

## The State of Education

Remote learning is here to stay and technology plays a critical role.



### **INTRODUCTION**

## Remote learning is an important part of the future of education

Educational institutions were forced to face their limitations with remote learning this past year. Many quickly went above and beyond to ensure that their students—and staff—had the best access they could provide on short notice to continue their education during a very stressful time.

Their work paid off as students across the globe were able to keep up with their studies. But remote learning is not a temporary fix; it is here to stay. Our recent research shows that students not only prefer but expect the flexibility of hybrid learning. The pandemic accelerated an existing trend towards less traditional learning environments, accommodating additional adult and non-traditional students, and a more customized educational experience. Hybrid learning is only possible with technology that removes distance learning limitations and enables an engaging and dynamic learning experience, wherever students and staff are.

Many schools have put in the work and resources to ensure that students have remote access to their courses and labs and IT professionals have the tools they need to help them from afar. That work, investment, and goodwill can serve universities, colleges and K-12 schools well into the future.

As we enter a new academic year, questions remain about how schools will manage the possibility of reverting back to remote environments along with bridge technology equity gaps that have risen. It's a matter of being proactive versus reactive—any educational institution should be able to act quickly when disruptions happen; ensuring that all students have equal access to the tools they need to learn.



Mark Lee Co-founder & CEO Splashtop





The pandemic prompted a re-think about different approaches to education, and some of those changes are likely to be permanent.

## Here are three trends that will form the next generation of education:

- 1. Flexibility: students want hybrid remote/in-person learning
- Access and Equity: managing technology remotely ensures equitable access to programs students and staff need for teaching and learning
- 3. Simpler Support: remote IT support is essential to enabling distance education



## Trend 1: The Future is Flexible

Flexibility is here to stay. Students have made their preferences loud and clear—they want the flexibility of hybrid educational environments.

# 1 out of 3

undecided high school students indicated that higher education institutions' handling of the unexpected shift to online education and the resources provided to faculty and students influenced their choice of college. (educationdata.org)



Today's students are juggling constantly. They're managing multiple projects across multiple classes, holding parttime or full-time jobs, have family responsibilities and they may be working to overcome barriers to continuing their education. Educational institutions must meet their students—current and prospective—where they are.

Hybrid learning is important to attract students and support their educational success. Students are looking for the flexibility of hybrid environments with choices for in-person and remote learning throughout their programs. With the sudden pandemic-caused shutdowns, many higher education institutions were forced to deploy remote learning very, very quickly. Now the test is how they'll continue with it—and prospective students are keeping track.

## Turning "What If" Into "So What?"

"Always be prepared" is a proactive stance. Severe weather events, problems with facilities and campus shutdowns can happen for a variety of reasons circumstances can change at any moment. Educational institutions cannot afford to waste time constantly scrambling to adjust. For students, lost classroom and lab time quickly adds up, leading to delayed graduations or abandoned degrees.

Remote learning environments allow schools to be more resilient and adaptable; therefore more attractive to prospective students. Schools need to start thinking of remote and hybrid learning as a valuable offering —more "standard operating procedure" than "exception to the rule." Any educational institution should be able to switch from in-person to remote and back again without disruption and without negatively impacting students' access, performance, and sense of community. Remote lab access maintains connections between staff, teachers, and students anywhere, anytime.

The Open University, U.K.'s largest online university, <u>found that the benefits of</u> <u>remote learning</u> go beyond the (virtual) classroom—they also include a decrease of carbon dioxide emission decrease of 85% per student and a 90% decrease in energy usage. We surveyed 500 students about their expectations for hybrid learning

92%

of students expect to have 24/7 access to campus computers to continue learning.

83%

think a mix of online and on-campus learning is the future for students.

92%

of students agree that they should have the ability to learn from home regardless of bandwidth or their type of computer.

"There's a huge advantage allowing students to use the animation and game-design applications whenever they want to, even if it's at 2am while eating cold pizza in their bedrooms. The more fluid access to the lab software has turned out to accelerate the process for many of our students."

## Kathryn B, Teacher



## Trend 2: Access, Equity, and Efficiency

Remote labs close the technology equality gap among students.

Many disciplines now use increasingly complex—often expensive—software. Students need access to these programs to complete their coursework, learn necessary skills and gain sufficient experience for their post-graduation careers.

On-campus computer labs have powerful Windows, Mac, and Linux computers with software apps like Microsoft Office, Adobe Creative Suite, and Autodesk. But not all students have access to the technology they need off-campus. In fact, Splashtop's recent survey showed that 63% of students do not have access to computers at home, and use Chromebooks, iPads or other tablets.

63%

63% of students do not have access to computers at home



Their own devices often lack sufficient processing power, and the advanced software programs they need are expensive and may not offer cheaper student versions. The quality of learning and coursework completion suffers without access to the tools and resources these students need. The result is not learning programs adequately leading to lower measurement of learning scores.

In addition, students' schedules may not allow them to spend adequate time or anytime—in on-campus computer labs. Remote access learning tools allow students to use computer labs when they like, as often as they like. They can work when their schedules allow and get the most benefit from the facilities their school offers and ease their concerns about falling behind. With remote computer access, students and teachers can use any device (iPad, Mac, Windows, Chromebook, etc.) to remote into on-campus computers and use them anytime they need, just as if they were physically in the classroom or lab.

# Getting the Most Out of your Technology

From the schools' perspectives, remote access helps them to get the most out of what they already have. Letting students leverage and optimize their existing hardware, software and licenses. Remote labs also solve two other issues: maximum capacity and hours open. There are a finite number of computers available in labs, and access can be difficult for students, particularly during high usage periods. In addition, many labs out of necessity are only open during specific hours. And, even when campuses are open for in-person learning, labs aren't as accessible as they could be if they have set hours that don't align with students' schedules, whether they're working while continuing their education or athletes who are training and competing.

Remote learning solutions offering virtual computers or on-demand cloud computers solve those issues because they offer unlimited simultaneous use and access to all software. They are also easy to scale up during periods of high usage, like at the end of a semester when students are studying for exams and writing research papers; and scale down during quieter periods, like summers when enrollment tends to be lower. More importantly, they don't require students to travel to their campus just to use a lab computer, leaving them more time to do their actual coursework.

### **Splashtop Survey**

72%

use specialized software during your degree/course

85%

would be more efficient if they had access to a campus computer remotely from home or anywhere else

76%

of higher education institutions believe that online learning tools and platforms should be made more accessible for students. (educationdata.org)

"It gives all students equal access to our labs and software, allowing students to engage with the curriculum at their own time. For example, athletes can log in after school when they can't stay back (in the lab) because of practice. It levels the playing field, especially with getting access to (applications like) Adobe."

Duane Roberson CTE Director Colorado Springs School District 11



### CASE STUDY

# Wayne State: Making powerful and expensive software programs accessible to all students

Students at Wayne State's College of Fine, Performing, and Communication Arts need software applications like Adobe Creative Suite and Logic Pro X to complete their coursework and develop their skills for future careers. These are expensive and powerful programs that require equally powerful computers that can run them.

When labs were closed because of COVID-19, students were locked out of a crucial part of their education. Many of their personal devices weren't capable of adequately running these applications—plus they couldn't undertake the burden of licenses or subscription fees. For these students, remote meant limited learning. Until a remote solution fixed both these problems. Wayne State's CFPCA opted for a device agnostic platform that allows all students to remotely access and work with these programs that will make the difference not just to their grades but also their future career prospects.

Read the full case study





## Device diversity in schools continues to grow and IT support teams must be able to support a range of devices and operating systems.

# Which computers do your on-campus computer labs have?

Which device(s) are you and your students using to learn from home?



# Trend 3: Access, Simpler Remote Support

The value of remote IT support has been made clear—it's more efficient and easier.

The obstacles that come with remote learning aren't only felt by students. Supporting IT from afar has its own challenges.

IT departments have to ensure lab computers are up-to-date, think about cybersecurity and manage user access. They also need to help teachers and students who are trying to get their work done in different places on different devices using a variety of broadband capabilities. Even when in-person classes are in session, they may have to disrupt classes to fix the in-classroom tech.

This is another area where schools are leveraging the benefits of remote

technology. With remote IT support, staff can maintain existing lab devices and components wherever they (and the lab) are located, and with the least amount of disruption. Similarly, troubleshooting classroom technology can also be done without stepping foot inside the classroom.

