

# EMC SOLUTIONS FOR HIGHER EDUCATION

## Technology to enhance administrative, educational, and research performance

### ESSENTIALS

Improve operations with EMC solutions for digital operations, IT consolidation, virtualization, cloud computing, network monitoring, and information security so you can:

- Manage data growth, enhance instructor effectiveness, and move into the next generation of learning technologies
- Enable staff and faculty to share ideas, collaborate in real time, and become more effective at delivering student services
- Track student activity and interactions online, identify students that may need additional support, and intervene to help those students meet their potential
- Use online, collaborative tools to help faculty interact with one another to share lesson plans, offer advice, and work together to improve student performance

Education today is undergoing a great deal of change. The convergence of information technology (IT) and teaching methodologies will revolutionize the way students learn and will drive both students and faculty to higher levels of creativity, performance, and interaction. Universities and other higher education institutions are moving toward more unified, integrated systems that support greater levels of collaboration, communication, and service delivery. These new tools expand flexibility and improve the types of offerings that educators can provide to students.

This new era of modernization comes at a time when colleges and universities around the globe are under extreme budget pressures. Costs are rising as student enrollments continue to grow, but economic difficulties have reduced funding levels for some institutions and educational programs. Students and educators both need faster, more direct access to information, and colleges need to enhance the delivery of educational services and make academic resources more readily available. All of these expectations must be met while still focusing on controlling costs. By optimizing resources, universities can still achieve their number-one goal: to develop competencies and expertise to be carried into the post-graduate life.

These are all significant challenges that face the higher education community at large. In some areas, government funding sources have offset some of the budgetary constraints, but in general, educators are still looking for ways to bridge the gap. EMC believes that IT can play a crucial role in transforming the overall model for how higher education institutions operate.

For colleges and universities, technology has historically been seen as a way to support administrative functions and drive efficiency within the overall organization (via student information systems, class scheduling applications, data center operations, email systems, and more). Today, schools are also using technology as a tool to facilitate and even enhance the teaching/learning process. Initiatives around distance learning, virtual classrooms, and “education clouds” can change how students and faculty can interact and collaborate more effectively—all with the goal of achieving greater academic results and student preparedness.

“Universities face an uncertain future unless they significantly alter their teaching and learning approaches...they need to reach more students who do not fit the standard residential degree... [they need to] facilitate learning for off-campus students based locally and globally.”

FACULTY MEMBER, MAJOR BUSINESS AND ECONOMICS SCHOOL

## EMC SOLUTIONS FOR HIGHER EDUCATION

EMC® provides a wide range of solutions for higher education that can help improve operations, increase faculty effectiveness, accelerate student performance, and develop new methods for delivering educational services in the 21st century.

### IMPROVE OPERATIONS

Improving operations should always be a key consideration for educational organizations at any level. Educators need to look at both their existing technology infrastructures, as well as new technologies on the market. It is important to not only integrate new technologies for improvements, but also to leverage existing IT in new ways.

One way to leverage existing investments is to look at IT consolidation and virtualization to help share services and provide cost savings, operational efficiency, flexibility, and scalability. Cloud computing models are also being considered as an attractive way to reduce the IT burden and use a “pay as you go” model for IT operations.

Other opportunities for improving operations include digitizing content and automating processes so that educators and administrators are no longer dealing with paper trails, but are now able to manage digital information. This reduces the burden on IT resources and increases administrative productivity.

EMC products and solutions have helped universities around the world become more efficient, more effective, and more flexible in their operations. Our solutions for digital operations, IT consolidation, virtualization, cloud computing, network monitoring, and information security can help colleges and universities manage their data growth, enhance instructor effectiveness, and move into the next generation of learning technologies.

### MANAGE DATA GROWTH

As institutions of higher learning start to use digital technologies to deliver student and teacher services, it becomes increasingly challenging to manage the volumes of digital data created. While managing the growth of data is a challenge, it's also an opportunity to acquire intelligence about your students, their learning experiences, and your overall operations.

EMC is the industry leader in storing, managing, sharing, and protecting data. We have helped colleges and universities across the globe improve their operations so they can turn data into information, and then turn that information into true educational value.

Higher education institutions have an opportunity to improve their student services by moving to a consolidated information management infrastructure, which enables staff and students to more easily access their information anytime, anywhere. This not only boosts the institution's ability to improve operations and cut costs, but also enhances instructor and student performance.

### ENHANCE TEACHER EFFECTIVENESS

As student enrollments rise year after year, and faculty hires remain somewhat flat, the importance of faculty effectiveness is greater than ever. Colleges and universities must find ways to do more with fewer resources.

It is essential that educational institutions enable their staff and faculty to share ideas, collaborate in real time, and become more effective at delivering student services. Studies have shown that instructors who are involved in professional development have a positive impact on the academic achievement of their students. Over the past few years, much of this professional development has been geared toward technology enablement. Colleges and universities are empowering their faculties to adopt innovative teaching methods such as blended classrooms (a combination of in-person and virtual learning), mobile technologies, advanced media, and digital content sharing, as well as Web 2.0 tools.

These new tools create multiple types of digital content, therefore colleges and universities are adopting technologies which can handle all types of digital data and support mobile

### SOME CUSTOMER EXAMPLES INCLUDE:

Collaborative learning at a major U.S. business school

- Network monitoring and intrusion detection at several colleges
- Storage, server consolidation, and disaster recovery at numerous universities
- Video surveillance at a college campus to help improve student safety
- Content management infrastructure for distance learning at a European university
- Student registration system for a very large university in Asia
- Backup system for a college in Canada
- Consolidated email exchange solution for 65,000 students spread across a four-campus system
- Development of a single platform for centralized document capture and content management

“Given the context, flexibility has been recognized as a key idea making it imperative to explore innovative models for flexibility that bring together and accommodate and support all learner groups.”

FACULTY MEMBER, MAJOR BUSINESS AND ECONOMICS SCHOOL

learning. EMC's solutions can easily capture, store, manage, and protect multiple types of data which enable institutions to manage the data they receive from classrooms, student mobile devices, online video content, and remote content creation (when students access school networks from homes or other offsite areas).

EMC products and solutions have helped higher education institutions leverage next-generation IT in many ways, including:

- EMC Centera® storage technology captures, stores, manages, and archives data from multiple sources and multiple devices (of various types).
- EMC Avamar® deduplicates information before it is transmitted to a central repository, thereby increasing storage capacity and driving further cost savings.
- EMC's RSA® technology protects student information.
- Education cloud technologies facilitate self-paced and collaborative learning.

Other solutions enable data sharing and project management so that teachers can post lesson plans and share them among themselves for increased efficiency and effectiveness. EMC has helped education institutions of every size, across the globe, to become more efficient and effective in the delivery of higher education.

## NEXT-GENERATION LEARNING METHODS

The convergence of IT and teaching methodologies is already driving both students and faculty to higher levels of creativity, performance, and accountability. The implementation of new technologies such as virtual desktops, cloud computing, and Web 2.0 technologies have given students greater access to their faculty, as well as to supportive instructional and informational materials.

Administrators and faculty are aware of the challenges ahead for their institutions, and their concerns open the door for the deployment of technologies that can help faculty members become more efficient in their roles. New technologies can be used to track student activity and interactions online, identify students that may need additional support, and intervene to help those students meet their potential. Institutions are using online, collaborative tools to help faculty interact with one another to share lesson plans, offer advice, and work together to improve student performance. All of these new technologies must be built on integrated systems to support greater levels of collaboration, and EMC has helped many higher education organizations standardize their systems, streamline their operations, and centralize their management for greater performance and financial benefit.

It is clear that the education industry is at a crossroads. While most college and universities are addressing substantial challenges such as aging equipment, tight budgets, and retention of top personnel, they are also faced with great opportunities in terms of leveraging technology to cut operational costs, increase efficiencies, enhance collaboration, and improve teacher effectiveness and student achievement. The next generation of teaching and learning is here, and EMC is ready to take you to the next step.

## CONTACT US

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, contact your local representative or authorized reseller, or visit us at [www.EMC.com](http://www.EMC.com).

EMC<sup>2</sup>, EMC, Avamar, Centera, RSA, the EMC logo, and where information lives are registered trademarks or trademarks of EMC Corporation in the United States and other countries. All other trademarks used herein are the property of their respective owners. © Copyright 2010 EMC Corporation. All rights reserved. Published in the USA. 12/10 Solution Overview H8537