement. As Cicero School District 99 Chief Information Officer Cao Mac, puts it,

“

Technology changes drastically, but if we don't expose our kids to these types of environments, they'll never be able to succeed in the future.

”



Victoria Sanville is on the education technology team at LG Business Solutions USA, a leading provider of advanced display solutions for learning environments. For more information, visit www.LGsolutions.com.



LG

**Business
Solutions**

Published on November 16, 2021

Ed Tech Usage is Up. So Are Parent Privacy Concerns

By Alyson Klein

As schools ramp up their use of digital tools—and the data collection that often goes with them—parents are becoming increasingly concerned about their children’s privacy, a survey shows.

What’s more, both parents and students want more say in how their personal information is used, according to a report released Nov. 15, 2021 by the Center for Democracy & Technology, a nonprofit organization that seeks to shape technology policy, with an emphasis on protecting consumer rights.

More than one in three parents—38 percent—listed privacy and security of their child’s data as something they are “very concerned” about, up from 30 percent in 2020. Concern was highest among white parents, those that said they were familiar with the school’s privacy policies, and families with higher incomes.

Parents and students alike want a bigger role in deciding how schools plan to use their personal information, but often report that no one has asked for their input. Ninety-three percent of parents say it is important for schools to engage with parents or guardians about how they plan to use student data. But only 44 per-



—iStock/Getty Images Plus

cent of parents report that their school district asked for their input on the subject.

A majority of parents—62 percent—also want a seat at the table when it comes to deciding what types of technology their district adopts. And 41 percent want a say when their child’s school is re-evaluating technology that’s been in use for a while.

Meanwhile, 82 percent of students said they should have a hand in figuring out how their personal data is collected and used by their school. But only a little more than a quarter—26 percent—said they had been asked for their feedback.

Students’ number one worry: a data breach that would give outsiders access to their personal records. Seventy-two percent of students sur-

veyed said they were either “very concerned” or “somewhat concerned” about that happening.

And more than half of students—52 percent—are “very concerned” or “somewhat concerned” about their data being shared with local, state, or federal officials, including information on whether they had been vaccinated against COVID-19. Black students were especially worried about their personal records being shared with government entities, with 61 percent reporting it is something they are anxious about. High school seniors were also more likely to have concerns than younger students, with 64 percent saying this is something they are worried about.

Fifty-six percent of kids say they are “very” or at least “somewhat” concerned about “Zoombombing,” when uninvited people show up and join or interrupt class discussion. And another 54 percent say they are worried about their information—including grades, attendance, and discipline record—being shared with the local police department.

“Since the growth of online learning in response to the pandemic, our research consistently shows that edtech is here to stay,” said Alexandra Reeve Givens, the CEO of the Center for Democracy and Technology. “However, our research also shows persistent and growing student privacy concerns, underscoring the need to safeguard student privacy and support the responsible use of education data and technology.”

The survey, which was conducted summer on 2021, included 1,001 10th grade teachers, 1,663 K-12 parents, and 420 ninth through 12th grade students. ■

Published on September 14, 2021

The Future of Blended Learning: What Educators Need to Know

By Alyson Klein

The Hustisford school district in rural Wisconsin wasn’t an obvious candidate for blended learning before the pandemic. There were no immediate plans for a districtwide 1-to-1 computing initiative, and about 1 of every 3 students did not have reliable internet access at home.

Then the pandemic hit and Hustisford, like

countless districts around the country, had to shift quickly to virtual instruction. That meant buying devices, handing out wireless hotspots, and making big changes to teaching practices.

Now, Hustisford’s teachers are regularly using tools like Kahoot, a game-based learning platform, YouTube videos, and even TikTok as part of in-person classroom lessons, said Heather Cramer, the district superintendent. More significantly: a handful of teachers took the initiative to flip their classrooms, allowing

students to learn new material at home via online tools and spending class time on group work, class discussions, or digging deeper into the material.

“That’s something that we’ve really, really lacked in the past,” Cramer said. “The kids didn’t have that technology at home to be able to do that research and bring that all together.”

The pandemic and the increasing use of technology in K-12 education it prompted has added renewed energy to the blended learning movement as most students are now learning in school buildings. About two-thirds of educators are expecting their use of the approach to increase during the 2021-22 school year, according to a July 2021 survey by the EdWeek Research Center. Nearly 30 percent said they were betting it would “increase a lot.” Just 14

percent expected it to decline.

Blended learning is an approach that leverages both digital tools and face-to-face instruction to offer a more personalized learning experience for each student. Students are typically given greater control over the time, place, and/or pace of learning and often participate in new instructional approaches, such as flipped classrooms. The approach is usually built on the premise that students will be attending classes in school buildings.

Thanks in part to a device-buying binge in the first year of the pandemic, fueled by federal relief dollars, 74 percent of educators surveyed by the EdWeek Research Center in March 2021 said their districts had invested “a lot” in devices since the pandemic started, with nearly another quarter saying their districts had invested at least “some” money.

At the same time, teachers became much more adept at using technology. Eighty-eight percent of teachers said their ability to use tech improved during the 2020-21 school year, according to the March survey.

Blended learning and the ‘new normal’ picking up momentum

In some cases, educators are taking the initiative to continue instructional practices they started using during the pandemic. For instance, teachers in California’s San Marcos school district are much more likely to record their lessons and post them online for students than they were before COVID, said the district’s director of educational technology, Stephanie Casperson. That allows teachers to flip their classroom or gives students a chance to review lessons if they need help understanding a concept.

