



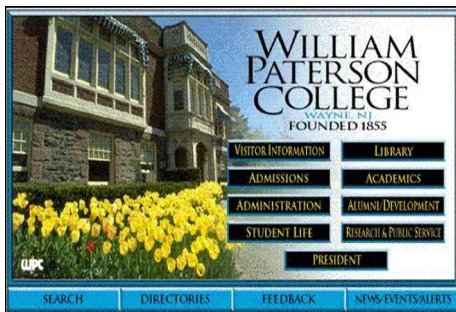
IT News

INFORMATION TECHNOLOGY
@ WILLIAM PATERSON UNIVERSITY

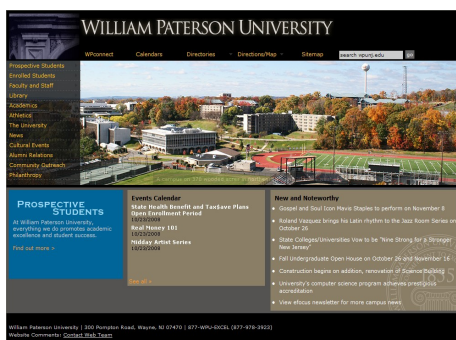


Winter 2008-09

dotCMS WPU's Website Content Management System



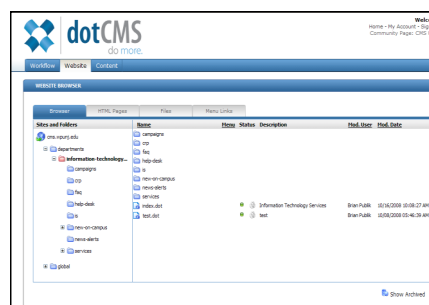
Starting in 1996 and until becoming a University in 1997, our web site looked like this and there were not many web pages behind it. From 1999 to 2000, when we started tracking activity on the University website, it took an entire year to have 750,000 hits on the home page. Today, our website has on average 855,000 hits per day and there are tens of thousands of web page files.



Beginning this fall the University's website will begin going through a major makeover. However, it isn't necessarily the look that we're after, it's the content. While the look and navigation of our website are still critical components of the makeover, the 10 million unique visitors that accessed

WPUNJ.EDU over the past year are expecting to find official, timely and accurate information. The implementation of a Content Management System will provide a new and much easier way for all of us to keep our respective web pages current and, as a result, significantly improve the content of our web site.

Within the past few months an open source Content Management System, **dotCMS**, has been installed and is currently being configured by a web advisory team lead by Yuri Marder and Brian Publik. They are currently creating new templates and setting the database where all content will be stored and managed. Implementation strategies will be developed in consultation with Colleges and Departments



What this means for departments is...

- Easy to input new content
- No need to know HTML or Dreamweaver
- Content previously in multiple places, now pulled from one place. i.e. auto update of all related links
- Able to pull in dynamic content easily, i.e. news, etc.

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Contact IRT
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Computer Renewal Program

The **Information Technology Advisory Committee** recognized the need for developing a standard technology “issue and renewal” policy for faculty, staff, and student labs and incorporated this as a goal in the **Information Technology Plan 2006 – 2009**.



CRP Team Technicians & Student Assistants

The **Computer Renewal Program** which provides for the renewal of computer equipment every three years was initiated in September of 2007 to address this goal.



CRP Imaging Room, Valley Road Building

Since the inception of the program, significant changes have been made to the way in which the **Information Systems Department** deploys computers



Outdated equipment for disposal

to the university community. Through the efforts of many people, the process has been refined to provide the installation of new computers with greater efficiency and minimum disruption for faculty and students.

Recycled computers which still meet configuration standards, have been placed into a central inventory which supplies the university's auxiliary equipment needs for adjuncts, part time workers, and student assistants. In addition, an application has been created for tracking university computer assets, and the secure disposal of outdated computer equipment.



Nursing Lab, Hunziker Wing Deployment



Continued on page 4.....

Improved WPUNJ Email Service!

As a consequence of the University's recent decision to adopt email as "an official form of University communication," several enhancements have been made to the WPUNJ email service. Intended to promote and facilitate the use of campus email for academic purposes, these improvements include:

- Mail box storage limits increased, with enhanced warning messages as these limits are approached;
- Option provided in web version of Outlook to increase access time to cover up to 24 hours of no activity (timeout period extended);
- New online tutorials created to illustrate procedures for handling junk email, using email folders and deleting old messages.

Just visit www.wpunj.edu/emailstu for student email details or www.wpunj.edu/emailfac for faculty email enhancements!

Liberty Server

New *Liberty* Server Supports Innovation and Applications for IRT and Library Staff



It produces an email each morning to Media Services staff listing all room and equipment setups for that day. It displays the Leisure Lounge titles along with images of their dust jackets. It allows staff to key information into an easy-to-use web interface and immediately transfers this input to active web pages. It dynamically generates web pages from information in databases. It has the potential to provide even more information to the WPUNJ community.

Not unlike the story of the Blind Men and the Elephant, where each man reports something completely different, yet each are aspects of the same animal, this "it" has as

Library Databases

Databases By Subject:

- All Databases
- Arts/Humanities
- Business/Law
- Education
- Science/Health
- Social Sciences
- General Subjects


The following databases are available through the Library. Databases with the  icon can be used both on- and off-campus, while those with the  must be used in the Library. For off-campus access select student or faculty/staff and enter your WPUNJ e-mail username and password.

Title Directory:

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Click on NAME to access database

 **ABI/Inform Complete (Business Periodicals Database)** Citations and abstracts for articles from business periodicals, with full-text access to over 2,100 titles. [August 1971 - present]

 **Academic Search Premier** Full-text index to articles from over 4,500 periodicals covering all subjects, plus citations and abstracts for over 3,500 additional titles. Funded by the the New Jersey State Library and New Jersey Knowledge Initiative.

unlike the story of the Blind Men and the Elephant, many functions as it does users. "It" is the new application server, known as Liberty. A collaboration between the Library, IS, and IRT, the project arose from the Library's Technology Committee as a way to benefit from a growing number of staff members with some programming experience. Limited by their access only to the web server, the Technology Committee began to list the requirements of a server that could meet an expanded set of needs.

Throughout 2007, meetings were held between members of the Library, IS and IRT to discuss the configuration of a server that would be able to access Library and other data sources, run ColdFusion, PHP and other web scripting tools, and provide the levels of access and security required. Tom DePietro and Brad Trotte of IS and James DeRose of the Library have provided the bulk of the server configuration and setup. From IRT Robert Harris, Jae Kim, and Housen Maratouk are contributing content geared toward faculty and teaching. Along with Ray Schwartz, Cheng Librarians Tony Joachim and Mark Sandford are creating applications drawing mainly upon Library data.

The Liberty Application Server project represents a successful collaboration between the University's Information Technology sections that has begun to bring a new level of timely, on-demand, and mission critical information to the University community.

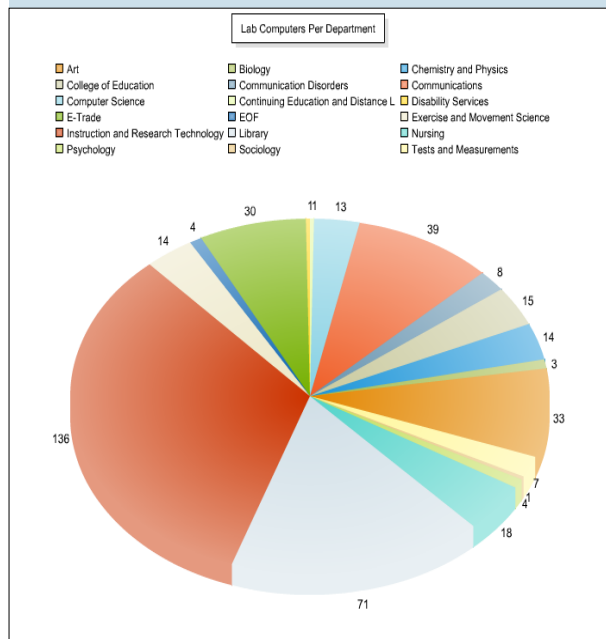
Kurt W. Wagner – Head of Library Information Systems

Computer Renewal Program (contd. From page 2)

Number of Computers Deployed (since Fall 2007)

Faculty & Staff	495
Student Labs	482
Auxiliary PC's	159

The CRP Program is managed by Mary Songer, Information Systems Assistant Department Manager, and the Deployment Team is led by Ken Templin, Field Support Coordinator, working in conjunction with Field Support Technicians George Buchanan and Aubrey Warner. Assisted by a team of students, on average they deploy over 100 computers per month.



For questions regarding the program, please contact
Mary Songer at ext. 2303.



The Pioneers of IPTV

Patrick Ryan, Assistant Director, IRT

William Paterson University has been on the leading edge of broadcast technology for many decades. We have maintained a private cable TV system since the early 80's and we operate the only licensed satellite earth station among the NJ state universities. On February 17, 2009 the FCC has mandated that all analog television broadcast will end and digital TV (DTV) will be the transmission standard. Faced with this change the University needed to make some plans for the future.

After many ideas, including TV antennas on the roof of every building, we had a plan we could afford and scale up if necessary. Our plan was to maintain the analog cable system and add IPTV. Television over the internet (IPTV) is an emerging technology and is proving to be the wave of the future. The industry sees the introduction of high definition television equal to the move from black & white to color. One could compare the arrival of IPTV to the introduction of cable TV. It's the next form of broadcast and we are confident it will replace cable and satellite TV moving forward.

We allocated our first \$8000 on digital television reception equipment. This equipment enabled us to secure over-the-air programming such as CBS, NBC, FOX, and ABC. We managed to engineer a 24 channel system that included free to air satellite (FTA) and our locally produced programming channels. In the following years we would purchase IPTV channels and send this programming to both the analog cable TV system and the new IPTV system. Each year we could add more IPTV channels and more programming channels. This became the perfect scalable solution for our future needs.

(Continued on next page)

(Pioneers of IPTV, continued from previous page)

IPTV has many features for the University community, including the ability to interrupt all channels with emergency messages, video on demand and support for high definition programming. We were confident these features would entice our analog cable TV viewers to migrate to IPTV. We had our first positive experience with IPTV during the presidential debates, when many faculty tuned into our demo IPTV system in the Valley Road classrooms. We received excellent feedback.

Most recently we moved to purchase more programming, as a first wave to scale up our latest plan. We secured a University purchase of 70 channels of programming and 70 modulators to augment our analog cable TV system. On February 17, 2009, students will experience the same programming channel line-up with no decrease in channels or interruption in service. The second wave will be the purchase of a 70 channel IPTV system to be rolled out in spring of 2009. Our recent programming purchase will enter both the analog cable TV system and the IPTV system simultaneously. We will run both systems and migrate our campus customers to the new IPTV system. Our intent is to continue the analog cable TV system, but we will not make any significant investments in repair and maintenance. IPTV will be the William Paterson Broadcast standard moving forward and we are once again the first and only NJ state university to provide this technology.



Partners in the NJVid statewide online video service began digitizing and uploading submitted videos in early September. The revamped NJVid web site launched in early November with videos openly accessible in the NJVid Commons (<http://njvid.net>). A big component in developing the Commons was not just gathering the initial round of videos but drafting official policies, procedures, and guidelines to govern NJVid's operation – from authoring a collection development policy, to establishing core metadata requirements necessary for describing and retrieving each video, to writing step-by-step guidance for institutions wishing to contribute videos to the Commons.

Up next for NJVid will be the integration of commercially-licensed videos, beginning with those of Films Media Group, a leading provider of digital educational videos, with additional commercial

video collections to follow shortly thereafter. Access to commercially-licensed videos will be restricted to William Paterson students and faculty and other institutions throughout NJ with license to commercial works. Video tools are also being developed for annotating and segmenting videos, which users can save to their computers.

NJVid is currently accepting submission of videos for the Commons, and each WPU department is encouraged to contribute. For more information, contact Tom Nemeth, NJVid Coordinator (nemetht@wpunj.edu).

Hobart Hall's New Media Lab

Ted Clancy, Audio Operations Engineer



The New Media Lab is a joint project of IRT & the Department of Communications in Hobart Hall. The idea was the brain child of Professor Keith Obadike who brought it to IRT for design, engineering, coordination and installation. The lab enables advanced students to work on projects that include graphic, video and both stereo and 5.1 surround audio elements. These productions are then exported to DVD for presentation and distribution.

