

BY MICHELLE FREDETTE

CAPTURING THE IMAGINATION

Lecture capture is no longer merely a safety net for students who can't make it to class. Here are 6 ways faculty are using it to make their courses more engaging, flexible, and imaginative.

YOU'VE COME A LONG WAY, lecture capture. A decade ago, the technology offered little more than a stodgy record of the sage on the stage—a viewing necessity only for students unwilling, or unable, to get out of bed in time for class. Today, lecture capture has progressed from unloved backup to an integral part of how many instructors teach their courses. Whether in flipped classrooms or blended courses, new lecture capture features are helping make face-to-face class time more appealing—and out-of-class learning more productive.

The changes couldn't have come at a more opportune time. With brick-and-mortar institutions facing increasing competition from online-only alternatives, faculty need ways to provide value-add for students attending class in person. Considering today's cost of tuition, it's a big ask.

Peter Wilson, a professor of accounting in the Carroll School of Management at **Boston College** (MA), calculated that each of his classes costs students about \$200. "We have to figure out how to provide \$200 worth of value," he says. "If students don't come to your class...because your lecture capture gives them everything your class gives them, then that's a statement about your class." ▶

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LECTURE CAPTURE

Fortunately, besides becoming far more feature-rich, lecture capture products have also become more intuitive, allowing faculty to focus less on the medium and more on the message. “[Today’s lecture capture tools are] fall-off-a-log easy,” says Ken Graetz, director of teaching, learning, and technology services at **Winona State University** (MN), where faculty use tools such as [Tegrity](#) and [Doceri](#) to record and publish their lectures. “We have one faculty member who records himself in the car, waiting for his kid to get done with a soccer game,” Graetz says. “It’s just become really liberating for him.”

Here, *CT* looks at six innovative ways faculty are using lecture capture to improve student learning.

1) Interactivity

Lecture capture has traditionally been a one-way conversation: Students watch a recording of the professor giving his presentation. Rob Zdrojewski, adjunct professor in the Education Technologies and Emerging Media program at **Canisius College** (NY), replaced this passive approach with something he calls “two-way screencasting,” utilizing a product from TechSmith called [Ask3](#).

“The teacher makes his traditional recorded whiteboard lesson as usual, but the students can make comments all along the timeline,” he explains. If a student is confused about a particular concept midway, for example, he can hit a button and post a question. “The teacher and all the students in the

class see that comment—it could be over the weekend. All of a sudden, people’s iPods and iPhones are going off with notifications. They can go in and answer that student’s question right on the spot. It truly opens up learning to be 24/7.”

If they want, students can take it one step further by inserting their own videos into the timeline instead of text. “Now it’s truly a screencast of a screencast, which blew my mind when I first heard this concept,” says Zdrojewski, “but it’s a really neat way to have two-way conversations that are not limited just to what happens in class.”

The ability to expand lecture capture into a kind of learning platform also appeals to Frank Fedel, who uses [Panopto](#)’s video platform for his courses in the Orthotics and Prosthetics Program at **Eastern Michigan University**. He finds that students use the notes section of the product to add links and other content that will be of value to other students. “They use it because they understand that collaboration is a good way to build a network of people in the class who understand the fundamentals and are ready to move on to the cool stuff,” Fedel says.

2) Increased Instruction

The earliest flipped courses were simple inversions: Lectures previously delivered in class were now watched by students out of class. But some faculty have since realized that the constraints posed by a 60- or 90-minute class do not apply in the

flipped model. As a result, students in many flipped courses are getting more hours of education via recorded lectures than the standard lecture model allows. Wilson calls this “sticking 10 pounds of sugar in a 5-pound bag,” noting that the information explosion of recent decades necessitates such an approach. “How do you cover the information that was there 20 years ago, multiply that by five, and teach that much more as well?” he asks. “You use technology to outsource things out of the classroom...so you can then build in more complexity.”

Simply by capturing new content each year, faculty can develop an archive of material that’s available to students as reference. As a result, says Fedel, students can watch past as well as current lectures, which may provide just that extra bit of information that helps them grasp a concept. Offering different approaches to course content, Fedel has discovered, helps less-motivated students in particular. “If they have other ways of accessing that information—links to things that spark an interest—they become better learners,” he says. “They’re finding other ways to learn.”

3) Cross-Disciplinary Sharing

For centuries, the prevailing model in higher education has involved one instructor and a class of students. With lecture capture, though, schools can take a broader, “it takes a village” approach to instruction. At colleges that have adopted a common lecture capture platform, for example, faculty

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can build courses that also pull in lectures from professors in related fields.

At Eastern Michigan, for example, Fedel utilizes the Panopto recordings of colleagues in disciplines such as athletic training, chemistry, and anatomy. To remind his students what they need to know about osmosis, he links them to a short biology lecture on the subject created by one of his colleagues. “It’s the cooperative business of education,” he says. “We’re building a holistic approach. It’s a very flexible system. It’s dynamic, interconnected, and growing.”

Fedel believes his students are benefiting from all this extra material. “They’re more sophisticated—they’re asking higher-level, more-informed questions,” he says. “The conversations are richer, and in class the students demonstrate a deeper understanding.”

