Enabling Campuswide Video

Solution At-a-Glance
Promoting rich-media educational experiences involves planning, execution, and curriculum adaptation. Cisco offers a comprehensive suite of products that allow educational institutions to grow and provide better a student experience, improve administrative and operational efficiency, and enable staff development. From user creation of content, campus media asset management and distribution, capture-archive-retrieve, and live video streaming, Cisco has modular solutions and services to support educators’ needs today and into the future.

What Challenges Does It Help Solve?
The current education environment demands much from the existing educational process. Traditionally, teachers teach, and students learn from them in a classroom environment. With continuous pressures on today’s teachers and students, we must find new ways to advance the education process. Cisco facilitates this evolution through video-enabled teaching and learning, which helps:

• Enable video on-demand (VoD), including its creation, archiving, and retrieval
• Enhance student–student and teacher–student collaboration
• Manage student creation of videos (e.g., morning announcements)
• Improve communication of information, activities, and events
• Maximize network and communication investments
• Promote on-premise or services-based video enablement and management

What Are the Benefits of Video-Enabled Teaching and Learning?
Accelerate learning with the Cisco® Media Experience Engine (MXE) and Cisco Show and Share. These solutions for Next Generation Learning create collaborative experiences and improve learning outcomes for students. Video-enabled teaching and learning delivers a media-rich teaching and learning environment to engage faculty and students in the learning process.

We have seen successful rollouts of video usage over the years. However, difficulty remains in capturing video and preparing it for posting as well as archiving and retrieving it (including assigning tags for searches and access rights).

The process of capturing of video, whether live or recorded, for immediate posting onto a website or campus network has been complicated in the past. Cisco MXE is a turnkey media-processing appliance that provides comprehensive live and VoD-based transcoding services, so you can share video content across a network to almost any type of endpoint instantaneously.

Whether it is a live sporting event, a graduation ceremony, or a student-recorded morning announcement, video-enabled teaching and learning allows users to quickly send live feeds to any digital media player (DMP) or digital media suite (DMS) endpoint.

Conversely, the ability to post recorded videos, including lecture material from a teacher, a student project, a recorded team project, captured research, or a video “pen pal,” to a social video system is critical for their distribution and usage. Cisco Show and Share is that social video system, allowing schools to create highly secure video communities to share ideas and expertise. Cisco Show and Share personalizes collaboration among teachers, students, and parents through simple, user-generated creation of video content.

Use Cases: Distributing Content to All Learners Campuswide
The following are examples of how students, faculty, and administrators can benefit from video-enabled teaching and learning in your school or district:

• Transmit lectures to other locations on satellite campuses
• Record lectures and make them available on-demand in a video portal in multiple formats
• Share information over a Connected Research network, allowing research teams to examine data remotely
• Make lectures available for viewing on mobile phones
• Conduct lectures in media-enabled classrooms—lecturer speaks to and interacts with students face-to-face from distant location
• Add HD video cameras in lab for interactive experiences with collaboration team
• View experiments live or on-demand for results validation and discussion

Product Overview
The following are core components of video-enabled teaching and learning:

Show and Share
Cisco Show and Share is a social video system that can help schools create video communities to share learning and expertise, and personalize the connection between teachers and students with user-generated content. Using Show and Share, teachers can record lectures, edit and capture versions, and publish the lectures for students to view at any time.
Video-Enabled Teaching and Learning

For more technical information, visit:

Media Experience Engine (MXE)
As a media-processing platform for user-generated content, the Cisco MXE 3000 provides an easy way to create broadcast-quality video experiences. Editing and production capabilities allow students to customize content, while MXE’s media adaptation functionality enables users to view media content on any endpoint device.

For more technical information, visit:

In addition, Cisco offers these related products for added capabilities:

- Medianet: Delivers all types of media over a single, end-to-end IP architecture. A Cisco architectural playbook and best practices for a video-ready network infrastructure, medianet is a critical foundation to introduce video traffic over a converged network.
- Cisco TelePresence: Creates a live, face-to-face communication experience that empowers students and teachers to collaborate in real-time, with individuals from different schools and communities. NLR and Internet2 have signed a MoU to collaborate on developing and deploying a Unified Cisco TelePresence service.
- Digital Media Suite: Offers a comprehensive social video, digital signage, and IPTV system; this solution can display video or live streaming media to any DMS-enabled endpoint.

Services
With a commitment to customer service and customer success, and providing unmatched technical expertise, the Cisco Lifecycle Services approach can help you implement well-planned, robust, and reliable network architectures for 21st century learning environments.

Why Cisco?
Cisco is the only provider of a suite of solutions with the capability of building end-to-end video-enabled environments. Cisco video-enabled teaching and learning solutions offer:

- Modularity
- Scalability
- Policy control
- Security
- Complementary, integrated solutions and products

Modularity and scalability are essential, especially as the traffic that rides over the network grows. Also, within educational environments, the need to maintain access policy as well as contain security threats is similarly important. With a focus on these key imperatives for schools, colleges, and universities, Cisco builds solutions for students and educators with their specific needs in mind.

Cisco is an industry leader in education transformation. With investments in Cisco Networking Academies, philanthropic works, as well as relevant partnerships and technologies, Cisco is committed to help educational institutions prepare for the future.

Visualize Transformation
To take advantage of all that video-enabled teaching and learning offers, contact a Cisco representative.

For more information about the many video-enabled teaching and learning solutions available, visit: http://www.cisco.com/go/education

For information about Services, visit: