CASE STUDY





Customer Profile

U.S. Region: Northeast Industry: Education Founded: 1823

Number of Students: Over 5,000 Number of Employees: Over 1,500 Web Address: www.mcphs.edu



BACKGROUND:

The Massachusetts College of Pharmacy and Health Sciences (MCPHS) is Boston's oldest institution of higher education. With its rich legacy, MCPHS spans three campuses and offers over 47 degree and certificate programs, empowering students to pursue successful, sustainable careers and leadership roles across various healthcare fields. Committed to excellence, MCPHS continually strives to expand research and learning opportunities for its approximately 5,000 students distributed across its geographically diverse campuses.

Medicine and technology go hand in hand, so as both technology and health sciences evolve at a rapid pace, MCPHS is consistently updating its technological infrastructure to attract top-tier faculty and ensure student success. Students often describe the College's cutting-edge laboratories and classrooms as dynamic, movie-theater-like environments that enhance the learning experience. Additionally, with an increasingly mobile student and faculty population, MCPHS ensures that personalized information is accessible anytime, anywhere within its campus system.

Maintaining three campuses, numerous laboratories, and computer environments with the latest software is no small challenge. The success of the IT department is crucial to the college's overall mission, as it directly impacts the students' ability to thrive. They must have seamless access to research resources and the right software applications, making the role of IT essential to their academic and professional growth.

BUSINESS CHALLENGE:

The demanding technological needs of the college required the information services team to utilize every available moment during the summer semester to update its computer systems. This process involved extensive research, planning, and physical installation, which inevitably led to unforeseen challenges. With a growing user population, the cost of supporting this advanced educational environment was becoming increasingly difficult to manage.

For MCPHS, its research, data, and applications are vital to its success. As Boston's first institution of higher education, the college has a rich legacy of leadership in both advanced learning and technological innovation. Recognizing the importance of safeguarding these critical assets, MCPHS decided to strengthen its disaster recovery systems.

With a strong focus on containing operational costs, MCPHS relies on its small but dedicated IT staff to optimize the student learning experience. To supplement its internal team, the college partners with critical partners. Having previously collaborated with Mosaic Technology on its storage environment, MCPHS had experienced firsthand the company's commitment to customer success.

THE SOLUTION:

The college's focus on pharmacy and health sciences meant that its desktops needed to support various applications, including frequently used online tools. It quickly became evident that streamlining the management of applications and users' desktops would provide the greatest benefit to MCPHS.

Deploying a Virtualized Desktop Infrastructure (VDI) emerged as the most logical solution. In a college environment, IT systems must always be accessible, as the workday for students and faculty doesn't adhere to a typical 9 a.m. to 5 p.m. schedule. The network also faces surges in demand, mainly when classes end every 90 minutes, and multiple users access the system simultaneously.

To ensure success, Mosaic conducted a comprehensive assessment of the MCPHS network, analyzing the best approach for implementing the new virtual desktop infrastructure and disaster recovery system. The key to the program's success was understanding the profile and performance metrics of those accessing the network.

Mosaic's analysis took into account the busiest periods of the year, such as course registration, book orders, and the setup of network preferences for the upcoming semester. These resource-intensive tasks, which occur at the start of each semester, were crucial considerations in designing the VDI system for the College.

Using the data gathered during peak workload periods, Mosaic tested the new VDI environment before deployment. To ensure a smooth migration, Mosaic set up the VDI network in its own facility and conducted rigorous testing to simulate a production environment. Despite initial concerns about transitioning to VDI due to the college's complex workloads and resource-intensive applications, Mosaic demonstrated that the new VDI solution could effectively support concurrent users, reduce costs, and provide the same level of reliability expected by students and faculty. The in-house testing environment enabled Mosaic to integrate the necessary hardware and applications, ensuring the system would be production-ready upon deployment.

Additionally, Mosaic designed and deployed a new disaster recovery and storage solution to enhance the college's business agility in the long term. The solution ensures that if one campus experiences an issue, the data will remain accessible. The disaster recovery system was strategically located at a campus that did not house the production network, accounting for potential long-term power outages or natural disasters.

Mosaic built a robust technical foundation that optimized performance and availability by simplifying the deployment of both physical and virtual infrastructure. Most importantly, this effort enabled MCPHS to enhance the overall student experience.

THE BENEFITS:

The Massachusetts College of Pharmacy and Health Sciences successfully deployed 500 virtual desktops across its three campuses, yielding impressive results from both an IT and user perspective.

By adopting this virtualized solution, MCPHS has streamlined its data center resources, significantly reduced infrastructure costs, and transformed how students and faculty access and share information. The new architecture has also greatly enhanced the IT department's response time. Applications can now be installed, upgraded, and patched centrally, then securely delivered over the network to any student's virtual desktop. This approach has eliminated the need for managing and supporting individual computers, resulting in substantial cost savings for the college.

"We truly appreciate every aspect of working with Mosaic. They were there for us from start to finish and beyond. That level of commitment is a value that's not always easy to find."

-Tom Scanlon, CIO, Massachusetts College of Pharmacy and Health Sciences



IN SUMMARY:

Mosaic Partners Deployed:

- VMware
- Dell

Mosaic Partner Products Deployed:

- VMware View
- Dell EqualLogic Storage

Hardware:

10GB Storage

Results:

- Delivered a VMware View architecture that streamlined data center resources, reduced infrastructure costs, and transformed how students and faculty access and share information.
- Demonstrated how the VMware platform significantly improved the IT department's response time.
- Built confidence within the Massachusetts College of Pharmacy and Health Sciences' end-user community regarding the performance of larger workloads on Dell EqualLogic and VMware platforms.
- Integrated Dell EqualLogic and VMware best practices into the analysis and tuning of applications to enable large-scale adoption.
- Reduced costs by eliminating the financial and time investments previously required to manage and support individual computers.