What Did the Professor Say? Check Your iPod

Whether it's an iPod showing an art history podcast, left, an iPod Touch showing slides, right, or a laptop displaying a biology lecture, new software is helping many students to review for exams.

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STUDENTS staring at their iPod screens may be taking a break with a music video — or they may be reviewing a tough chemistry lecture.
These days, students who miss an important point the first time have a second chance. After class, they can pipe the lecture to their laptops or MP3 players and hear it again while looking at the slides that illustrate the talk.

At least two companies now sell software to universities and other institutions that captures the words of classroom lectures and syncs them with the digital images used during the talk — usually PowerPoint slides and animations. The illustrated lectures are stored on a server so that students can retrieve them and replay the content on the bus ride home, clicking along to the exact section they need to review.

When it’s time to cram, the replay services beat listening to a cassette recording of a class, said Nicole Engelbert, an analyst at Datamonitor, a marketing research company in New York.

“Students already have an iPod and they already use them all the time,” she said. “You don’t need to train them.”

Professors who know less than their students do about MP3 players won’t be at a disadvantage, because the systems require little technical skill to operate. “The best lecture-capture solutions simply require the speaker to turn on a mike and push a button to start the recording,” she said. “They are simple to use.”

Long before audio files, of course, students were doing “lecture capture” by taking notes, but even rapid writers may fall behind in fast-spoken, highly detailed deliveries. The new technology may help some of these students, especially those in large lecture classes. “But it doesn’t necessarily make sense for all groups,” Ms. Engelbert said, “for instance, in a more collaborative environment like an advanced composition class with a lot of discussion.”

The University of Central Florida uses a lecture-capture system from Tegrity, a company in Santa Clara, Calif., at its college of engineering and computer science in Orlando to
record all sessions of about 300 classes a year attended by roughly 2,500 students, according to Alfred Ducharme, an assistant dean.

Tegrity software indexes every word shown on the computer screen during lectures in a database.

“Students don’t have to review the whole lecture,” he said. “They can type in key words on their computer, do a Google-like search, and open the lecture at that point.”

Isaac Segal, the president of Tegrity, said its fees are based on the number of students in the institution or department. Annual fees typically run $25,000 to more than $100,000, he said. Of the 90 institutions now using Tegrity, about half have campuswide installations.

Ronald Danielson, a vice provost at Santa Clara University, which has a site license from Tegrity, said that students use the review system efficiently. “They are very expert at clicking back and forward to the exact spot they want,” he said. “They don’t listen from start to finish.”

Purdue University in West Lafayette, Ind., plans to use a software application from Echo360, of Sterling, Va., that records lectures and accompanying slides for replay on iPods, iPod Touches, Zunes and other devices, said Edward J. Evans, Purdue’s interim executive director for teaching and learning technologies. The university is testing the program in as many as five classes this January, he said, and hopes to extend it to 300 classrooms in the fall.

Echo charges universities $10,000 for an annual site license for audio-only podcasts, and $20,000 for enhanced podcasting with visuals, said Mark Young, senior vice president and general manager. In January, Echo will introduce a new podcasting service for $50,000 that includes dynamic displays like computer animations.

The pressure to buy lecture-capture software has come mainly from students who need to study away from school — during a commute, for instance, said Bryan Vandiviere, the Web presentation technology coordinator at Kansas State University, which has a site
license from Tegrity.

Laura Martho, a student at El Centro College in Dallas, finds the replay service invaluable. Mrs. Martho, who has four children, commutes 45 minutes each way four days a week to a hospital for clinical work in echocardiology. During the commute, she plugs an iPod into her car radio to review lectures, and checks visuals during lunch. “Every second counts,” she said.

Limor Raz, a Ph.D. candidate at the Medical College of Georgia in Augusta, reviews lectures in her neuroscience class by computer. “I can’t stress enough how much it helped me prepare for exams,” she said. “There’s a tremendous difference between viewing the lecture once and seeing it again. It’s not exactly easy, neuroscience. Trust me, it’s very tough.”

But Professor Danielson at Santa Clara said that not everyone on his campus was won over to the replay systems.

“Some professors are concerned about having less-than-perfect classroom moments captured for posterity,” he said.

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