Even school social workers and music teachers are making these instructional videos, she said. “Before COVID, it was mostly my American Sign Language teachers who did videos,” Casperson said.

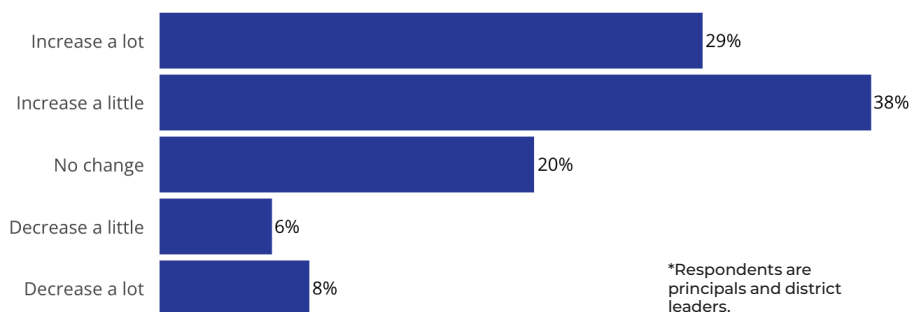
Before the pandemic, only two or three teachers at Corunna High School near Flint, Mich., were very comfortable using blended learning approaches, said Barry Thomas, the principal. Now, it’s more like eight to 10 of the school’s roughly 30 teachers, he said.

Corruna teachers are now more apt to record their lessons so that students can go back and review them, and the school’s math department has embraced online platforms like Khan Academy to supplement their own instruction.

“They’ve found things in the course of this last year and a half that they really have liked,” Thomas said. “And now it’s just part of their normal operation.”



Compared with prior to the pandemic in 2018-19, will your district’s or school’s integration of digital devices and online learning into regular physical classroom instruction—so called blended learning—increase, decrease, or remain the same?



SOURCE: EdWeek Research Center

EdWeek
Research Center

But some educators are cautious about embracing too much digital instruction.

“I’m not going to force anybody to do more blended learning,” said Scott Clayton, the principal of Scofield Magnet Middle School in Stamford, Conn. “Most children have a device or a cellphone. And now we’re putting a Chromebook in front of them or a laptop. It’s increasing screen time.”

Districts put greater emphasis on profes-

sional development for blended learning.

Yet as teachers’ level of interest in, and use of, blended learning has risen, districts and schools are making it a higher priority for professional development. More than half of the district leaders and principals who said they were planning to offer some remote instruction next school year in a survey by the EdWeek Research Center this summer 2021—58 percent—said they plan to offer training on the strategy.

That's compared with just over 30 percent who said they were likely to work with teachers on remote instruction or teaching kids in-person and online simultaneously (so-called concurrent teaching), the next most popular approaches.

"Demand on our end has been explosive," said Kareem Farah, the chief executive officer for the Modern Classroom Project, a nonprofit that works with educators on blended, self-paced, mastery-based instruction.

The organization has trained 2,300 teachers through a virtual mentoring program, which was at capacity during the 2020-21 school year. And a free online course on blended learning launched at the start of the pandemic went from 500 users initially to 30,000.

But despite an influx of federal funding that can be used for professional development, there are logistical challenges to getting teachers hooked up with blended learning training. The San Marcos School district, for instance, is running up against a nationwide substitute teacher shortage, making it difficult to find time to get teachers out of the classroom for training.

And for some teachers, there's a big temptation to revert back to traditional instruction.

"The initial shift is kind of almost been like, 'We want to go back to exactly what we were doing before,'" said Justin Cutts, the principal of Whitney High School in Rocklin, Calif. "Which is, to me, a little bit of a disappointment. We had the math department burn through, like, 12 [packages] of paper in the first two weeks of school. How did we go [through] the last year and a half, and now we're gonna go back to breaking copiers again?"

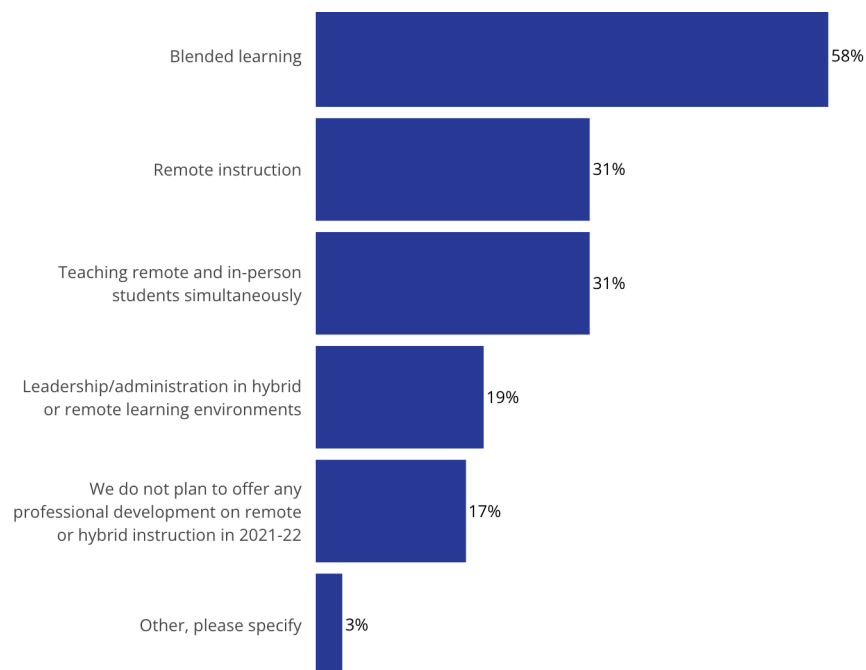
Blended learning for acceleration and remediation

There has been significant concern among educators and policymakers about students falling behind academically due to the pandemic. Half of teachers said their students were behind where they would be in a typical year, according to a survey of 1,042 teachers conducted in spring of 2021 by the Clayton Christensen Institute, a nonprofit research organization that promotes innovation in education and other fields.