As the pandemic made IT pros all too aware, providing the tech support they offer students wasn't easy. Even when schools are back to in-person, students don't always have the time or schedule that allows them to visit the tech help desk. Both parties benefit from remote support, and IT staff can help more students faster. "There are tons of cases where people can't come in. We haven't had that tool to be able to access computers anytime. Adding Splashtop gives us the ability to have 24-hour access."

## **Jason Deadman**

Computer Services Helpdesk Technician, Confederation College



### CASE STUDY

## Virginia Tech: The College of Agriculture and Life Sciences Brings Technology to the Field

Virginia Tech's College of Agriculture and Life Sciences (CALS) IT department is managing technology at 140 sites spread over a large area. With limited staff to manage and support a considerable number of devices, traveling to each site to provide support was resource intensive. Plus, during the pandemic, it was no longer feasible.

CALS needed a solution that would offer reliable remote access to any device whenever required. By implementing a remote software solution, CALS cut down on travel time and costs along with faster response to the issues. The remote solution has the added benefit of allowing professors to access their office computers from off campus. While CALS IT professionals will continue to provide a certain amount of in-person support, they intend to continue using the remote solution to help them provide more efficient support and see it as a valuable tool for the hybrid future.

Read the full case study







## Proving Constant Access Availability

Many schools are continuing their investment in remote learning solutions. They recognize that they must provide a remote educational experience that is on par with, or even exceeds, in-person environments. They recognize that they must find ways to foster community and engagement amongst their students, not only to promote school loyalty but to help students who are working off-campus to feel less isolated, supported and part of something that adds meaning to their lives.

Remote access also allows schools to expand their reach to prospective students in a larger geographical area than they would otherwise, and to those who think returning to school to further their education is too difficult or not possible Finally, access to remote learning is important for accessibility and diversity and to address the "digital divide" in education.

While many schools went through a steep learning curve, they've discovered that remote learning is opening up new educational possibilities. This is the future of learning.

## Survey Methodology

A big thank you to our survey participants for their guidance and insights that helped inform this report.

Splashtop surveyed over 2,500 random individuals that are currently involved in a learning program to find out how their educational institutions were adapting to the COVID-19 situation. We also surveyed over 500 students about the future of hybrid learning.

Here's what IT professionals have to say about their experience deploying Splashtop:

#### **Abbey Road Institute:**

"During these times when teaching can only be delivered online, we, unlike many other schools, can continue to provide our students with access to industry-standard software to support their learning process. This provides us with a competitive edge." – Natalia Rodrigues Milanesi

#### Imperial Valley College:

"Our techs liked Splashtop the most because you can initiate the session with the local admin credentials. That's a big deal as we had no way to override the prompt for admin credentials when the computer was outside our network..."They're using Splashtop for any type of remote troubleshooting. They prefer using it over Teams desktop sharing because you get a full screen and you can just take over. It's a lot more robust with the options you have. Teams is more a screenshare for presenting, rather than a technical troubleshooting tool. So that's the advantage we get with Splashtop and why our technicians are really happy with it." – Jonathan Singh

#### Laney College:

"There is a state program that provides students with computers, so we've been providing them with Chromebooks... [but] they can't run SolidWorks with the Chromebooks. But the Chromebooks provide access to our computer labs where they can run it. The instructors love it. They can't believe it works so well, they're shocked, and I don't think I'm overstating that." – Gerald Casey



## About Splashtop

Based in Silicon Valley, Splashtop Inc. delivers next-generation remote access and remote support software and services to educational institutions globally, across the Americas, Europe, Asia, Middle East, and Africa.

Splashtop is enabling students, faculty, and IT professionals to remotely access and support any device from any location, Helping the next generation of students fulfill their course requirements, learn important software applications, and get the most of their school experience.

- A device-agnostic platform that allows students, staff, and IT support to access lab and work computers from anywhere.
- Schools leverage their existing licenses and hardware, and students are relieved of the burden of paying for their own copies of expensive application programs.
- Remote IT support, lab access and facilities management, including virtual machines and virtual desktop architecture from a single application.
- Customizable to fit each schools' needs.

Ramp up your remote learning capabilities.



