Build a strong digital foundation for immersive, inclusive learning

Verizon's smart connected campus solutions can help you create a personalized, enriched learning environment where students can thrive.

Today's K–12 and higher-ed students are accustomed to gaming, connecting with friends on social media and interacting heavily with online apps. When it comes to their education, they expect schools and institutions to take advantage of the latest technologies to enhance learning. Students want more personalized, immersive experiences that are interesting and engaging, while delivering educational content. But how do you deliver these immersive experiences effectively?

The high performance and low latency of 5G and the network architecture of multi-access edge computing (MEC) can help create new possibilities in education. 5G and MEC help power innovative technologies like augmented reality/virtual reality (AR/VR), artificial intelligence (AI) and the latest in video conferencing that deliver new experiences to help schools and educators address a wide range of learning styles. In doing so, they can foster an environment where more students feel like they belong. Let's look at some of these technologies and how they work.

Studies show that students using VR in education:

Learn four times faster*

- Have an 8.8% improved recall**
- Are 3.75 times more emotionally connected to content than classroom learners*

* Source: https://www.pwc.com/us/en/tech-effect/emerging-tech/virtualreality-study.html

** Source: https://news.asu.edu/20201222-creativity-exploring-new-worldsvirtual-reality

Enhance learning with AR technology.

Educators can use AR to layer digital experiences onto the physical environment of the classroom to help keep students focused and engaged.

How does it work?

AR overlays information, objects or media virtually onto the real world using mobile devices, tablets, PCs or headsets. The objects or media may appear as a flat graphical image or as a seemingly real, interactive 3D object, which helps bring learning to life. Using AR technology in the classroom can be beneficial to students who are visual learners or who may have a disability. They may find AR's graphical format more intuitive and engaging than the usual text-based learning or lectures.

AR can also be particularly useful in teaching complex subjects, like physics, astronomy, geology or even history. Students simply use their mobile devices, tablets or PCs to explore and directly interact with different historical periods and events.

Verizon 5G Edge can support as many devices as needed in the classroom with little lag time or delay, providing students with a seamless interactive experience. Plus, 5G-enabled apps can run on multiple devices, connecting students in and out of the classroom and enabling them to collaborate and learn in near real time. Students can move about the classroom and engage with AR-rendered objects and locations and see how they operate. They no longer learn about these concepts in abstract terms or hear about them in a lecture; they can now have direct, hands-on experiences with them.

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Open new worlds for learning using VR technology.

VR delivers fully immersive experiences to help support learning as if educators and students met in classrooms on other worlds. Instead of physically visiting a location, students can simply put on a VR headset or head-mounted display and use their mobile devices for a 360-degree view of an artificial world. VR enables students to experience events and places directly and engage their senses, all while interacting with environments and situations that inspire empathy. They can now walk on the moon or planets, fly over the pyramids, swim under the ocean, or explore other entirely new worlds and locations in a multiuser experience. Large amounts of data are needed to create these immersive environments, which means that bringing it to your students requires the power and capabilities of 5G.

How does it work?

Integrating VR into the classroom gives visual learners the opportunity to better understand concepts, while helping students from diverse backgrounds and abilities feel more a part of the learning process. VR can help students better visualize unique or unknown environments and complicated theories and environments, so they can increase their comprehension and retention of the subject matter. This technology can also help foster student collaboration and belonging. Students in other classrooms or different locations could join the same virtual environment to interact and collaborate with other students while receiving the same learning.

Foster student interaction and collaboration with Cisco Webex by Verizon.

Cisco Webex by Verizon is a video-conferencing and recording solution that empowers fast and easy face-to-face communications for personalized learning. It combines high-quality audio, HD video, data sharing and web conferencing into a secure, cloud-based collaboration platform to help keep students engaged. Cisco Webex integrates with popular scheduling, messaging and productivity tools to help educators stay connected with students in virtual classrooms or remote-teaching situations. Students and educators alike can take advantage of a Cisco Webex-enabled hybrid learning environment for synchronous and asynchronous learning experiences.

5G helps fuel the future of education.

Harness the power and performance of 5G to create engaging, collaborative and immersive learning experiences for students and faculty. Verizon is a partner to K–12 and higher-education institutions across the U.S. to help deliver the foundation for secure, digital learning experiences. Here are just a couple of the things we've accomplished together:

Verizon Innovative Learning HQ
Engages K–12 students in new ways of learning in the science, technology, engineering and math (STEM) fields and other various subjects using AR and VR technologies

Arizona State University 5G Innovation Hub
Brings students, faculty, entrepreneurs and corporate partners together to test and create 5G-powered educational solutions that are more inclusive, equitable and accessible to help bridge the digital divide

Why Verizon for the connected campus.

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Verizon delivers a broad portfolio of products, solutions and services dedicated to helping K–12 and higher-education institutions provide deep, immersive learning experiences to their students.

We offer:

- More than two decades of experience supporting K–12 schools and higher-education institutions
- Fixed wireless access that provides the bandwidth and low-latency connectivity that can enable interactive, near real-time educational content and immersive experiences via mobile devices
- Verizon 5G Private Wireless Network provides fast and reliable connectivity to handle the massive image-processing demands of AR/VR while streaming the same content to multiple feeds at once in near real time
- In-building 5G coverage that can help enable innovative learning experiences across your learning environments
- Secure connectivity on our 4G LTE and 5G Ultra Wideband networks to enable hybrid learning
- Service on America's most reliable 5G network[1]

We'll work with you to match our solutions to your specific learning needs – so you can engage and empower the next generation of always-connected learners. It's your Verizon.

Learn more:

To learn more about how Verizon smart connected campus solutions can help you provide engaging, immersive learning opportunities to students, contact your Verizon Government or Education Account Manager or visit verizon.com/k12 for K–12 schools or verizon.com/highereducation for higher education.

1. Based on RootMetrics® State of 5G Report, United States, 1H 2025. Tested with best commercially available smartphones on three national mobile networks across all available network types. Your experiences may vary. RootMetrics rankings are not an endorsement of Verizon.

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