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How to Podcast Campus Lectures

Advice on getting your institution's 'coursecasting' program off to a good start

By BROCK READ

Many college classrooms these days may as well have lighted signs over their doors that read "On Air" or "Recording in Progress." A growing number of professors are recording their lectures and making them available as podcasts — regularly updated sets of audio files that students can download to their computers or MP3 players.

Some campus administrators have expressed surprise that podcasting lectures — also known as coursecasting — has piqued the interest of so many students and professors. But others note that it's not hard to understand podcasting's appeal.

The technology gives professors a chance to meet students on their own turf: After all, students often seem to be joined at the hip, literally, with their iPods. It is easy to imagine students using the devices to make up for lectures they missed, or to brush up on key concepts as final exams approach. And there seems to be an elegant economy to the podcast, at least in theory: If you're already preparing a lecture for the classroom, why not bring along a recorder and throw the results online?

If only it were so simple. Creating a podcast requires a bit more effort and technical know-how than many professors anticipate. So more and more colleges are trying to help professors who want to try out the technology.

Many colleges are using a free service from Apple called iTunes U to handle the distribution of coursecasts. But institutions can also set up their own online distribution systems, which give professors greater control over how they present their content. And a growing number of companies offer tools designed to capture audio — and even video and PowerPoint slides — from college

lectures so that material can be broadcast beyond the classroom.

Along with hardware and software decisions, colleges looking to start campuswide coursecasting face a number of policy issues. Should podcasts be restricted to registered students, for instance, or should they be offered up to the Web at large? And who owns a lecture recording?

There are no one-size-fits-all answers to many of those questions. But the advice of college officials who have started extensive podcasting services can be condensed to six key points for those who are considering podcasting programs of their own:

1. Make it easy for professors.

Tech-savvy lecturers may be perfectly comfortable recording themselves, toying with sound-editing software, and finding a way to post their finished products online. But to many professors, the technology still seems downright daunting. Disenfranchising those professors would be a big mistake, most campus officials agree.

So most colleges try to make the process as undemanding as possible. Purdue and George Washington Universities and the University of California at Berkeley all use software that can be set to record lectures at certain times: Professors don't even have to worry that they will forget to press "record" before they start speaking. "I did not want the podcasting tools to be disruptive to any faculty members using them," says P.B. Garrett, assistant vice president for academic technologies at George Washington. "It's embarrassing to walk into a classroom and not know how to use the technology."

If George Washington professors want a bit more control over their podcasting schedules,

or if they want to edit out quotidian discussions about reading assignments and course work, they can always turn the classroom recording devices on and off manually, Ms. Garrett says.

At the University of Michigan's School of Dentistry, which began podcasting all its courses in 2005, selected students see to it that lectures are recorded. The students tap into lecture-hall sound systems to record class sessions and "tag" them with identifying information before they go online. "For the faculty, we just want to keep the process simple and accessible," says Lynn Johnson, Michigan's director of dental informatics.

2. Start small...

It might be tempting to try building a podcasting empire in a semester, but overambitious projects aren't likely to succeed, says John P. Campbell, associate vice president for teaching-and-learning technologies at Purdue University at West Lafayette, which has one of the most extensive coursecasting services in academe.

Purdue had a head start because it began recording lectures years ago, originally offering the recordings on cassette from the library. So university officials had already placed recording devices in many classrooms. Since going digital two years ago, the service, called BoilerCast, has swelled to include recordings of about 70 courses. Students now download those recordings from a central Web site, or from iTunes U.

Other colleges, though, have had to invest more heavily in technology for their classrooms. Berkeley, for example, set up 23 classrooms for recording lectures. Each audio-recording room is outfitted with an Instreamer — a device that takes recordings from lecture-hall sound systems and converts them into Web-ready MP3 files. Instreamers, designed by a company called Barix, retail for \$395.

"You have to recognize that you're going to need to spend some money on the infrastructure to capture your lectures," says Benjamin Hubbard, Berkeley's manager of

video services. And that, he adds, is before storage servers, Web-hosting fees, and a variety of other expenses even enter the picture.

A battalion of classrooms ready for podcasting may sound appealing, but for most institutions just starting out, a few wired rooms should suffice, several campus officials say. Berkeley is able to accommodate its relatively large coursecasting program — about 35 courses are podcast, and a dozen or so more are made available exclusively as video recordings — by using some creative scheduling and, when necessary, by bringing portable recording equipment to classrooms that are not equipped with recording hardware.

There is no point in overreaching early, says David Eisert, the architect of Purdue's BoilerCast, because podcasting programs tend to grow slowly, by word of mouth. "BoilerCast took off when professors started mentioning it to their colleagues, and when they started getting pressure from students," he says. "We really haven't had to push it very hard."

3. ...but leave room to expand.

"Think about what your plan is when this grows, because it will grow fast," Mr. Campbell says.

In other words, the process for converting lectures into podcasts should be intuitive, easy, and able to handle a heavy load. "It comes down to automation," says Mr. Hubbard. "You want to have a very low impact in terms of staffing, and you want to be able to capture a large amount of content."

Berkeley has designed its own software to oversee virtually the entire process of creating a podcast. By linking with "Linux boxes" — cheaply assembled computers running the open-source operating system — in each of its podcast-ready classrooms, the program can automatically tell the rooms to start recording at certain times. The software collects the recordings and transforms them into MP3 files that appear online. Campus technology officials listen to the files, making sure they

do not contain any material under copyright, like recordings of complete songs, before posting them on the Web. But otherwise, Mr. Hubbard says, the process basically runs itself.

