

# Your Turn

by Richard B. McKenzie

## Faculty: Embrace the Tech-Supported Classroom

**I've become a passionate evangelist for technology in the MBA classroom.** I am so convinced that video and audio technology offer a win/win situation for business schools that I don't believe there really is a question about whether schools should exploit such technologies for class use. The real question now is who's going to lead and who's going to play catch-up.

Too many business professors have distanced themselves from new classroom tools, either because they're intimidated by the technology or they're unwilling to take the time to revise their course materials. Faculty aren't simply missing incredible opportunities to enhance their in-class sessions—they're also putting their schools at a disadvantage. In today's competitive market, the school that deploys the best technology may be the school that attracts the best students.

I know that technology can radically transform an MBA classroom because I've seen how it enabled me to revise both the content and delivery of my microeconomics course. Not only did technology provide a supplemental learning tool for students, it made their study time more efficient and classroom time more valuable for both my students and me.

The course revision started about a decade ago as I strove to make the class more relevant, particularly to older and fully employed executive-level students. I found that many of these students remembered their undergraduate economics courses as

having little connection to management issues, and they were not interested in spending much time on microeconomics as grad students. Another difficulty I encountered was finding a microeconomics textbook designed exclusively for MBAs.

I developed my own textbook, which included a heavy dose of conventional microeconomic theory, and an equally heavy dose of the growing subdiscipline of organizational economics. Together they illustrated how a relatively few economic principles and lines of argument could be used in understanding management problems and solutions. In effect, I integrated what used to be a second-year course on "managing through incentives" into my core course on microeconomics—but I wasn't able to do so fully or with great success until I began to take advantage of rapidly advancing classroom technologies.

A half dozen years ago, the Merage School of Business at the University of California in Irvine began streaming and capturing for downloads the review sessions we organized for our fully employed and executive MBA students. At about the same time, I began holding my "office hours" early in the morning at a Starbucks near campus, where I went every morning to get my caffeine fix. It was convenient for my students to see me at this Starbucks in the morning, as opposed to getting off from work during the day and finding on-campus parking to see me in my office at school.

One morning early in the course, three students had set up appoint-



ments a half hour apart to talk over a line of argument they did not understand. Each student asked the same question, virtually word for word. After spending an hour and a half talking to the students individually, I realized there was a better way of dealing with such

repetitive questions. All I had to do was record a video module on the topic and post it on the Web for streaming and downloading. Indeed, I found that, when not interrupted by students, I could record this particular explanation in less than ten minutes, and then I never had to repeat it!

That year, I developed 18 video modules to deal with other repetitive questions from students. The next year, I increased the video modules to 20. Last year, when my textbook was being prepared for publication, I ran the count of video modules to more than 60. Most are 12 minutes or less, although they total more than ten hours. Together these modules cover core topics that all MBA students should have a nodding acquaintance with and more complicated issues that students rarely understand when they encounter them for the first time. Frankly, most of the video modules cover topics from my lectures that I consider tedious and boring, even though they are essential to a student's understanding of microeconomic theory.

The video modules now have been made downloadable to both laptops and video iPods, in versions both with and without the video. I consider these modules a win for the students for two reasons:

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■ **The students love them.** So far, when I ask the classes to rate the modules' educational value, students have given them ratings of anywhere from 9.1 to 9.7 on a ten-point scale.

■ **The students use them.** Students report spending an average of four hours a week with the modules, with only a slight reduction in the time spent reading the textbook. Many watch or listen to the modules on their laptops and iPods while commuting to work, traveling on business trips, and exercising.

The video modules also are a win for me:

■ **They save time.** I created the first modules two years ago. I figure that, for every hour I spent producing the modules, I saved two hours dealing with student issues outside of class—and that's for last year alone. I expect to save at least the same amount of time for every year remaining in my career. In the end, I estimate I could save at least 20 hours for every hour that I have spent producing the modules.

As suggestive proof of the time benefits to me, the count of e-mails I have received from students this year is down by a third from last year. The number of students who have shown up for my early morning office hours with repetitive questions is probably down 90 percent. When students do show up, the discussion is often about the application of class principles to their work situations. So not only have I improved the quality of interaction I have with students, but I have freed up more of my own time that I can devote to research.

■ **Class time is more efficient.** Because the modules have allowed me to offload from my lectures the basic but important concepts that I prefer

not to deal with in class, I've been able to move through material at a faster pace and expand my course content at the same time. This year, I completed in eight lectures the same material that took ten lectures last year. I've also felt that I had more time for class discussion of topics of interest to me—and, I surmise, to my students. Over the past five years I may have doubled the array of economic and management topics I've been able to consider in my ten-week course.

■ **Class attendance remains high.** Students have more reason to come to class, since discussions are now reserved for dealing with issues that can't be dealt with effectively through video technology.

These same video modules have been used to support the publication of the textbook I co-wrote with Dwight Lee, *Microeconomics for MBAs*, released in January 2006 by Cambridge University Press. This quarter, we also made the textbook an audio book, with all relevant tables, figures, and equations designed to pop up on the screens of laptops and iPods when they are covered in the readings.

Lee and I are not alone in offering podcast technology to complement a textbook—there's been a tidal wave of other publishers moving in that direction. For proof, go to iTunes and look up the available video/audio content under education. It has exploded. Our own modules can be accessed at [www.gsm.uci.edu/~mckenzie/](http://www.gsm.uci.edu/~mckenzie/). Modules don't have to be highly polished to be effective, though leads, endings, and music can be added easily.

My co-author and I have concluded that downloads of the modules can only increase interest in our

textbook, and so we have no concerns about protecting our intellectual property. In fact, we are pleased that professors and students from around the world report downloading the modules. The download potential expands my classroom at zero added cost to me.

But technology such as this has even more far-reaching implications—for business schools, not just textbook authors. Technology can become a factor in helping students decide which program to attend, particularly fully employed and executive MBAs. The biggest problem these students face is too little time, given the demands of work, family, and studies. More and more of these students will be looking to relieve their serious time constraints by covering some of their class assignments while doing other things, such as commuting, traveling, and exercising. Audio and visual technologies permit busy students to multitask.

Therefore, to both faculty and administrators I would say: It's time to embrace the tech-supported classroom. Technology can do so much to enhance our pedagogy that it *must* be considered as we put together our course plans. Imagine how technology can allow business schools to recruit and retain more and better students. Imagine, too, that these students will be willing to pay a premium price to attend a program that caters so well to their needs. The use of technology in the b-school then becomes not just a good idea, but an essential component of the school's strategy for survival. ■

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