The Path to the Digital Campus

VMware is helping education institutions such as Xavier University of Louisiana accelerate the delivery of critical services across data center, cloud, and edge environments. Learn how our integrated solutions and proven best practices can help you serve students with greater efficiency.
Embracing the Digital Age of Education

Today's higher education institutions are at the crossroads of technological transition. In the midst of public health concerns, declining enrollments, and escalating demands for services, institutions are introducing new applications to engage students and transform administrative efficiency. Digital services are empowering students, faculty, and staff like never before.

At the same time, many educational functions are still supported by legacy applications and physical data centers, and institutions need to be able to leverage these investments for as long as possible. Campus IT staff are faced with the complexities of parallel infrastructure stacks, hybrid and/or multi-cloud architectures, disparate IT operations models, and untenable cyberattack surface proliferation. Plus, there's the added investment overhead, cross-campus collaboration, and manpower required to make even minor technology changes.

The reality is that educational institutions need a modernization continuum that allows them to migrate existing applications to the cloud incrementally. Today's institution requires a dynamic technology foundation for managing and securing all types of applications—legacy, cloud-native, and container applications—to meet student and staff needs effectively.

For more than 20 years, VMware has helped colleges and universities use the latest R&D innovations to drive greater efficiency, security, and reliability. Our integrated capabilities are designed to make the most of legacy technical investments, while also enhancing the organizational culture. With VMware, your institution can build, run, manage, connect, and protect any application. And this continuous delivery lifecycle works with any cloud and any device.
Best of all, VMware has an eye on the future, with a unique understanding of what higher education institutions may face over the next decade plus. VMware differentiates itself with a holistic set of technologies and services to lower cost and propel modernization initiatives in five essential ways:

1. By unifying cross-functional teams and bringing together the organizational, cultural, and technical competencies institutions need to build and scale high-performing IT and software teams with a laser focus on delivering strategic value.

2. By simplifying operational complexity through seamless abstraction, orchestration, and parallel operations of legacy, cloud-native, and containerized applications in a highly automated and tailorable application development and operations platform.

3. By enabling end-to-end hybrid cloud management from a single pane of glass, providing fine-grained control and portability across public clouds, physical data centers, and the educational edge/end-user device environments.

4. By protecting critical assets with end-to-end, Zero Trust-enabling security capabilities, which are integral to a cloud-based architecture and proven to reduce complexity in enterprise security operations.

5. By delivering a best-in-class end-user digital workspace experience that ensures user security and productivity.

WHY VMWARE FOR EDUCATION?
Building on a legacy of innovation, only VMware brings your institution:

- Over 20 years of experience in driving digital transformation in education
- The end-to-end virtual infrastructure solutions required to respond faster to the needs of students, faculty, and staff, while reducing technology expenses
- Ongoing investment in the future, bringing you seamless access to new innovations, like Kubernetes, without the need to reskill IT staff
Modernize Applications for Better Experience

At the heart of every institution are the applications, data, and technology workloads that must be managed with maximum agility. In fact, 83% of colleges and universities are investing in or exploring digital transformation. Yet, many institutions are not only faced with complex and inflexible legacy environments, but the organizational structure itself restricts innovation. There needs to be a culture shift to allow for iterative collaboration between cross-functional teams, which accelerates the delivery of high-quality software.

VMware offers the building blocks and proven technical expertise to help your institution easily adapt to changing requirements, especially when modernizing applications to enhance the user experience for students, faculty, and staff. Our experts understand how to put the right processes into place for cultural transformation.

Using Kubernetes as a common platform, VMware lets institutions leverage all the benefits of going “cloud native” without refactoring applications, reskilling, or starting from scratch. By seamlessly integrating new methodologies like containerization and orchestration into your IT infrastructure, you can accelerate software delivery to improve support services—across data center, cloud, and edge environments.

Expand Services in a Multi-Cloud World

Traditionally, application development and delivery within institutions was a siloed affair, involving complicated handoffs and cross-team coordination. The modern paradigm brings together those who build apps with those who run them, and those who secure them. With DevSecOps orchestration, institutions now have a common language, common tools, and a common security methodology for rapidly delivering applications in a diverse multi-cloud world.

And the cloud readiness is not a moment too soon. IDC found that 3.5x more cloud applications can be delivered with a cloud-enabled infrastructure. VMware can help institutions accelerate the adoption of cloud applications and new ways of learning, ensuring that students can get the most from their learning experiences—whether on campus or remote.