The room is about 25' x 15' and contains the main workstation and seating for a dozen students and the professor. The room is carpeted and the side walls are covered with sound diffusing arrays to minimize internal sound reflections thus reducing flutter echoes and the rear wall is covered by a custom designed quadratic diffuser. These treatments give the space a controlled sound without making it sonically dead. All of this enhances the labs functionality for teaching the advanced audio students how to listen critically, to evaluate existing mixes and to create their own mixes in mono, stereo or 5.1 surround.



More Classrooms are Technology READY

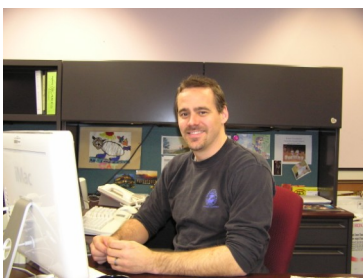
Media Services in IRT is proud to announce that 10 more classrooms have been completed this past year with technology in Hobart 143, Wrightman Gym 202, Hunziker Hall 128, 129 and 208, Wing 241, Raubinger 213, Library auditorium, Library Paterson room, and Atrium 114, 123 A & B And 125. The podiums include a DVD/VCR player, document camera, and switching controls for the ceiling mounted projector and a new addition this year— desktop computers. Swipe locks have been placed on the doors to the classrooms and are automatically opened at 7:30 each morning and locked at 10:30 in the evening. This new security system was a result of the work of the Learning Spaces Committee this year.

The Learning Spaces Committee, with members from each College, the Registrar and IRT staff is a sub-committee of the IT Advisory Committee and is charged with developing standards to new building projects and any technology upgrades to spaces throughout the campus.

Joining the IRT Department

Damon Weber

Recently placed in a temporary full time assignment to cover chief engineer Bob Kovalski while he is on sick leave, Damon Weber has been working part time in IRT's office of audio operations with co-workers Ted Clancy and Greg Mattison since 2001.



BPS has grown significantly and audio operations has been changed by it. The integration of video and multimedia into what was originally a unit focused solely on audio across the campus has added this new dimension. In addition to mastering audio for video productions, many of the university projects Damon was involved in continue just as they did 8 years ago. He mixes and masters archival CD's for the university's Jazz Room Series as well as Special

events at Shea and across campus. Website design and administration for BPS has also worked it's way into his duties.

Current projects include planning for and installation of the 301 pro tools system upgrades for Keith Obadike which will be networked into the editshare system, planning and installation for a Hobart Hall TV studio audio redesign including new state of the art digital audio consoles slated for this summer, repairs and installs at the campus Radio station and the creation and maintenance of the BPS website with a new media page to showcase select BPS productions as they are digitized.

Contact IRT
(973)720-2659
www.wpunj.edu/irt





Christopher Encalada Joins the IRT Department

Christopher joined the Instruction & Research Technology Department and is currently attending Passaic County Community College. His primary responsibility is to administrate the processing of the STCs timesheets. His secondary responsibility is to assist in any administrative functions for the IRT leadership.

Although he only works 20 hours a week, Christopher is always willing to assist anyone with any issue that may arise. Please feel free to stop in Atrium 108 or call him at X3078 if you need anything.

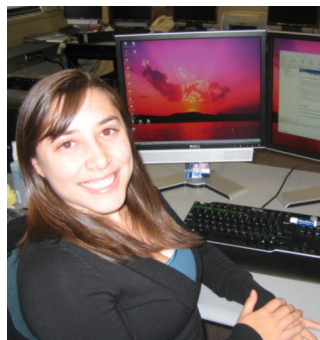
Tom Nemeth Coordinates NJVid Grant

Mr. Thomas Nemeth is the Coordinator of the IMLS Grant known as NUVid which is to develop a state-wide video portal for commercial, public domain and lectures on demand videos. He is hired as the Digital Collections Manager, in IRT.



Mr. Nemeth holds a Master of Arts degree in Moving Image Archive Studies, University of California, Los Angeles; a BS degree in Computer Science and a BA degree in Communication from WPUNJ. Tom's extension is x2416.

