

The Power of the Connected Campus

How the Network Helped Five Schools Gain a Competitive Edge – and You Can Too





Colleges and universities have traditionally been at the forefront of innovation and transformation. But did you know that the campus network is one of the most transformative ways to modernize higher education and the student and faculty experience? As the world catapults further into an immersive digital culture, it makes sense that universities and colleges would propel that change with their own offerings. The campus experience is no longer confined within the walls of the institution, but now extends way beyond, into the ether. IT teams have consequently been thrust into the spotlight as students and staff expect their educational experience to be more innovative and transformative.

For students, a connected campus is about more than just quality of education; it's about the whole experience, from the moment they access their personalized learning management system (LMS) dashboard, navigate through the campus to class, check social media pages, participate in a virtual reality-based lesson, or rely on seamless connectivity to conduct an online exam.

As expectations rise about what higher education should deliver, the network has taken center stage, becoming both an unexpected profit center and strategic asset. The network has become the foundation for innovative elements that make higher education a smart choice.

Digital touches and advanced omnichannel experiences must be woven together with learning management systems, classrooms, research labs, lecture halls, athletic venues, and dorm facilities. The result is a smarter, more connected campus that not only primes students for a successful future, but also sets a future-based, innovative standard that differentiates the school for new generations.

Read on to find out how five individual institutions each gained the edge in higher education by turning to the network to get smarter about making a connected campus.



Oral Roberts: Gained the Advantage

ORU has a vision to become a truly global institution driven by cutting-edge technology and innovation. The team knew that to get there, they needed a network that could support and enhance the student, staff, and guest experiences.

New Ways

ORU IT now has granular visibility and insights into the network and its applications, from the data center to the edge using ExtremeAnalytics. They have gained real-time views of user engagement, application usage, performance issues, and even how to optimize quality of experience for the best return on investment.

ExtremeWireless* maximizes the network for the highest-capacity performance and efficiency. It brings the latest Wi-Fi technologies securely while enabling IT to apply informed network policies to prioritize or limit performance at individual or group levels.

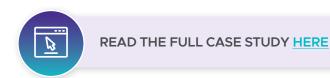
ExtremeCloud™ IQ uses the industry's most innovative machine learning (ML) to analyze and interpret data across the campus, delivering actionable business and IT insights.

Better Outcomes

Students and staff have now come to expect consistent, reliable experiences with uninterrupted streaming and learning systems operation. IT staff no longer need to spend time troubleshooting. ORU has even been able to create data-driven personalized experiences for each student, whether on campus, virtual, or in the metaverse.

Staff and leadership can make data-driven decisions that optimize the network and user experiences. They have new levels of network automation and intelligence, enabling them to be proactive instead of reactive. Full network visibility and control, regardless of how many devices, buildings, and services, enable IT to manage the network efficiently and confidently. IT now provides the kind of network service that a modern school needs for today and tomorrow.

Students anywhere can connect to ORU resources and education services, and even learn from experts around the world. ORU has been able to integrate emerging technology like AR (augmented reality) and VR (virtual reality), telepresence robots, and smart classrooms to higher education curricula more innovatively. This has even been extended to the fan experience at athletic events.





Jefferson College: Support for the Future

There was a growing demand for Jefferson College's network. More students were bringing more devices than ever. Add to that the increasing pressure from campus operations, a growing list of new learning technology, multiple sports venues, and a distributed campus. The team at Jefferson knew their network needed to grow too, and the wisest approach was to go with technology that not only met their immediate need but would also give them capacity and functionality for years to come.

New Ways

Jefferson upgraded to the latest industry-leading Wi-Fi 6 technology with Extreme Universal Wireless, a software-selectable operating system that avoids technology lock-in. By refreshing hardware across campus, Jefferson had the confidence to know that capacity would no longer be a bottleneck for critical initiatives.

With ExtremeCloud IQ cloud management,
Jefferson's small IT team eliminated their most
tedious pain points while gaining built-in security, location
services, and IoT (Internet of Things) controls. The
enhanced management capabilities gave Jefferson's team
simpler, better visibility and control of the entire wired and
wireless network streamed from a single dashboard.

Better Outcomes

The college now boasts uninterrupted connectivity across its 400+ acre campus, including multiple sports venues and academic buildings along with an increasing number of education technology plus student and faculty devices. This opened up new possibilities for students in particular, who now have seamless ability to participate in online classes, reliable access to online collaboration tools and college learning materials. Online communication is improved as well as the capability to conduct research for assignments, projects, and papers then submit assignments for real-time feedback.