Of course, colleges without academic-technology departments the size of Berkeley's may be hard pressed to design their own software. But a few commercial podcasting services hope to step into the breach.

George Washington University uses Anystream, a program designed by a company called Apreso, to manage the path of podcasts from the lecture hall to the Web. Anystream includes software that, once installed on classroom computers, can schedule recording sessions, capture lectures, turn them into MP3 files, and tag the files with titles and other information.

"We were going to try to do this in-house," says Ms. Garrett, of George Washington. "But with Anystream, we were able to get started on a tight time frame."

The software isn't cheap, though: It costs \$10,000 a year, according to Apreso.

4. Ask students what they want.

A recording of a great lecture doesn't do much good if students don't listen to it. Any college planning a podcasting venture must make sure that its public face is one that students will be likely to use.

"My piece of advice is just to keep the students involved," says Ms. Johnson, of Michigan. The dental school lets students choose which courses are podcast — provided, of course, that the students win the approval of their professors. And before committing to any software, Ms. Johnson says, the school surveyed students and gave them a chance to test-drive several different methods of syndicating course lectures.

It is hardly surprising that Michigan, like many other institutions, ultimately chose to distribute its podcasts through iTunes U. The chief advantage of iTunes is simple: The program is wildly popular among students. And its interface is generally easy to use.

Students can access podcasts on iTunes not just through an iPod player, but through course-management software like Blackboard and Sakai. Once students have subscribed to certain lectures, they can plug iPods or other MP3 players into their computers and have the machines automatically add lectures that have not yet been downloaded.

Still, some colleges maintain their own Web sites for course podcasts. Berkeley, for instance, offers its coursecasts on a university Web site, called Webcast.Berkeley, as well as through iTunes.

"One of our core principles was that a strategic partnership with a company like Apple would not in any way atrophy our ability to maintain Webcast.Berkeley," says Mr. Hubbard.

Berkeley maintains its own coursecasting site in part because campus officials want to keep lectures available in several different formats. On its site, the university offers recordings as streamable MP3 files as well as downloadable files, for instance. Offering a smorgasbord of options — campus officials call it "crossplatforming" — is important: Despite the obvious implications of the term "podcasting," many students still listen to podcasts on their PC's, not their iPods. In fact, more than 80 percent of downloaded podcasts never reach MP3 players, according to a study conducted in March by the Diffusion Group, a technology-consulting firm.

Berkeley has other reasons for continuing to stock its own podcasting Web site. For one thing, the university prefers to keep copies of its lectures on its own servers.

iTunes U stores podcasts on Apple servers, which concerns some campus officials. "The big thing people are worried about is that it's possible for Apple to try to pull the plug at any time," says Mr. Campbell, of Purdue. Colleges would do well to devise an emergency plan of action should that worst-case scenario come to pass, he says.

5. Read the fine print.

Before signing up with iTunes U, colleges should have a lawyer look over the contract Apple asks member institutions to sign, campus officials say. At the beginning of last year, the contract made some campus officials uncomfortable by suggesting that Apple might feel free to use content the colleges wished to remain private. The contract's language — which gave Apple "the right to use the private content for promotional and marketing purposes" if colleges did not object within 10 days of being notified — "made our hair stand on end," said Molly Gordon, director of IT policy for the University of Notre Dame, in an e-mail message to an Internet forum for campus-technology officials.

Campus officials who have brokered deals with Apple in recent months say that language is no longer in the iTunes U contract. They also say Apple has never misused their content.

Still, Mr. Campbell says, colleges should discuss whether they feel comfortable with Apple's stipulations. "Different institutions have different interpretations of the contract and different levels of concern," he says. "Some are concerned about the ownership of their content, and how widely it will travel."

6. Think seriously about intellectual property.

Professors may also worry about where their words will end up. Colleges can assuage those concerns, at least in part, by deciding whether administrators will make podcasts freely available on the Web, as Berkeley does, or restrict them to registered students, as does Michigan's dental school. (iTunes U allows colleges to choose between making podcasts public or protecting them behind a fire wall.)

But even then, there is a broader discussion to be had about the differences between

podcasting and other methods for putting lecture recordings online. Podcasts, unlike streaming audio, can be downloaded permanently, and therefore can be easily passed from one person to the next. A professor's most probing insights may find an audience outside the ivory tower, but his or her most embarrassing faux pas could also be broadcast to a wider audience than ever before.

Professors who count themselves as podcasting novices should be made aware of "exactly what they're doing when they press the 'go' button," Mr. Campbell says.

Before going live with podcasts of any sort, college officials should make sure they have an intellectual-property policy that spells out, in clear terms, whether podcast lectures belong to professors or to their institutions.

Berkeley, for example, stipulates that all lecture content is the property of faculty members. But the MP3 files themselves are, according to the institution's policy, owned by the regents of the University of California system.

Still, the university is planning to cover its podcasts with a Creative Commons license, Mr. Hubbard says. The Creative Commons license — the product of an alternative-copyright project that in Berkeley's case would allow individuals to copy or distribute a podcast only if they credited the university and the relevant professor — is much clearer than the institution's current policy, Mr. Hubbard says. "It really spells out what our intentions are."

If professors and administrators cannot reach an agreement on intellectual-property matters, a campuswide podcasting project might not be a good idea. "Podcasting isn't for everyone," says Mr. Campbell, of Purdue. "If you're concerned about where your content is going to end up, it's probably not the way to go."