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These Lectures Are Gone in 60 Seconds

Minute-long talks find success at a community college

By DAVID SHIEH

Take a 60-minute lecture. Cut the excess verbiage, do away with most of the details, and pare it down to key concepts and themes.

What's left? A "microlecture" over in as few as 60 seconds. A course designer for San Juan College, a community college in Farmington, N.M., says that in online education, such tiny bursts can teach just as well as traditional lectures when paired with assignments and discussions.

Skeptics, however, argue that lectures involving sustained arguments, such as literary analyses or explanations of complex equations, cannot be boiled down in this way.

At San Juan, microlectures were introduced in a new online degree program in occupational safety in the fall and are now expanding to subjects like reading, tribal governance, and veterinary studies.

San Juan administrators are impressed with the results, as enrollment in the occupational-safety program, which uses microlectures exclusively, quickly ballooned to 449 by its second semester. They hope to expand the use of microlectures to as many online classes as possible. (An agreement with Texas A&M University that allows San Juan students to transfer credits toward a four-year degree may also have been an attraction.)

Instructors at other colleges, such as York University, in Toronto, have experimented with lectures that last about 20 minutes — particularly in online classes, where students can quickly grow bored watching a talking head on their computer screens. But San Juan's systematic use of the 60-second lecture may take the shrinking-lectures trend the furthest.

The microlectures, which last from 60 seconds to three minutes, do little more than introduce key terms and concepts. In an online class on academic reading, for example, students learning about word construction listen to an 80-second microlecture that introduces word parts and explains that they have a bearing on the meaning of words, said Michelle Meeks, a reading instructor. Students then use an online dictionary to look up a list of 25 prefixes, suffixes, and word roots, writing up their findings and discussing them on a message board.

Sandra Tracy, dean of the school of extended learning at San Juan, said she initially doubted that microlectures could be effective — they just didn't seem long enough.

"At first it's one of the most unnatural things," Ms. Tracy said. "But it's an intriguing concept — it gets you away from the idea of a talking head; it's more like snapshots of learning."

Thanks to a flexible course-management system and standardized lesson plans — microlecture, assignment, and discussion — course development is relatively quick: The occupational-safety program had four courses up and running in two months.

Ms. Meeks, who condensed a 10-minute lecture into the 80-second microlecture she uses in the word-construction lesson, said she was initially wary of the format. But when she replaced the in-depth explanations of word parts in the 10-minute lecture with a brief introduction to key words, little seemed to be lost except "verbiage," she said. Student feedback has been almost entirely positive, Ms. Tracy said, and administrators now recommend that new distance-learning programs use microlectures.

The format encourages active learning, says David Penrose, a course designer for SunGard Higher Education and online-services manager for San Juan College. He developed the microlectures for San Juan. While the quantity of information that a 60-second microlecture can convey is limited, he said, it primes the student to learn from completing the assignments that follow the microlecture.

"It's a framework for knowledge excavation," Mr. Penrose said. "We're going to show you where to dig, we're going to tell you what you need to be looking for, and we're going to oversee that process."

Richard Fiske, a first-year student in Ms. Meeks's reading class, said that he sometimes wishes the microlectures would elaborate more on certain areas but that they function well as lesson overviews and give enough information for him to complete assignments and participate in discussions.

In recent years, many distance-learning programs have adopted other short-form pedagogical tools, said John G. Flores, executive director of the United States Distance Learning

Association. Podcasts, many of which introduce a topic briefly and encourage listeners to perform their own research, have become increasingly popular with distance-learning programs, he said.

Mr. Penrose said microlectures are so new at San Juan that they have encountered little opposition, but administrators and instructors said the format may not work as well in classes requiring sustained discussion or explanations of complicated processes.

Ms. Tracy, who said she hoped to expand the use of microlectures to as many of San Juan's online courses as possible, said the format works best when instructors wish to impart small chunks of information. In classes requiring extended discussions, like English-literature courses, microlectures fall short, she said.

And Chris Baade, an assistant professor of mathematics at San Juan who is filming a series of two-minute videos that demonstrate how to work through several algebra problems, said she never considered using the microlecture format. Simply using keywords would leave students without crucial step-by-step explanations of how to solve the problems, she said.

Dennis De Turck, who runs a 60-second-lecture series at the University of Pennsylvania that Mr. Penrose looked at before devising San Juan's program, said such short lectures — used at Penn to showcase its faculty rather than provide formal academic instruction — have their pedagogical limitations.

"In a lot of classes, the point is to follow a sustained argument or to build one piece by piece," said Mr. De Turck, dean of the College of Arts & Sciences at Penn. "A 60-second impressionistic overview is useful, but it's not going to be the be all and end all."

HOW TO CREATE A ONE-MINUTE LECTURE

Professors spend a lot of time crafting hourlong lectures. The prospect of boiling them down to 60 seconds — or even five minutes — may seem daunting. David Penrose, a course designer for SunGard Higher Education who developed San Juan College's microlectures, suggests that it can be done in five steps:

- 1.** List the key concepts you are trying to convey in the 60-minute lecture. That series of phrases will form the core of your microlecture.
- 2.** Write a 15 to 30-second introduction and conclusion. They will provide context for your key concepts.
- 3.** Record these three elements using a microphone and Web camera. (The college information-technology department can provide advice and facilities.) If you want to produce

an audio-only lecture, no Webcam is necessary. The finished product should be 60 seconds to three minutes long.

4. Design an assignment to follow the lecture that will direct students to readings or activities that allow them to explore the key concepts. Combined with a written assignment, that should allow students to learn the material.

5. Upload the video and assignment to your course-management software.

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