New Members of the Information Systems department: Rebecca Schaffer and Brian Publik



Rebecca Schaffer started in September 2008 as a new employee in the Information Systems department, within the Enterprise Systems Services group. Rebecca's responsibilities include supporting the technologies that support computer labs and general desktop configuration. This includes managing the desktop environment and supporting applications, configurations and security. She is a 2006 graduate of William Paterson University with a degree in Computer Science.



Brian Publik started in June 2008 as a new employee in the Information Systems department. Brian's responsibilities include supporting the technologies that run behind the University's websites, primarily the upcoming Content Management System that will be used to manage the University's website. He is a 2008 graduate of William Paterson University with a degree in Computer Science.

Library Technology Skills Assessment

Kurt W. Wagner, Library Information Systems

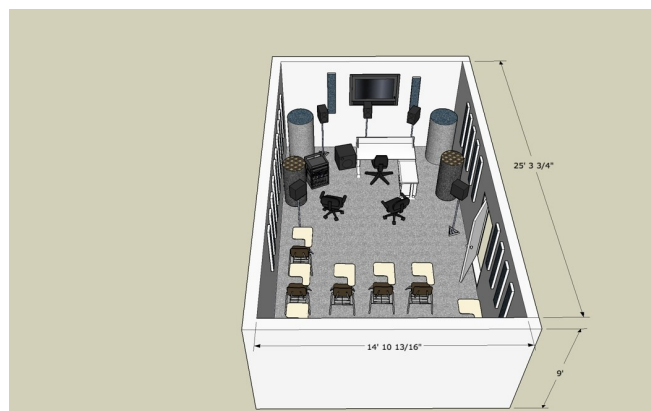
In 2007 the Library's Technology Committee discussed an observation that there were areas of technology skills deficit among the Library staff. The Committee agreed that the both the internal work of the Library and its public service components rely on specific technology competencies and that there should be a shared standard that all attain. Part of the mission of Library Information Systems is to provide or promote appropriate technology education, and it was determined that the results of a survey of current skill levels would be of assistance in identifying which areas needed attention.

Through the spring of 2007 and summer 2008 a subcommittee worked with Library department heads and developed a technology survey consisting of questions in the areas of computer hardware, Microsoft Outlook, email attachments, Microsoft Word, the online Library catalog, Microsoft Excel, and file management. An extensive discussion was held by the Library Council to determine the areas of focus, method of delivery, and how to protect the anonymity of survey participants.

The survey was delivered in August 2008 and the results tabulated over the fall. A detailed analysis of the results is ongoing with a formal report expected this spring. The preliminary tabulation found that the sections on computer hardware, the online Library Catalog, attachments, and Microsoft Outlook had the highest number of correct responses. The sections on file management, Microsoft Excel, and Microsoft Word had the highest number of incorrect responses. As a part of its annual Staff Development Week in January, Library Information Systems will provide workshops in file management, Excel and Word to specifically address these areas. Information will also be provided about IRT and HR workshops in these topic areas so that staff may obtain additional training.

1	Library Technology Skills Assessment ** - no response		
2	Participant	AAA	
3	Section 1: Hardware	Points possible	score
4	1.1 Identifying computer's components	4	4
5	1.2 How to turn on a computer	2	2
6	1.3 Once computer is on, the order to proceed is...	2	2
7	1.4 To properly shut down a computer...	2	2
8	1.5 If printer stops working, things to check are...	4	4
9	1.6 What to do if cannot solve computer/printer probl	3	2
10	Section 1 Total	17	16
11			
12	Participant	AAA	
13	Section 2: Outlook	Points possible	score
14	2.1 Best response to describe the use of Outlook		daily
15	2.2 How to set up an archive on the network drive	2	0
16	2.3 How to create a new distribution list	2	0
17	2.4 How to create an e-mail signature	2	2
18	2.5 Choose two ways to flag or categorize e-mail mes	2	2
19	2.6 Choose correct toolbar function in Outlook	2	2

(New Media Lab, continued from page 5)



At the front end of the facility is a DigiDesign Control 24 mixing and control surface which allows the students to control the ProTools software/hardware from a tactile surface. The Control 24 also has high quality mic pre's and line in's so that students can record into the ProTools system or to input their own pre-recorded material. This front end feeds the recording software/hardware that is in a quad-core Macintosh G5 housed in a temperature controlled quiet rack. The back end or output side of the audio system is comprised of five Mackie HR-824 full range powered monitors and a Mackie HRS-120 sub woofer for the extreme low end and effects. The video output is handled by two 20" monitors on articulating arms as well as a 46" LCD display on an articulated wall mount.

"Advanced Audio Production is an introduction to a set of tools and concepts necessary for producing professional audio for a variety of projects."¹ Students are introduced to advanced techniques in audio recording, MIDI sequencing, creating unprocessed studio and field recordings and applying signal processing to dry recordings. Additionally they'll learn "how to critically listen to audio and analyze recording techniques."¹

¹ Quoted from course syllabus for Communication 353 – Advanced Audio Production, Professor Keith Obadike



7 things you should know about... Lecture Capture

Scenario

At medical school orientation, the incoming students in Leah's class were warned that the lecture capture system used at the university should not be seen as a substitute for attending lectures. In the first week, she realized she would never be tempted—there was so much information to absorb and so little time in the classroom to assimilate it that she found herself downloading the recorded lectures to fast-forward to the parts she didn't understand so that she could listen again to the explanation and stop the recording to clarify her notes.

During her second year, Leah had to attend a funeral and missed a key class on respirator settings in her pulmonology course. Late that afternoon she was able to download the lecture and watch it on her laptop as she rode the train back to campus. Someone in her study group had added to the recording a bibliography reference for a related article. She requested the article online that evening from the medical library and found that it explained key elements discussed in the lecture.

Leah's third year in medical school found her assigned to clinical rotation at a rural site five hours from the university. The lecture capture option allowed her to watch a one-time-only series of lectures on herbal medicine delivered on campus by a guest speaker from China.

Leah served her residency at a hospital with a grant to study a rare hearing disorder. An online correspondence with doctors in Spain and Germany offered new insight into the study. Leah organized a live presentation from both doctors via the lecture capture systems at their universities, arranging for it to be shown at a nearby lecture hall. Meanwhile, a doctor in Ecuador saw the proposed abstract of the study and requested information related to patients at his clinic. All the doctors were able to send questions to one another by e-mail during the presentation and discuss the answers before the end of the conference.

When she completed her residency, Leah began work in a program in Thailand sponsored by Médecins Sans Frontières. Because she was able to take continuing education courses through her university, she signed up for a course in tropical medicine, downloading the lectures to her laptop and watching them whenever she had time in her schedule.

What is it?

Lecture capture is an umbrella term describing any technology that allows instructors to record what happens in their classrooms and make it available digitally. The term is used to describe a wide array of software, system capabilities, and hardware options. In its simplest form, lecture capture might be an audio recording made with an iPod. Alternatively, the term might refer to a software capture program, such as TechSmith's Camtasia Relay, that records cursor movement, typing, and other on-screen activity for demonstration purposes with an audio voiceover. At the other end of the complexity spectrum, a lecture capture system might mean a turnkey operation like Sonic Foundry's MediaSite, a webcasting platform that is frequently set up in a dedicated studio where software and hardware reside permanently to provide as-needed audio and video recordings of presentations and accompanying slides or other digital resources. While not intended as a replacement for in-class instruction, lecture capture systems offer three important benefits: an alternative when students miss class; an opportunity for content review, particularly when abstract topics are introduced or detailed procedures are performed; and content for online course development.

Who's doing it?

Many schools are implementing these systems to provide students with greater convenience if they miss class or simply want to catch up on course content. As an additional benefit, captured lectures often form part of online or blended course development. The University of Geneva, which captured video of lectures as far back as 1970, began a program two years ago to use a lecture capture system to convert its archived holdings to new formats and generate new recordings. The system has been enthusiastically received by students because it provides more options for accessing academic content. Lecture capture systems are also popular in health and medicine programs. Michigan State University, The Johns Hopkins University, the University of North Carolina, and a number of other institutions with medical programs have been explorers in and adopters of this technology, possibly because medical training often involves demonstrations that cannot be easily repeated. In lecture capture sessions at Carleton University, students meet in classes where the lectures can be broadcast via Internet television (ITV); lectures are recorded and made available within 24 hours. One team at Carleton has devised a video mashup tool that lets students personalize lecture capture by tagging, editing, annotating, and subsequently sharing the results with their peers.

more →



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Lecture Capture

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on the ELI website
www.educause.edu/eli

How does it work?