It's unclear how much of a role technology can play in helping students regain their academic footing, through either acceleration or remediation, at least during class time.

School and district leaders surveyed by the EdWeek Research Center summer of 2021 were most likely to say their students would be able to use online tools for acceleration and remediation at home more frequently than before. Less popular: Offering intensive tutoring that incor-

When it comes to remote or hybrid instruction, which of the following areas of professional development do you expect to offer in 2021-22? Select all that apply.

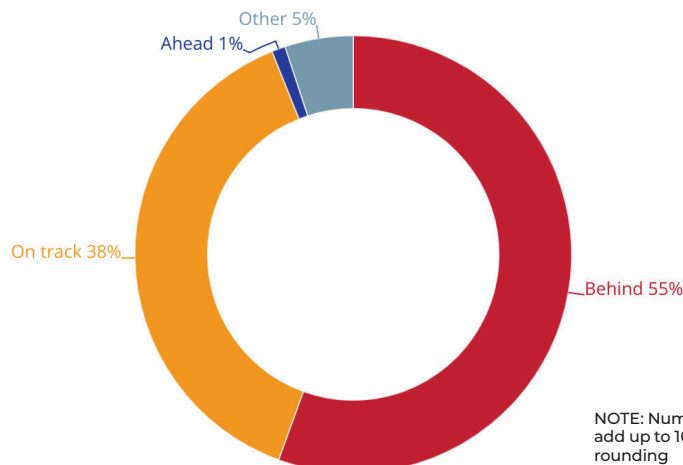


Respondents are district leaders and principals who indicated that they would offer both remote and hybrid learning or remote-only instruction.

SOURCE: EdWeek Research Center

EdWeek
Research Center

How did your students' average learning growth perform in 2020-21 compared with a typical year?



NOTE: Numbers may not add up to 100% due to rounding

SOURCE: Christensen Institute, survey of 1,042 teachers

porates digital tools more often than in the past.

About another quarter of district and school leaders surveyed aren't planning to use blended learning at all to help accelerate instruction, or for remediation.

Some districts are trying a multipronged approach.

California's Whitney High School is having some of its students catch up using a mix of software, courses specifically geared toward helping students who are behind in either math or language arts, and even smaller classes to help students who have failed multiple subjects.

While the district has used "bits of pieces of this system," it has never been as comprehensive as it is this school year," said Cutts, the principal.

But some schools are taking a more-cautious approach to blended learning.

For instance, even though he and his school have embraced the use of technology for teaching and learning, Clayton, the principal from Connecticut, doesn't think it's necessarily the best strategy for making sure that students have the background information they need to access grade-level content.

"If anything instructionally will shift, it's this move toward an acceleration model of learning, which is not about technology," he said, referring to the practice of refreshing students on just the learning they need to access grade-level content. "That's about instructional practices. It's about teachers not relying on remedial instruction because they feel as if students have somehow lost learning over the [last] year."

More educators are experimenting with flipped classrooms

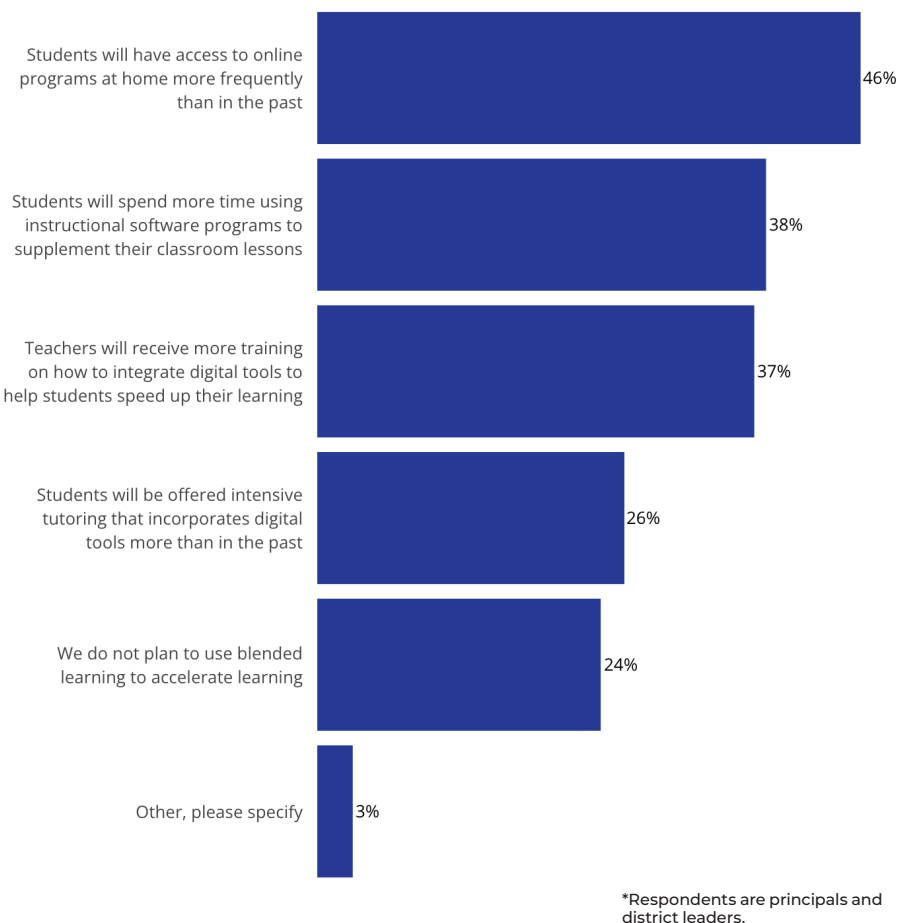
Teachers are more likely these days to try out an intensive form of blended learning—the so-called flipped classroom—in which students cover class content online at home and in-person instruction is used for discussions, projects, and practice, the Christensen Institute survey found.