4) Customized Content

Finding additional recorded materials is a lot easier now because today’s lecture capture solutions have far superior archival and tagging capabilities than they did just a few years ago. Not only do these features make it easier for faculty to find related materials for their classes, but faculty can even create customized packages for students who are specializing in particular areas or need additional help.

“This is new, because the amount of content that’s available has grown,” notes Sean Brown, vice president of Son-

ic Foundry, the company that makes Mediasite. “Plus, we’ve dramatically redesigned our editing tools, so an academic professional no longer has to be a media professional to go through archived lecture content, select, and collate those into a catalog for an individual student.”

5) Language Instruction

Eastern New Mexico University has learned that lecture capture, which students can speed up, slow down, or watch repeatedly, is an excellent tool for learning a language—or any complex concept, for that matter.

ENMU started offering ESL courses via lecture capture to foreign students, so they can hone their English language skills before they arrive on campus. “They don’t have to pay room and board while in the preparatory stage,” says Mary Ayala, dean of the College of Liberal Arts and Sciences. “All they have to pay is their tuition. And then when they get here, they can have saved for the actual exchange experience—studying in their discipline.”

Boston College also uses its lecture capture solution to facilitate language instruction. “We encourage students to speed up or slow down the capture to suit their learning style,” says Wilson. “If they’re taking English as a second language, for example, they can slow down the capture so they can understand better. It’s also true the other way: Students who want to breeze through can listen at double speed and then slow down

OTHER INNOVATIVE USES OF LECTURE CAPTURE

■ **Assessment:** In programs where performance is part of the curriculum, such as drama, music—even sales—students are using lecture capture as a means to review and receive feedback on their performances.

■ **Faculty Development:** At **Winona State University** (MN), faculty are encouraged to review their own performances. “We’ve had a lot of ‘aha!’ moments, where we’ve observed faculty realize that they do things they didn’t know they did,” says Ken Graetz, director of teaching, learning, and technology services. “They say ‘um’ a lot. They go over something way too fast, and then they realize why students don’t get that concept.”

Peter Wilson, a professor of accounting in the Carroll School of Management at **Boston College** (MA), reviews recorded lectures from previous years to refresh himself on the content and to assess how the topic went. He also shares lectures with junior faculty to demonstrate teaching methods for technical concepts or case studies.

■ **Recruitment:** College recruiters are seeing the value of lecture capture as a way to give prospective students a glimpse of real classes, especially in professional programs such as medicine and law.

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at the parts that interest them most.”

6) “Khan Do”

Faculty are learning the value of short videos to explain difficult concepts, an approach popularized by Khan Academy. Fedel, for example, uses lecture capture to create four- to seven-minute recordings that range from real-life examples from the field of orthotics to animations. These video sidebars are then indexed alongside his longer recorded lectures. “Students can create their own learning path,” explains Fedel, “with the strong suggestion that they look at everything.”

From Ayala’s standpoint, shorter chunks of content are more manageable for students and faculty alike: Short segments are easier to search and, from a learning perspective, easier to digest than a long lecture. And some content is just better suited to a multi-installment approach. For example, a film instructor at ENMU created step-by-step video instructions on how to use the film-editing

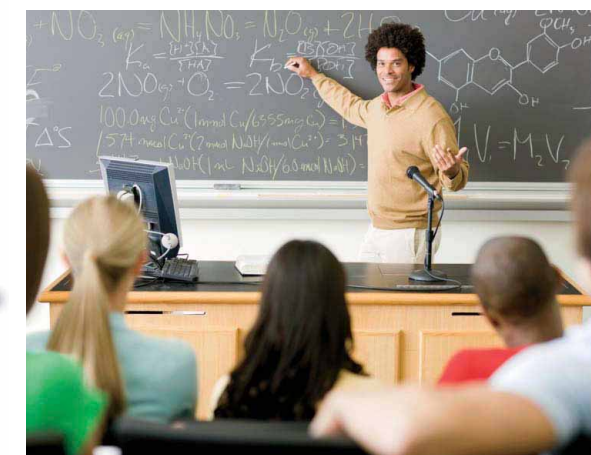
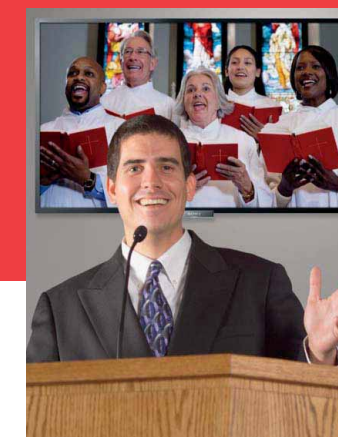
software employed in his class.

Zdrojewski’s use of lecture capture consists almost entirely of short videos, often screen captures. Using Google Docs, he creates step-by-step explanations of the technology that his education students will use in his class—and in their own teaching. Each step contains an embedded screen capture, with an accompanying voice-over by Zdrojewski. Topics might include how to set up an Edmodo account, or how students can create their own lecture captures.

Short videos also lend themselves to more interactive learning. At Winona State, Graetz asks faculty to consider how they can “chunk” the material they’re recording, and then embed assessments and other learning activities. That way, he says, “it becomes less a sit-and-get session for students and more of an interactive learning experience.” **CT**

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