WHAT’S A “CLICKER”? TEACHING WITH NEW TECHNOLOGY

By Meredith Heagney

Times change, and so do the tools of teaching. Many Chicago alumni remember their Law School days and think of filling loose-leaf pages with hurried scribbles, in a desperate effort to get down what the professor scrawled across the chalkboard. Answering a question meant raising your hand or, conversely, the dreaded cold call. Commenting on another student’s work meant passing around a hard-copy draft, and not understanding a lecture the first time around was a potentially dangerous problem.

Today’s students live in a much different world, one in which professors use technology to help them teach, challenge, and assess students. Rest assured: the cold call is alive and well. But professors also have other tools for checking student knowledge, such as handheld clickers that poll the whole class on an answer instead of just one or two people. Some faculty still write by hand on the board, but many have moved to presentation software such as PowerPoint, often powered from their iPad or another tablet. Students take notes on their laptops and, in some classes, post their homework responses on a blog so they can comment on each other’s work. At least one professor puts his lectures on YouTube for students to review later. Several professors are active on Twitter, which can be a teaching tool in a different way; it tells students what their professors are reading and thinking about, which can often help understanding in class.

Elizabeth O’Connor Chandler, Director of the Center for Teaching and Learning at the University, applauds professors who use more advanced technologies, such as clickers, which remain relatively rare on campus. “Very few people take advantage of technology because it takes a lot of set-up time and reconfiguring of your course,” she said. But the number is growing as educators realize the benefits. When used thoughtfully, technology can both deepen learning and make it more efficient, Chandler said. The law professors who have embraced new methods are “demonstrating a real commitment to student learning and improving teaching,” she said.

Chandler is especially impressed by “clickers,” which are handheld devices used by teachers to poll classes en masse with multiple-choice questions. Professors Saul Levmore, Lee Fennell, and Eduardo Peñalver use a brand called the i-clicker in class. Several brands of clickers are on the market, and the technology is becoming increasingly popular for every level of education; the New York Times reports that just two of the many companies that make clickers have sold nearly nine million units in under a decade. The i-clicker brand was invented by four physicists at the...
University of Illinois and is now owned by Macmillan in New York. The students’ device costs about $40 each.

The clickers give a professor instant, easy feedback on where the class is, in terms of understanding. “That's one of the most important things in teaching, diagnosing where the misconceptions are in class,” Chandler said. “The useful thing from a student’s perspective is that it offers them an opportunity to recognize differences in thinking within the class and to engage other students immediately to discuss those differences. This process helps everyone in the class to clarify misconceptions and to arrive at a point of relative agreement on course material.”

At the Law School, the seemingly straightforward tool—how hard can multiple-choice be?—can be used in both concrete and abstract questions.

Levmore, who likes to keep people on their toes, asks questions like this in his Torts class for 1Ls, via clicker:

On average, which rule does a negligent defendant prefer when it comes time for a court to hear evidence about plaintiff’s damages?

A. Take facts into account as known at the time the tortfeasor misbehaved
B. Take facts into account as known at the time complaint was filed
C. Take all facts into account up to the time of trial
D. Any of the above will do, but law seems to choose (which one is the rule?) based on its compensation goal
E. Same as D, but based on an apparent goal of controlling litigation costs
(There are reasonable arguments for both D and E, by the way.)

Levmore and his colleagues who use clickers say their teaching benefits by being able to involve every student in the class. They find out whether the class as a whole is grasping the concepts taught and if they can move on to the next thing. They often raise more questions and encourage more conversations: “I see most of you said A, but 35 percent of you said B. Any of you want to explain why you did that?” Sometimes, a lively discussion or debate will ensue. It’s also anonymous; students can answer honestly without worrying about looking silly.

“The Socratic method is not what it used to be,” Levmore said, because this generation of students is more self-conscious and sensitive to criticism. To a devotee of the method, like him, that’s not exactly good news. But of course, calling on students one at a time has its limits too. Sometimes, if he’s questioning one student, he gets the sense others are just typing down what he says mindlessly, without really thinking. “The i>clicker gives somewhat of an opportunity to be Socratic with everyone at once,” he said.

Levmore limits their use. He doesn’t use them in every class, and when he does, only for 10–20 minutes. He usually has the students complete a worksheet before class and then plug in their answers via clicker. “I like the feedback. I find my questions can be harder afterward,” he said. “Class can go much quicker—I’m not pulling teeth.”

Fennell also used them when she taught Torts in the fall. She tends to base her clicker questions on a hypothetical situation or a real case that the students have not yet encountered. She asks them to choose how a court would rule in each case. After everyone has committed to an answer, she asks a few people to explain why they chose the way they did.