Eighteen percent of teachers said they were planning to use the model after the pandemic, compared with 12 percent who said they used it before the pandemic.

For instance, during the 2020-21 school year, when most schools were using hybrid instructional approaches, some 5th grade teachers at Winchester Trail Elementary School in Canal Winchester, Ohio, began to shift to a flipped model. The principal, Max Lallathin, who encouraged teachers to give the arrangement a shot, is hoping to see it used in his school more often.

"It's a timesaver for the kids because they

How do you plan to use blended learning this school year for remediation? Select all that apply.



SOURCE: EdWeek Research Center

EdWeek
Research Center

Please indicate the timing of your use of flipped classes



SOURCE: Christensen Institute, survey of 1,042 teachers

can go right in” and begin discussing content, he said. “If they watch a scientific video, they can go right into the scientific method the next day, instead of watching the video in class.”

But despite all the trends showing teachers’

technology skills rising and increasing use of blended learning approaches, some educators worry about backsliding.

“My biggest fear was that we’d go back to business as usual this [school] year, and that

teachers would stop using some of the technology” that they mastered during the pandemic, Casperson said. “And I think that’s a fear of pretty much every ed-tech director that I’ve talked to.” ■

Published on November 4, 2021

The Number One Reason Students Still Lack Internet At Home: Parents Can’t Afford It

By Alyson Klein

Affordability—not lack of high-speed broadband infrastructure in the community—is the biggest reason millions of students are still without home internet access, even as the federal government has poured billions of dollars into closing the digital divide.

In fact, almost two-thirds of offline households have access to home broadband connections in their areas, but can’t cover the cost, according to “No Home Left Offline,” a report released by EducationSuperHighway, a non-profit that champions greater broadband access in schools and homes.

“The broadband affordability gap is present in every state and has become one of the primary inhibitors of access to economic security and opportunity,” wrote Evan Marwell, the founder and CEO of EducationSuperHighway, in a letter that accompanied the report. “It is a reality centered in our nation’s poorest communities and disproportionately impacts people of color.”

EducationSuperHighway has been part of one of the biggest digital education success stories of the past decade. The nonprofit launched in 2012, and by 2019, the number of students with strong broadband in their classrooms had catapulted from just 4 million to 45 million.

The effort was such a triumph that, in 2019, Marwell declared “Mission Accomplished” and announced plans to sunset the organization the following year.

But 2020, of course, brought a worldwide pandemic and unprecedented use of remote and hybrid learning and the technology available in students’ homes. Home internet connectivity for students went from an important service to have to something that could make-



or-break their academic success.

So, now, instead of closing its doors, EducationSuperHighway is moving on to its second act: EducationSuperHighway 2.0. The organization’s mission will be “to close the digital divide for the 18 million households that have access to the internet but can’t afford to connect,” Marwell wrote in his letter.

One item on the to-do list: Helping low-income families take advantage of federal broadband affordability programs already at their disposal. As few as 17 percent of people eligible for those programs have enrolled, the report says.

That’s partly due to lack of awareness. Only 25 percent of lower-income people had even heard of a new federal emergency broadband benefit created in response to the pandemic, according to a national survey cited in the report.

Many offline families are also worried about

sharing personal information through the sign-up process, or aren’t convinced that the program will actually cover their internet costs.

And signing up for the program can be daunting, particularly when it comes to producing documents to verify income. The nonprofit is planning to work with school districts to find families with school-age children who are unconnected, and help them enroll in programs that cover home internet access costs.

Marwell and his team also plan to build public-private partnerships, better identify unconnected households, help states make the most of federal resources for broadband, and come up with guidance for states, cities, and school districts that want to ramp up connectivity in their communities, Marwell wrote.

“Internet access is no longer a luxury,” Marwell wrote. “It’s a necessity in the daily lives of every American.” ■

FEDERAL FUNDING INVESTMENT PROVIDES FLEXIBILITY TO YOUR SCHOOL'S UNIQUE TECHNOLOGY NEEDS



ADAPTABLE CLASSROOM ENVIRONMENTS

Flexible instruction delivery models help improve engagement, facilitate individual learning and improve the interactive environment

Adaptable classroom technology can be used in global seminar environments and in classrooms for in-person, remote and blended learning to create immersive learning environments

PRODUCTS: LG gram, Non-Touch Displays, Interactive Displays, Desktop Monitors

RETURNING TO CAMPUS SAFELY

Sustain healthy environments to reduce the risk of virus exposure, coordinate response efforts and alert all to campus safety protocols

Campus digital signage can be used to communicate health and safety protocols, direct walking traffic, push emergency alerts as well as for mobile spaces for socially distanced learning

PRODUCTS: webOS Displays, Non-Interactive and Interactive Displays on Mobile Carts, Projectors, UV-C Robot, Air Purifier



EXPAND LEARNING AND SOCIALIZATION TIME

Apply education technology to meet multi-purpose needs to address learning loss, provide social and emotional services and provide after school care

Education technology can be expanded beyond the classroom to help schools provide remote mental health services and allow students to experience virtual field trips and specialized labs

PRODUCTS: LG gram, Non-Touch Displays, Interactive Displays, Video Walls, Desktop and Gaming Monitors, Projectors



Published on October 5, 2021

How Much Screen Time Is Too Much? The Answer Is ‘It Depends’

By Alyson Klein

One of the biggest critiques of full-time virtual and blended learning is that kids spend way too much time on screens. Students have complained about getting headaches, and educators have suffered from “Zoom fatigue.”

