

# New Capabilities and Answers For Today's Challenging, Exciting, and Immersive Learning Environments

## Educational Facilities and Learning Departments

K-12, Higher Education, Continuing Education, and Corporate Learning have different needs, which can all be solved with different technology, letting organizations expect and do so much more. E-rate qualifying technology can even help academia cover a large percentage their needs! Immersive environments engage learners. IoT sensors confirming identity/validating participation, monitoring physical security, and overseeing activities (even letting you know if students are vaping in the bathroom). SMS has become the default for reminders, iPads for lesson delivery and extending the learning environment beyond a 4 walled classroom. Wi-Fi/Internet is a pre-requisite vital part of a new era of innovation and accessibility, even offering virtual environments and behind-the-scenes management / decision-making. Technology is introducing convenience, efficiency, economies, transparency, actionability, flexibility, and scalability. As the world continues to change, technology is how education will move ahead, and improve the way we learn.

## EDTECH TRENDS AND FACTS

**\$4  
Billion**

2022 Cost to US schools for ransomware attacks – just for downtime!  
[Verizon.](#)

**28%**

of K-12 schools have fully established 1-to-1 computing environments.  
[EdWeek.](#)

**1 in  
50**

Annual number of kids (under 18) who have identities stolen; (1.25 Million).  
[Javelin.](#)

**20-  
90%**

Discount e-rate can offer eligible schools/libraries on qualifying technology.  
[National School Boards Association.](#)

**70%**

of educators are using EdTech daily as part of their work.  
[Yahoo Finance.](#)

**39.5%**

Compound Annual Growth Rate (CAGR) for Generative AI in Education.  
[Market Research.](#)

## EDUCATION TECHNOLOGY/ APPROACHES TO BE AWARE OF

- ✓ Collaborative Learning/Immersive Learning
- ✓ 1:1 WiFi/Internet for Students
- ✓ Smart Campuses
- ✓ Virtual Desktop (DaaS)
- ✓ Learning Management Systems (LMS)
- ✓ eLearning/Learning Outside the Classroom Environment
- ✓ Educator Retention/Recruitment
- ✓ Social Media in Learning
- ✓ Interactivity/Immersive Classrooms
- ✓ Data Management & Analytics (AI/ML)
- ✓ Gamification in Education
- ✓ Online Data and Cybersecurity
- ✓ Identity Management
- ✓ Generative AI/Intellectual Integrity
- ✓ Personalized Learning
- ✓ Social-Emotional/Language/Continued Education Learning

## CHALLENGES, SETBACKS, AND POSSIBILITIES

The financial crush continues for public education, with leaders striving to turn the tide and push forward by embracing technology. At the same time, exciting opportunities to do more, gain efficiencies, and improve security are also available. Schools are tackling short-term hurdles while looking to a future with greater flexibility and empathy. Addressing these changes is critical if educators hope to stem historic levels of teacher turnover, improve the well-being of students and teachers, and successfully achieve academic recovery. Meanwhile, educational cyber threats continue to grow, becoming a favorite target for criminals. Education is also one of the key sectors affected by innovative disruption, giving classrooms a new look and changing how things are taught.

# Technology Empowering Education



**Managed Services** | IT teams are understaffed and under-resourced — especially when it comes to deploying and integrating online learning tools. Hardware (deploying laptops/tablets to students/educators), software, support, Cybersecurity, updates, and even policy can be amended with Managed Services Providers (MSPs), either in combination or as a single vendor. Cloud solutions, for example, can eliminate the need for hardware purchases, upgrades, and maintenance. This can help cost management and offer the skillsets necessary for Cloud operational efficiency. During a time when IT talent is difficult to find and retain, many organizations and educational facilities are turning to Managed Services Providers to help fill skill gaps and achieve more of their objectives.