Lecture capture systems include a suite of software applications with specifications for preferred hardware, which typically consists of items such as a camera and a microphone that are available in many classrooms. The Panopto suite, for example, includes CourseCast Recorder, CourseCast Editor, and CourseCast Server. These applications integrate with audiovisual hardware to capture a lecture. Pushing a single button is enough to activate turnkey systems like Tegrity Campus and Panopto CourseCast and begin capturing a lecture. Recordings can be viewed on the web or in formats compatible with MP3 players and portable video devices.

Why is it significant?

Lecture capture enhances and extends existing instructional activities, whether in face-to-face, fully online, or blended learning environments. It works especially well in subject areas where students benefit from repeated viewing of content, as when complex information is discussed or formulas are written on a board. The video-on-demand portion of lecture capture allows students to closely examine the steps of a demonstrated procedure or stop and focus on important actions in a science experiment. Lecture capture may enable freer thinking—students who find themselves struck by a particular comment or point can pursue that line of thought, confident that the lecture itself can be reviewed later.

Some worry that students may cut classes in favor of viewing captured lectures. Yet, from the advent of the cassette tape through the podcast, students have found that recordings take as much time to absorb as a live lecture, but without the opportunities for question-and-answer or interaction with their classmates. Moreover, instructors might add group activities during in-class times to supplement the lecture material held in archives from previous years. Recorded lectures might offer a new library of information resources and trigger changes in archiving and accessing data and new citation practices. They also offer advantages for interdisciplinary programs—a biology professor, for example, might show recorded lectures from colleagues in the physics or chemistry departments as part of the biology curriculum.

What are the downsides?

Some question whether any pedagogical benefit emerges from replaying a lecture and covering the same ground twice. Beyond that, the practice raises a number of issues around who should have access to lectures and for how long, as well as questions of how the recordings are to be stored and what policies will govern their handling. A complicating element of lecture capture is ambiguity over who is responsible for providing the recording resources and who owns the intellectual property once the recording has been made. Using these systems for classes, conferences, and guest speakers might require a legal release, particularly when lecture capture depends on a complex infrastructure provided by the institution. Colleges and universities must also decide whether the same release applies when a professor independently captures a lecture and makes it available to students on a faculty website.

Where is it going?

Recorded lectures could easily result in large stores of material that require new paradigms for search and archiving, including the ability for students to create personal course archives. The platform may invite mashups as developers enable ways for students to annotate a lecture itself and share the results with study groups. Such additions to captured recordings could change the character of the lecture as students annotate and reorganize what they have heard.

Institutions will need to establish copyright policies for captured lectures, arrange releases, and ensure that intellectual property rights are not left in limbo. Future lecturers might find that elements of course content become a point for contract negotiation under the heading of “courseware rights.”

What are the implications for teaching and learning?

This technology adapts to multiple input locations so that instructors or guest speakers can present from any location that has the appropriate recording equipment. At the same time, it conforms easily to a variety of content delivery models—podcasts, mobile devices, laptops, or high-definition presentation. These systems provide convenience for students, offering remarkable flexibility with course timetables to coordinate work and study schedules. Students might even be able to take two courses scheduled at overlapping times. Emerging features in tagging and markup may draw students into intellectual discussion on a topic and encourage them to share work with others.

Lecture capture also offers new flexibility for each student’s course of study, as a single lecture could be extracted from a series and viewed separately by any student enrolled at the college or university, promoting ad hoc interdisciplinary research. An easy-to-search archive of recorded courses would thus allow a student to cross disciplines to watch a philosophy lecture on Roger Bacon, for instance, that supports a paper on the evolution of scientific thought for a course on the history of medicine. Lecture capture provides new educational opportunities—for distributed learning students as well as residential students in face-to-face or blended courses—opening up multidisciplinary programs where students can pick the best lectures from any school on any topic and assemble their own lesson plans. Faculty, on the other hand, can work with colleagues on their own campus or disparate campuses to assemble multidisciplinary courses constructed with lectures from the leading experts in the field.

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