So how worried should educators be about all that time students spend staring at a Chromebook, iPad, or cellphone screen, especially if it’s followed by hours of television or video games? How many hours of screen time per day is too much?

To answer those questions, Education Week spoke with Lisa Guernsey, a senior fellow and strategic advisor with the Education Policy Program at New America, and Michael Levine, Senior Vice President, Learning and Impact, for Noggin, Nickelodeon’s online interactive learning service for preschoolers.

This interview has been edited for length and clarity.

How worried should educators and parents be about screen time?

Guernsey: The research doesn’t match up with the sensationalized headlines. The research actually shows that there are many things at play in a child’s life and what they’re learning from a screen interaction. It’s not just about the amount of time that they spend in front of a rectangle slide screen.

Instead of time, we really have to look at the three C’s. And those three C’s are looking at the Content on screen; understanding the Context in which the child is playing, watching, or observing what they’re seeing on screen; and then the third C is the [individual] child. There’s so many different needs that children have at different ages and different stages of development in their own context of their family but also in their community.

Can you talk about the fears that parents, and even kids, have had about too much screen time during the pandemic?

Guernsey: I think it’s completely valid that

“It’s extremely important that the parent monitor and review the quality of content as well as the context and the needs of that individual child.”

MICHAEL LEVINE

Senior Vice President, Learning and Impact, for Noggin

there were concerns, because in the pandemic it was certainly the case that a lot of things were not available to our kids. Being able to be with their peers, or running around outside, or for the older ones being able to go to a concert or a football game. [Kids were] not being able to get together with friends. It was not a good year. To stay inside and to have to try to find ways to entertain yourself or to keep your kids learning is really, really difficult. So I do think that we need to recognize that we want something different than what we had last year and we want that to be something that’s engaging for children.

The science of how children learn really points to how much social interaction matters. How much just getting engaged with new content and exploring new things and being able to ask questions and have some critical inquiry about what you’re seeing and exploring that really leads to even more engagement for kids. That can happen through great TV shows, through really cool [digital] games. That can also happen offline.

Instead of asking the question, ‘how do we get kids off screens?’ Let’s turn the question

around and ask ‘how do we make next year so much more interesting, engaging, interactive for our kids?’ I think that that may very well mean for families that have the means and the ability to do so that their kids do some things off screen now. But it doesn’t mean that we’re going to suddenly go back to this world in which all screens are bad.

Are there any health issues related to screen time?

Levine: It’s really important that parents and educators realize that screens can be disruptive to sleep. I think a lot of kids did get out of their sleep routines [during the pandemic] and very young children need quite a lot of sleep. We do need to be concerned about screens [being used] late into the night.

Can you talk a little more about how content figures into screen time?

Levine: When you think about the digital media diet that your child should have, there are things that really are more like treats and then there are things that are wholesome, you know, fruits and vegetables [of television shows or games]. It’s extremely important that the parent monitor and review the quality of content as well as the context and the needs of that individual child. Once you’re getting into the kids who are parts of peer culture, Pokemon Go and Minecraft or more violent video games, there’s quite a lot more work that needs to be done.

How can you improve the context in which your child or student is experiencing screen time?

Guernsey: [When teachers or parents watch with their kids], they’re learning together, they’re having fun. There’s a positive emotional experience that comes out of that. We build on that in communication with teachers, and having more of a two-way street. But [it’s] also just recognizing, ‘Hey, it can be fun to talk to your kids about that game that they just played or to maybe play along with them. If it sparks something that they might want to do offline, that’s great too, like maybe that character was so much fun for them they want to draw a picture of it.’

How can teachers help parents navigate their child’s use of digital media now that most schools have resumed in-person instruction?

Guernsey: Continued communication be-

tween families and teachers can really go a long way to helping children themselves feel like they're supported both in school and then back at home. Maybe that means continuing to use Zoom, at times, with parents to connect

over the best thing for [the] child or having moments where there are songs and stories that are told together through virtual spaces so that parents can be engaged in that, especially for those parents who cannot get to those par-

ent teacher conferences at 4 p.m. on a Tuesday afternoon. The most underserved kids, in communities that haven't had the resources they need, they really need that ecosystem of support more than ever. ■