**Cybersecurity** | Threats are everyone's concern, while compliance is an added focus for many higher education institutions. The penalties for non-compliance and cyber incidents are likely to increase. The direct costs to organizations for a breach can encompass everything from reputational damage to the monetary outlay for recovery and return to normal operations, if possible. This timeline can span for months if not years. Institutions that depend on Department of Defense contracts for essential research programs will soon need to show compliance with Cybersecurity Maturity Model Certification (CMMC). Higher-ed institutions must establish robust compliance programs anchored in real-time, objective data that accurately reflect the state of their security controls. Such a comprehensive approach acts as a lens to evaluate the institution's defensive posture and overall security program maturity.



**Cloud Computing** | Written lessons, audio lessons, videos, and video assignments can be stored on a school's Cloud platform, ready to be accessed from anywhere with assignments submitted back in the same manner. Cloud computing eliminates the hassle of carrying tons of books or practically living in the local library. Students/teachers can chat live with each other or engage with interactive tutors. Digital transformation is taking time, but the trend is accelerating. While many traditional institutions may be resistant, the benefits and cost savings can't be denied. More campus leaders now understand the value and need to modernize their technology infrastructure, making a successful transition to a Cloud-based operating environment a high priority.



**Biometrics** | Say goodbye to truancy and cheating! That's the hope at least. The introduction of biometric systems in schools has helped streamline education and enhance discipline. Facial recognition, fingerprints, voice recognition, and eye tracking are some of the biometric methods schools have implemented. Apart from monitoring class attendance, biometrics can also be used when borrowing school property like library books or laptops. Teachers can get real-time actionable feedback by using eye-tracking methods to monitor how students are absorbing the content they're being taught.



**Connectivity** | The proliferation of Internet availability has significantly hastened the integration of technological advancements within the realm of education. That being said, not every community has equal access. For campuses; SD-WAN, fiber, 5G, and fixed wireless can work together to prevent disruptions while offering optimal speed. Many institutions, levels of government, and advocacy groups are also providing initiatives to expand public Wi-Fi access, create hotspots, or offer programs that directly provide at-risk learners with direct access to the internet they need. Millions of students in the US don't have reliable access to internet-connected laptops/tablets. Studies show that students without access to computers fall behind their classmates. While 99% of districts now have fiber connections (Forbes) on their campuses, critical home access still falls far short.



**CPaaS, DaaS, UCaaS, CX, MS Teams Integration & Collaboration** | Cloud is a game changer, that is so expansive. For education, it particularly impacts the way people (students and educators) communicate and the way they work. Communications Platform as a Service (CPaaS), Desktop as a Service (DaaS), Customer Experience (CX), MS Teams Integration, and Collaboration solutions have all become integral to all levels of education – letting the organization have predictable costs, gain IT support, and simplify their tech stack while improving the way they talk (SMS messaging, CRM integration, Contact Center functionality) and how they work (software authorization, delivery of lessons, securing records/environments, verifying identity, etc.)



**Generative Artificial Intelligence (ChatGPT), and Artificial Intelligence/Machine Learning** | The catch-all, Artificial intelligence (AI), is permeating every level of technology, spanning from basic to cutting-edge applications. In educational settings, AI automation is revolutionizing tasks like grading and feedback, streamlining processes for teachers. AI can foster personalized learning experiences, catering to the unique requirements of students, including those with special needs. Advanced Machine Learning (ML) has given rise to adaptive programs that cater to individual learning styles. Notably, AI-powered tutors are now guiding students in subjects like mathematics and writing, making learning more interactive and effective. Generative AI, like ChatGPT, is becoming well-known and accepted. The legal and ethical ramifications are a large ongoing conversation, but this technology is here to stay.

## WE UNDERSTAND THE DIVERSE EDUCATION SPACE, AND YOUR CHALLENGES

Expertise provides better results and takes time to develop. Our team has experience working with organizations like yours; K-12, Higher Education, Continuing Education, and Corporate Learning; who provide the means and understanding to fulfill your learner's needs to grow in today's modern environments. We understand your concerns and can help find the solution(s)

that meet your needs and requirements. As vendor-agnostic technology professionals (with access to over 200 tech Providers) we will work with you and your requirements – budgetary, efficiency, and timelines – to achieve the outcomes you want, because we work for you!