Elevate Employee and Student Experiences with Digital Workspaces

Today’s institutions are under increasing pressure to use the latest technologies to attract and retain students. Online learning is a way of life for the next generation. Meanwhile, faculty and staff also need to work safely and securely from any location. Across the board, users have higher expectations about their online experiences, as everyone’s daily lives grow more virtual. Platforms like digital workspaces and virtual infrastructure can help campus IT staff keep up with all the new demands.

With VMware, institutions can consolidate management of IT assets and user identities—while empowering students and staff with self-service tools. Users can access critical resources on-demand, with authentication rules based on their roles, geographical location, and network connection. VMware frees campus IT staff from disparate management tools and time-consuming manual operations. From a single point of control, IT can view devices, monitor their patch levels, and automatically enforce security policies to ensure seamless operations.

Trusted Digital Foundation

Only VMware offers the integrated, end-to-end solutions today’s educational institutions require.
Optimize Connectivity for a Remote-Access World

As more student services and school administration goes online, institutions need more fine-grained network control. Campus IT staff need to be able to stand up and scale new networks, provision applications, and enable new services with robust security. According to recent EDUCAUSE surveys, information security and privacy continue to be the top IT issues for higher education.³

Leveraging the skills and solutions your teams already have, VMware creates a critical consistency in how workloads and data are managed—all through a single platform optimized for multiple destinations at once. When unexpected or short-term needs drive demand for added capacity, software-defined WAN services enable your institution to quickly scale and adapt automatically. VMware provides the seamless, extensible way to deliver applications to a workforce in motion, while securing resources on the evolving organizational edge.

Key capabilities for the DevSecOps lifecycle

<table>
<thead>
<tr>
<th>Build</th>
<th>Run</th>
<th>Manage</th>
<th>Connect</th>
<th>Protect</th>
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<tbody>
<tr>
<td>Build continuously, deploy infinitely</td>
<td>Optimize every resource</td>
<td>Unify visibility and control</td>
<td>Deliver to a more dynamic world</td>
<td>Reduce the risk of whatever comes next</td>
</tr>
<tr>
<td>• Bring new efficiency to legacy x86 apps</td>
<td>• Give teams a common language and toolset</td>
<td>• Consolidate management of resources</td>
<td>• Use enterprise-grade networking for collaboration</td>
<td>• Leverage robust SD-WAN security</td>
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<tr>
<td>• Build cloud-first, cloud-native</td>
<td>• Unify development, operations, and security</td>
<td>• Automate capacity delivery and redundancy across the multi-cloud</td>
<td>• Deliver to a workforce in motion while securing the edge (via SASE, zero-trust VPNs, etc.)</td>
<td>• Zero trust from user to cloud; AI/behavioral-driven protection at the endpoint; dynamic, in-depth segmentation to data center</td>
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³ "Top 10 IT Issues, 2020." EDUCAUSE.
Protect Against Emerging Cybersecurity Threats

Colleges and universities need to protect sensitive data not just in administrative systems, but also in the systems that support online learning and academic research. To strengthen your institution’s security posture, it’s time for zero-trust policies and controls that work across on-premises, cloud, and endpoint devices. VMware provides built-in security that automatically embeds protection everywhere—rather than “bolting on” point security products.

Naturally, every environment has its own challenges. That’s why VMware has flexible solutions to match your institution’s unique modernization pace. Our focus is on helping institutions build, deliver, and secure the applications that produce better teaching and learning experiences.

The VMware approach builds security into the deepest infrastructure layers and extends it through applications, enforcing security policies for every workload. Zero-trust security helps protect information and assets from evolving threats, unexpected user behavior, and emerging real-world risks. When combined with threat intelligence, your institution can shift from simply reacting to threats to proactively protecting the environment from a position of strength.

MODERNIZING IT AT XAVIER UNIVERSITY OF LOUISIANA

Founded in 1925, Xavier University of Louisiana is known for educational value. But its small IT team was under pressure to do more with less. They were struggling with manual hardware updates, data security vulnerabilities, and disaster recovery tasks—a key concern given the risk of hurricanes in the region. With the help of VMware, Xavier moved to an efficient, secure cloud infrastructure, freeing up IT staff to better serve faculty, staff, and students.

Xavier worked with VMware partner RoundTower Technologies to deploy a robust cloud foundation, so the university can:

• Centralize management and cut the infrastructure footprint by 90%
• Automate IT tasks via the cloud, allowing IT staff to focus on more strategic initiatives
• Bolster security and disaster recovery preparation with SLAs and productivity gains provided by VMware

Education IT decision makers have counted on VMware for over 20 years to deliver the innovations that matter. From infrastructure to applications, VMware has the breadth of capabilities to help institutions tackle today’s IT issues and whatever comes next. Find out more about VMware solutions for higher education.

READ THE STORY