OPINION

Published on November 5, 2021

How Schools Can Stem the Toxic Tide of Technology

Students' relationships, motivation, mood, sleep, and safety—all are at risk

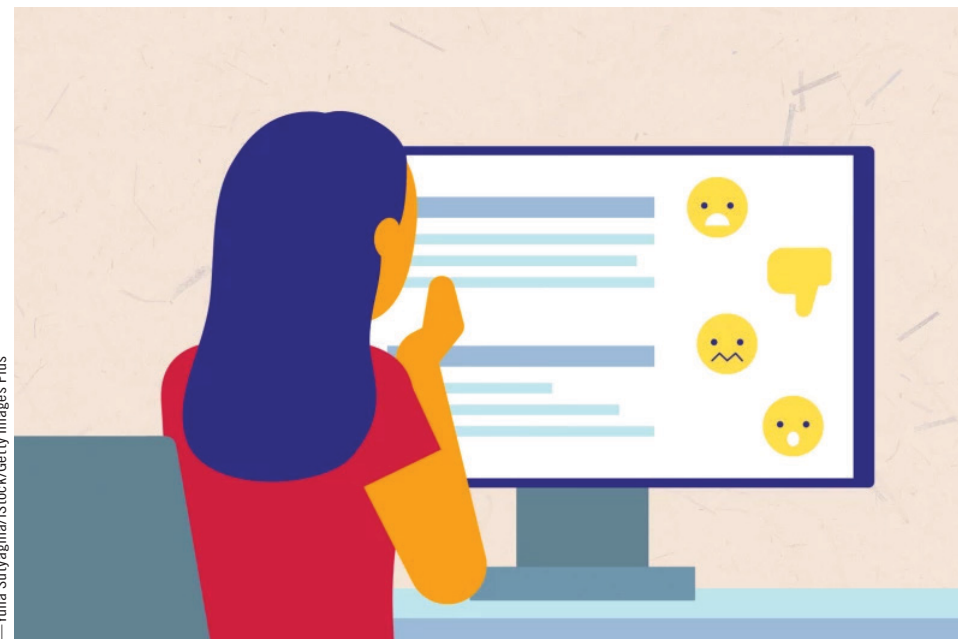
By Andy Hargreaves

Whistleblower Frances Haugen exposed how Facebook's own research links its Instagram service with body dissatisfaction and suicidal thoughts among teenagers. In a chilling TED Talk, design thinker Tristan Harris revealed how Google, his former employer, lures users into staying on-screen far longer than is good for them. Psychology professor Jean M. Twenge reported that teenage anxiety levels spiked after smartphones started to saturate the adolescent market in 2012. During the pandemic, hundreds of thousands of 5-year-olds received government-mandated, on-screen instruction that well exceeded the one-hour limit that was recommended pre-pandemic by the American Academy of Pediatrics.

What are schools, school systems, governments, and foundations doing to stem this toxic tide of digital distraction, depression, and addiction? The answer, sadly, is very little—or nothing at all.

Yes, a Senate subcommittee grilled big-tech-company executives about the serious harm their products might do to children, but it's unclear whether the protective legislation some legislators favor will ever see the light of day. Even more alarming perhaps, the people in charge of what our students should learn and how they should learn it are mainly making things worse.

Early in the pandemic, former New York Gov. Andrew Cuomo announced a major partnership with the Gates Foundation to “reimagine education” digitally. Why, “with all the technology you have,” he disturbingly wondered aloud, was there any need for “all



—Yulia Sutyagina/Stock/Getty Images Plus

these physical classrooms” anymore?

When I joined global policy discussions to brainstorm post-pandemic educational scenarios, I witnessed ed-tech entrepreneurs, government leaders, and philanthropy executives wax lyrical about a transformative future of digital, blended, and hybrid learning. COVID-19 seemed to be the disruptive educational force they'd all been waiting for, the force that would upend conventional schooling everywhere.

If, like me, you are worried about the downside for students of such rapture, let me suggest the example of the notorious Luddites, a group of 19th-century English textile workers known for smashing the inventions that threatened their own jobs. Contrary to the popular understanding, the Luddites

were actually very skilled with technologies. They weren't opposed to all of them. They destroyed only the machines that they believed were being misused to undermine good labor practices.

My own research reveals countless examples of thoughtful uses of digital learning technologies in interdisciplinary projects and in formative assessments shared in real time. And, of course, during the pandemic, teachers have made enormous strides in developing their own and their kids' digital competence so they can make use of such approaches. This is to the good.

So the answer is not to smash all the screens. Instead, we need to embrace our inner Luddite: Retain the uses of technology that offer distinctive benefits, yet ruthlessly

eradicate the uses that lead to toxic effects.

In response to the exuberance of technology advocates in the early months of the pandemic, my new colleagues and I at the University of Ottawa in Canada created a charter for ethical technology use. Here are six of its 10 provisions.

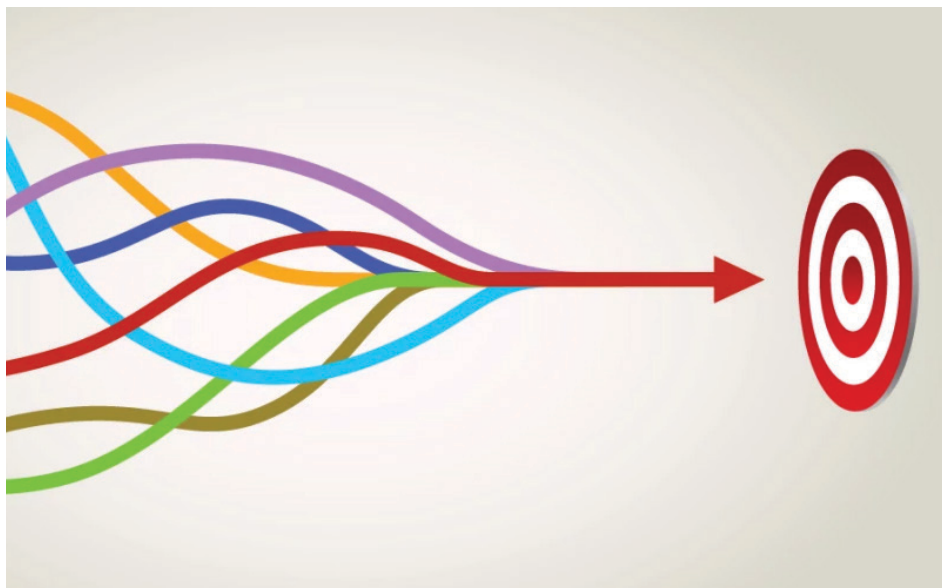
- **The primacy of schools and teaching.** Most children and families need physical schools with in-person teaching and learning. They enable young people to develop identities as members of a community. Frankly, physical schools are also necessary because children's parents need to go to work. Online learning has a place in all our lives now, but nothing will ever beat the stimulation, relationships, and engagement children get from in-person teaching.
- **Unique value proposition.** Learning technologies should be adopted when they have a unique value that cannot be addressed in another way. This is true of all learning resources such as manipulatives, books, and conversation. Adapting technologies for students with special needs, collaborating with colleagues across remote rural communities, and transforming assessment such that students, parents, and teachers alike can get instantaneous feedback on student learning—these are some of the digital ways we can enhance teaching and learning. Digital technologies must be employed only where they add unique value, and not, willy-nilly, just because they are there.
- **Universal access.** Educational technology access must be universal and free as a basic human right. Countries like Estonia already have this. Others come very close. Uruguay, for example, instituted the provision of one laptop per child in 2007, and has a national online digital platform, backed up with in-person facilitators, that stimulates and supports innovation. The platform saw a huge increase in use during COVID-19. Meanwhile, over 98 percent of South Korean families have access to broadband and devices. This sort of reach is the only way we will eliminate the digital divide that puts students from well-off, well-educated families on one side and everyone else on the other.
- **Risk management.** Strategies of educational-technology use must address risks. These include excess screen time, digital addiction, adolescent anxieties about online identities, algorithms that reinforce in-group prejudices as well as personal preferences, excessive student surveillance, and displacement of valuable nondigital activities, such as outdoor play and sleep. Every school, district, government, and technology company should have a clear and transparent policy of risk identification and management. Teachers' unions should insist on one. And every agreement signed with a technology provider should reflect concern about ethical technology use.
- **Disciplined innovation.** Technology use should be evidence-informed, inquiry-driven, and impact-assessed. In research with my Boston College colleague Dennis Shirley, school superintendents have reported that when predecessors introduced digital tablets into their schools in one fell swoop, it created chaos among students and teachers lasting a year or more. Digital tools and platforms should be adopted system-wide only after thorough processes of disciplined inquiry with smaller groups. This calls for a new paradigm of collaborative development that should include and empower teachers and students, rather than corporations, as the primary design drivers of learning.
- **Public responsibility.** Educational technology companies should pay fair taxes. They have accrued enormous profits during the pandemic, including from students' learning. Tax subsidized philanthropy directed to causes determined by corporate leaders is no substitute for properly assigned taxes prioritized and distributed through civic means for public benefit, including public education.

We mustn't be blinded by the digital light. But it's not a moment to switch off all our screens either. Instead, every school and system must focus more sharply and think more precisely about where, when, and how technology-supported learning can and cannot add unique value to students' experiences and outcomes. ■

Andy Hargreaves is a professor emeritus at Boston College and a visiting professor at the University of Ottawa in Canada. His two latest books, out this year, with Dennis Shirley, are Five Paths of Student Engagement (Solution Tree) and Well-being in Schools (ASCD).

“

Contrary to the popular understanding, the Luddites were actually very skilled with technologies. They weren't opposed to all of them. They destroyed only the machines that they believed were being misused to undermine good labor practices.



—DigitalVision Vectors/Getty

OPINION

Published on November 18, 2021

The Case for Virtual Social and Emotional Learning

By Rick Hess

The pandemic has sparked unprecedented concerns about student social and emotional well-being and mental health. One organization seeking to help schools address this challenge is EmpowerU, which offers online social-emotional support via daily skill-building lessons and one-on-one mentoring. Founded in Minnesota in 2018 by Katie Dorn, a veteran K-12 school counselor and therapist, EmpowerU serves thousands of students across the country. I spoke with Katie about why they do this work online, whether it delivers for kids, and how exactly it works.

—Rick

Rick: What is EmpowerU?

Katie: EmpowerU is a tech-powered platform that delivers social-emotional learning, or SEL, and mental health to schools and colleges. Student mental-health challenges have been on the rise for the past decade, with nearly 1 in 3 students struggling with anxiety, depression, trauma, or attention issues that impact their ability to focus, stay motivated,

and learn. EmpowerU aims to ensure that all students can access quality mental health and SEL support that is relevant and impactful in a cost-effective way—teaching students how to make the change that works for them, one small step at a time.

Rick: How did you get this started?

Katie: I am a licensed school counselor, counselor-educator, therapist, and mother of seven grown children. When I worked in a high school with a caseload of 400 students, about 10 percent of them needed daily skill building and support, but there just wasn't a time or place to deliver it. Schools were using IEPs and 504s to accommodate students' ADHD, anxiety, and depression but just didn't have the bandwidth and staff to deliver any highly personalized support. I knew there had to be a better way to support students, so I founded EmpowerU with two other adolescent-mental-health clinicians.

Rick: What does using EmpowerU look like for students?

Katie: Students work through a self-paced daily curriculum that lasts about 12 to 14 weeks. They

sign onto the EmpowerU portal from their tablet, computer, or phone to complete a 30- to 40-minute daily lesson, comprised of videos, graphics, and questions. Each student is also assigned a licensed adolescent-mental-health instructor—think school psychologist, school social worker, school counselor—who builds a relationship with the student and provides daily feedback and encouragement via text and email. The psychological safety our coaches provide is critical for students to identify their own challenges, worries, strengths, and circumstances, which allows us to customize the program for each student. And the coursework is aligned with National Health and Wellness standards, so it can be credit-bearing.

