Digital Media in Higher Education:

Enrich Learning and Campus Communications
Digital Media in Higher Education: Enrich Learning and Campus Communications

By distributing live and on-demand video to PCs and digital signage, colleges and universities can accommodate students’ different learning styles, improve campus communications and emergency notifications, and enroll more students without adding classrooms. This solution overview describes the ways that colleges and universities worldwide are using digital signage, webcasting and video sharing, and Campus IPTV to enrich learning and campus communications. The Cisco® Digital Media Suite reduces total cost of ownership by letting you create, schedule, and manage digital content for all three systems using a central management system.

Challenge
Today’s higher-education students have grown up with video, which plays an increasingly important role on campus. Full-motion live video, video on demand, and motion graphics can enrich lectures, provide emergency training, promote events, and effectively disseminate information to students, faculty, and staff:

- **Digital signage** replaces posters for communications about campus events and safety information. It reduces clutter, avoids out-of-date communications, and can immediately be updated to display up-to-the-minute emergency alerts.

- **Webcasting and Video Sharing** enables anytime, anywhere learning by delivering live and prerecorded lectures directly to students’ desktops. Authorized students can use their own or public PCs to access the video portal from anywhere in the world. And professors and instructors can go to the video portal to receive training, such as emergency response, from office or home, whenever they have time.

- **Campus IPTV** delivers campus-produced and commercial video on demand to large displays in dorm lounges and classrooms. Students select and control content with a remote control. With the addition of encoders, Campus IPTV can also replace campus cable TV systems.

- **Media Experience Engine (MXE) 3500** extends the DMS deployment, enabling users to create content once, customize it as needed, and share it with all DMS applications and mobile devices.

The value of digital media is widely accepted. The challenge is how to simplify digital asset management and keep costs down. With most solutions, content for each type of application has to be separately stored and managed. If an Astronomy lecture will be distributed to desktop video and also excerpted for digital signs promoting a planetarium show, the same video must be stored and scheduled in both systems. This increases the costs of servers, storage, management software, and staff time. The challenge will only multiply as colleges and universities increase their use of digital media.

Benefits
Colleges and universities can increase the value of their digital assets and reduce costs by using the Cisco Digital Media Suite, a comprehensive offering of webcasting and video sharing, digital signage, and Campus IPTV. Desktop video applications managed from a central management system. You can start by deploying one application, such as digital signage, and then add other applications whenever you are ready. Whether you use one, two, or all three applications, you manage them all from a single interface, saving software and management costs. The benefits of
the Cisco Digital Media Suite apply to the learning experience as well as campus operations.

Communicate Campus Events and Emergencies with Digital Signage
Traditionally, campuses have advertised events on posters tacked to bulletin boards around campus. The drawbacks of paper-based communications include clutter, out-of-date information, the time needed to constantly put up and take down posters, and paper waste. Cisco Digital Signs provides more timely and eye-catching communications that can be scheduled to appear in different parts of the campus (Figure 1). Install the networked digital signs in high-traffic areas such as the entrances to buildings, student union, and faculty lounge areas. Then display information about campus events and up-to-date emergency alerts and instructions. Assign any staff person, not necessarily an IT staff member, to use the interface to schedule content. You can even deliver different content to different signs - for example, promoting plays in the Theater Department building and advertising specials in the book store.

Figure 1. Digital Signage Promotes Campus Events and Provides Emergency Updates

Popular uses of digital signage in colleges and universities include:
- Emergency notifications and instructions
- Event announcements, such as sports, guest speakers, registration/drop deadlines, and more
- Classroom changes
- Student and staff group training
- Advertising in bookstores and stadiums
- Way finding
- Information for major events such as graduation or donor recognition receptions
- Room scheduling (when used with software from Cisco partners that complies with the R25 scheduling standard)

College of Southern Nevada in the United States uses Cisco Digital Signs to distribute attention-getting multimedia announcements. The college planetarium uses a full-motion video to promote its ongoing shows. Disney has submitted video content to recruit students for summer work opportunities. The theater department advertises upcoming performances on three separate monitors placed throughout its building. Live video from college regents’ meetings is sometimes played around all campuses. And when a shooting occurred in the community, the college avoided panic by immediately publishing text messages that explained the event and the actions taken.

Enable Anytime, Anywhere Learning with Cisco Show and Share
Restricting instruction to the lecture hall only serves students with certain types of learning styles. Colleges need other approaches for students who need to hear the material more than once, concentrate better at a different time of day, or have physical limitations (Figure 2).

Figure 2. Cisco Show and Share Makes Distance Learning Possible

Higher education institutions can be more inclusive, enhance the
Overall learning experience, and serve out-of-area students by offering a webcasting and video sharing on the desktop. Students visit the portal to search for videos by category or keyword and play them in full motion. They can even search for words or phrases within a particular video if a video is accompanied by a transcript. Students who are deaf or hearing-impaired can click a button to see closed caption text embedded in the video. During live webcasts, students can click an Ask Question button to type a question for the presenter. Use the management interface to easily indicate which users are authorized to access a particular video. You can also associate other content with the video, such as presentation slides or websites. Professors and administrators can even generate reports showing who watched what video content, and when.

Some ways that colleges and universities can take advantage of Cisco Show and Share for education excellence and administrative efficiency include:

- Lecture review
- Lectures from guest speakers anywhere in the world to augment regular classroom instruction
- Distance learning: The college can enroll students in any location without the expense of adding classrooms
- Recruitment: Colleges can produce videos to promote themselves to prospective students and faculty
- Professional development and safety instruction for faculty and staff
- Replay of school functions such as graduation or theater productions for friends and family who cannot attend in person

Facilitate Group Instruction with Cisco Cast

While desktop video is intended for individual viewers, Campus IPTV or Cisco Cast provides the large, high definition displays needed for groups watching a video together, such as students in a study lounge or a classroom. Some colleges and universities have deployed cable TV systems, but producing video for these systems requires knowledge of arcane tools, not today’s widely known digital video production tools. Cisco Cast lets colleges and universities distribute live or on-demand video content to digital displays. Students use a remote control, IP phone, or a touch enabled digital display to access content through simple, intuitive on-screen menus and program guides. Cast uses the same management platform as Cisco Digital Signs and can even use the same displays, reducing operational costs and simplifying deployment.

Applications for Cisco Cast in higher education include:

- Delivery of live or recorded lectures and training to dorm common areas and classrooms.
- Emergency broadcasts.
- Delivery of external TV programming, such as a science channel, broadcast over the IP connection to classrooms as well as dorm rooms. This requires additional equipment.

Extend the Reach of Content with Cisco Media Experience Engine

The Cisco Media Experience Engine (MXE) 3500 extends the reach of any content to any end-point device. The feature-rich MXE 3500 provides:

- Media adaptation functionality enables users to view any media content on any end-point device. Media files can be shared easily between Cisco Digital Signs, Show and Share, mobile devices and other applications.
- Editing and production capabilities allow users to customize content with company logo overlays, transitions, file clipping, and color and video quality enhancements.

Solution

The Cisco Digital Media Suite lets you use one interface to create, manage, and deliver digital content to digital signs or the desktop. Start with one system, like Cisco Show and Share or Cisco Digital Signs, and add others at any time.

Create: Digital Media Encoders convert audio and video sources to a digital format that you can transmit over the campus network. The destination can be digital displays or the desktop.

Manage: Cisco Digital Media Manager makes it easy to schedule content, set up live webcasts, import videos, and manage and publish the content for digital signage, Campus IPTV, and desktop video access. The Cisco Digital Media Manager provides one intuitive interface for individual departments to manage and design digital content, control user access, and manage system components, as shown in Table 1.

Deliver: Cisco Digital Media Players handle digital media content display and playback across the high-definition displays used for digital signage and Campus IPTV.

Table 1. Management and Design Interface
Why Cisco?
Cisco brings extensive experience working with higher-education institutions and leadership in video content delivery. The Cisco Digital Media Suite meets the needs of colleges and universities in the following ways:

- **Low total cost of ownership:** A single system can be used to manage and publish digital assets for Cisco Digital Signs, Cisco Show and Share, and Cisco Cast. This reduces capital and operational costs compared to purchasing separate systems, even if the first system costs less than the Cisco Digital Media Suite.

- **Video expertise:** Cisco has years of experience with video and has built a portfolio of business video technologies to help customers solve challenges.

- **Corporate strength and stability:** Cisco is an established, financially sound company that will be around for the long term to support your solution as needed.

- **Comprehensive services:** Cisco and our certified partners provide comprehensive service offerings to help design, deploy, and operate the solution, as well as consultation on your content strategy. We also offer the Cisco Academy of Digital Signage, a global qualification program that teaches media professionals to create and optimize content for digital signage.

Conclusion
Digital media has become an important and exciting part of higher-education instructional and communications strategies. The Cisco Digital Media Suite gives you the flexibility to deliver digital assets to the desktop of on digital displays without having to purchase additional management software. You get more value from your digital assets, and with a lower total cost of ownership.

For More Information
To read more about the Cisco Digital Media Suite, visit: [http://www.cisco.com/go/dms](http://www.cisco.com/go/dms).

To read more about Cisco Education solutions, visit: [http://www.cisco.com/go/education](http://www.cisco.com/go/education).

To read more about Cisco Services, visit: [http://www.cisco.com/go/services/digitalmedia](http://www.cisco.com/go/services/digitalmedia).

To read more about the Cisco Academy of Digital Signage, visit: [http://www.cisco.com/go/dms/ads](http://www.cisco.com/go/dms/ads).