“It engages them a little bit more. It helps make the class a little more interactive and immediate,” she said. Fennell tries to use them at least once every class session. Sometimes it’s for simple polling questions, such as, “Are you OK to move on?” or “Have you been taught the Coase theorem before?”

A 1L student in Levmore’s Torts class with his clicker.

The 1Ls who use the clickers agree that it’s nice to be anonymous when you’re wrong, but say the clickers’ benefits don’t end there. “I love it as a knowledge test,” said Erica Jaffe, ’15. Because each class only has one test or paper, and it’s at the end, “you never know if your knowledge is quite where it needs to be.”

Jaffe acknowledges that when she first heard she had to buy the clicker, she was a little miffed, thinking, “I didn’t come to law school to do multiple choice.” But she soon saw the questions can be very complex, abstract, and thought-provoking, she said.
Becca Rickett, ’15, said the clickers change the way the students behave too. When the professor is cold-calling, students who aren’t cold-called try not to raise their hands because they don’t want to appear to be showing up the student who might not be giving a stellar answer. With the clickers, hands are free to shoot up for the subsequent discussion because there’s no one they’re stepping over, she said.

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The clickers are, of course, not the only tech tools embraced by professors. Professor Randy Picker uses a whole slew of methods that enhance his classroom teaching, starting with a blog for his Technology Policy seminar. Picker assigns readings to students, and they write blog posts in response. In class, Picker talks about both the readings and the student posts, and students are encouraged to comment on each other’s work. A recent student post focused on the limitations of the “safe harbor provisions” of the Digital Millenium Copyright Act when it comes to social networks or search engines that aren’t housed on common servers but rather in the grid of its members’ computers. The post was written in response to a section of Hollywood’s Copyright Wars by Peter Decherney. The student’s writing, along with other posts from the week, was used as a jumping-off point for a classroom discussion, Picker said.

“The blog creates a smooth functioning for my seminar that I don’t think existed beforehand,” he said. “It facilitates exchanges of ideas between students.”

For his Antitrust class, Picker posts all his course materials online, where anyone can see them at: http://picker.uchicago.edu/antitrust/Syllabus.htm. He also makes YouTube videos of his PowerPoint slides, for which he provides a voiceover explanation. He purposely posts these in a public medium, he said. He’s been somewhat inspired by the “MOOC” movement, which stands for massive open online course, wherein universities open their courses to anyone with an Internet connection.

“There’s no reason for teaching materials not to be open and available,” said Picker, who gets emails from students and professors in other countries and the occasional government regulator. It takes a lot of extra time to record voiceovers for his slides, but it’s worth it if it helps students,
he said. He saw a big spike in views right around exam time.

Chandler, from the Center for Teaching and Learning, said there’s no reason to “limit people’s access to materials that help them learn. Technology gives us an opportunity to repeat, repeat, repeat. Isn’t that what a good learner does, anyway?”

Eduardo Peñalver, a new Professor of Law who teaches both Property and Land Use, is another high-tech academic. He uses the clickers, which he also used in his last position at Cornell Law School. But he also uses video clips and Google Maps.

For example: When teaching students about a case that involves a coastal neighborhood and a dispute over whether to dredge a channel to a marina, he used Google Maps to show an aerial view. This perspective revealed something interesting about the case, between the homeowners’ association that wanted to dredge the channel and the residents who didn’t. It turned out that only about half the residents had docks behind their houses; that is, only about half of them would make any use of that channel, even though all had to help pay for it.

“It helps bring home the nature of the dispute, because visualizing it helps you understand it,” he said. Peñalver also uses video clips, sometimes of news reports and sometimes of movie scenes that drive home a specific point.

An irreverent but memorable example is when he has shown a clip from *Drag Me to Hell*, a 2009 horror-comedy about a gypsy curse. He uses a clip where the cursed character tries to give her curse back to the old woman who cursed her in the first place, who is now dead. Peñalver uses this clip to illustrate the law of gifts and the necessary elements of a gift: intent, delivery, and acceptance. That is, a dead person can’t accept a gift.

Of course, technology has its limits. Computers crash, iPads freeze, and clickers run out of batteries. That’s why Fennell said she takes precautions. “I never go into class without a printed set of hard-copy notes that I can use if the technology goes down. I try to always be prepared for it to go wrong,” she said.

As much as a techie as Picker is, he said there’s no need to worry about technology and online education replacing the face-to-face value of attending class. After all, he said, those in-class conversations are much of the point of the exercise of studying the law.

“Technology isn’t a substitute,” he said. “Law school is not fundamentally about just conveying facts. It’s really about a method of inquiry that requires a certain amount of examination and mistakes.”