Rick: How does the coaching work? Can mental-health support online really work without face-to-face interaction?

Katie: Let me give a student example. A 9th grade student enrolled in EmpowerU after she couldn't leave her home for 10 months because of her extreme anxiety. Each day, she logged on to complete a lesson that built upon core concepts and strategies using videos, example scenarios, and formative questions. At the end of each lesson, she wrote a reflection on how she could apply what she learned to her specific goal. Her personal coach, who had been working with her via personalized messages sent through our secure portal since day one, would read this reflection and provide support and encouragement. The student would follow up with questions or work with the coach to set a small goal for the day. After just three weeks of daily lessons and support, this student was able to return to school. The key takeaway is that social-emotional learning can't just be taught. In order for it to positively impact behavior change and outcomes, students need support and accountability on a daily basis.

Rick: What data do you have on program effectiveness?

Katie: Our approach uses a psychological model that's considered the gold standard in measuring pre- to post-intervention behavioral change. This model focuses on the decisionmaking of the individual and outlines five stages of change a person goes through, beginning with recognition or interest in change and ending in the ongoing practice of new, healthier behavior. Our three-year data study shows that the average EmpowerU student advances through those stages of change at nearly twice the typical rate.

And 94 percent of our students make significant enough progress that they avoid needing additional or more costly interventions.

Rick: As time moves forward, what role can online SEL programs or mental-health provision play?

Katie: Past challenges fueled an estimated learning gap of 20 to 30 percent—which was even greater for disadvantaged students who were already behind prepandemic. School leaders are looking for holistic programs that will reengage struggling students, support their mental health, and in turn help them meet their academic goals. EmpowerU helps schools increase student support without having to hire new staff. In fact, school counseling teams love partnering with EmpowerU because they get access to the data tracking their students' goals and progress, which is unique to EmpowerU.

Rick: How do your online services compare to traditional therapy?

Katie: With adolescents, there is a real cost and access issue with traditional therapy. A 2019 report from the Substance Abuse and

Mental Health Services Administration showed that nearly 60 percent of the 3.8 million youth aged 12 to 17 who reported a major depressive episode in 2019 did not receive any treatment. The majority who did receive help got it only at school. Typically, these students see a school-based therapist every other week for 50 minutes, at an average cost of about \$200 a session. When I was in this role, students often forgot to practice strategies I assigned as “homework” in the time between sessions, so it was hard to build momentum. With our online program, students receive SEL instruction and feedback every school day. Within the first five days, students are making significant progress. The school district contracts with us to provide the 12 to 14 week course, instruction, support, and pre-to-post outcome data for a total cost of \$399 per student.

Rick: What do you say to parents or educators who are skeptical that social and emotional learning can really happen online?

Katie: First, I get it. I think everyone has asked themselves about limitations of online teaching, therapy, social interaction—you name it. But it has been shown that online

delivery of counseling services is effective for people of all ages. During remote learning, we had hundreds of students who had become discouraged and disengaged enter into our program; many were seniors that were behind and at risk of not graduating. They were able to use EmpowerU to become more confident, self-directed learners, helping them reengage and cross that finish line. And we've even found that the asynchronous nature of our support allows students to reflect more thoughtfully and discover insights on their own. They can be more vulnerable, honest, and direct as they outline their deepest fears and greatest aspirations to their personal coach. Schools recognize that students need a safe time and place each day to focus on these vital skills. We have created that space and support in a way that feels highly personal, in an online format that students are used to and actually feel more comfortable with.

This interview has been edited and condensed for clarity.

Rick Hess is a resident scholar at the American Enterprise Institute and the director of the think tank's Education Policy Studies.

Copyright ©2021 by Editorial Projects in Education, Inc. All rights reserved. No part of this publication shall be reproduced, stored in a retrieval system, or transmitted by any means, electronic or otherwise, without the written permission of the copyright holder.

Readers may make up to 5 print copies of this publication at no cost for personal, non-commercial use, provided that each includes a full citation of the source.

For additional print or electronic copies of a Spotlight or to buy in bulk, visit www.edweek.org/info/about/reprints.html

Published by Editorial Projects in Education, Inc.
6935 Arlington Road, Suite 100
Bethesda, MD, 20814
Phone: (301) 280-3100
www.edweek.org

EducationWeek®

SPOTLIGHT

Get the information and perspective you need on the education issues you care about most with Education Week Spotlights

The Achievement Gap • Algebra • Assessment • Autism • Bullying • Charter School Leadership • Classroom Management • Common Standards • **Data-Driven Decisionmaking** • Differentiated Instruction • Dropout Prevention • E-Learning • ELL Assessment and Teaching • ELLs in the Classroom • Flu and Schools • Getting The Most From Your IT Budget • Gifted Education • Homework • **Implementing Common Standards** • Inclusion and Assistive Technology • Math Instruction • Middle and High School Literacy • Motivation • No Child Left Behind • Pay for Performance • **Principals** • Parental Involvement • Race to the Top • Reading Instruction • Reinventing Professional Development • Response to Intervention • School Uniforms and Dress Codes • Special Education • STEM in Schools • **Teacher Evaluation** • Teacher Tips for the New Year • Technology in the Classroom • Tips for New Teachers



VIEW THE COMPLETE COLLECTION OF EDUCATION WEEK SPOTLIGHTS

www.edweek.org/go/spotlights