The single pane of glass cloud network management takes the burden off the college IT team so they can put their energy into priority initiatives. The college now has the network capacity to take on new academic programs and initiatives with more demanding digital needs.

Future-proofed and scalable, the Jefferson team is confident that its network can now support campus operations now and into the future.





City, University of London: Modernized Management

Managing the network at the City, University of London was a 24/7 job. The IT team was overwhelmed by a growing number of students and increasingly complex mix of demanding services and applications. As with Jefferson College, the team at City, University of London was now taking on countless personal devices that ran on the network night and day. The team knew they needed to simplify things so they could focus on student outcomes.

New Ways

City, University of London renovated their network with Extreme management and fabric technology to simplify and unify all the disparate elements.

ExtremeCloud IQ – Site Engine enables analytical decision-making, workflow automation, and a secure cloud networking infrastructure that drives end-to-end network management.

Extreme Fabric Connect delivers virtualized services across the campus infrastructure, including wired and wireless, with an ability for SD-WAN, IoT and even third-party devices.

Better Outcomes

Improved Learning Experience: Students and staff do not worry about connectivity delays and instead enjoy a consistently smooth experience whether researching, using learning platforms, or following online lessons. Because the campus network now easily supports an increasing selection of media-rich content, it is possible for faculty to integrate more modern programs and curricula.

Simplified Network Management: The automated operation and management of all network functions makes network administration a breeze. The university IT team is freed from the night watch and constant vigilance of the network and can now focus on optimizing the network – being proactive instead of reactive. They can make more informed decisions and decisive changes plus execute goals and strategies instead of being bogged down by all the fires.

Reliable Connectivity: Everyone gets a unified network experience with seamless connectivity, despite high-density environments like the Bloomsbury Theatre & Fitness Centre and the Science Library across campus.



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Baylor University: Revolutionized the Fan Experience

Renowned for its Bears football team, Baylor was challenged to build a revolutionary new on-campus stadium from the ground up — and with a rich technological environment. With Extreme Networks, Baylor created an innovative fan experience with industry-leading digital touches that put them ahead of the game.

New Ways

The new stadium boasts such a high-density Wi-Fi network that they were able to provide free, open access to in-venue guests. Extreme Universal Wireless provides enterprise-grade Wi-Fi performance to users and time-saving operational efficiencies to IT teams, ensuring best-in-class user experiences.

And by using ExtremeAnalytics, complete transparency into the stadium network and its applications is made possible from end to end. The system provides instant insight into user engagement, application usage, performance concerns, and the most effective methods for enhancing the quality of experience, resulting in the best possible return on investment.

Better Outcomes

The network-powered stadium successfully revolutionized the experience for both fans and the Baylor Bears. Today everyone experiences gamechanging connectivity for an NFL-like experience.

ML insights keep the network operation team primed with information about use behavior and traffic patterns that enables them to optimize, make good calls, and add value that resonates with fans.



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North Carolina A&T State University: Trusted Security

A cyberattack alerted North Carolina A&T to the need for a new, more reliable, and secure network. They used the opportunity to upgrade and transform to a digital-first learning environment.

New Ways

The entire NC A&T network was rearchitected with Extreme Network Fabric, incorporating its built-in security with hyper-segmentation and multi-level security for data center and service provider networks.

Better Outcomes

Newly fortified network security for the largest HBCU in America means secure onboarding of student and faculty devices, regardless of location. The university now has greater control and visibility into the network infrastructure. Critical content is protected by the inherent design of the network fabric. A range of authentication options and granular network policies can be applied globally or customized for local access.

NC A&T has a robust and scalable network to support campus operations for years to come. They have the confidence in the network to take on new academic programs and initiatives with more demanding digital needs.

NC A&T network can now support the myriad of devices brought on campus by students and staff.

This can even extend to investments in edtech solutions that put the edge in learning.



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Conclusion

Each of these institutions recognized that to stay competitive they needed to embrace technology and create a digitally connected campus. They understood that a smarter campus would enhance the student experience, improve operational efficiency and sustainability, and establish a foundation for learning. Through the implementation of innovative technologies from Extreme Networks, these institutions truly transformed their educational environments.

Find out how you can start your institution's higher education transformation by visiting us at **EDUCAUSE**. Come find us at **booth #601** and sign up for a 1:1 meeting with our team.

Can't make it this year? We'll be hosting an after-EDUCAUSE webinar highlighting some of the biggest learnings this year as well as why colleges and universities are excited about Extreme. Register now

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