

<http://chronicle.com/weekly/v50/i45/45a02701.htm>

Wired for Cheating

Some professors go beyond honor codes to stop misuse of electronic devices

By BROCK READ

Last winter, when some graduate business students at the University of Maryland at College Park accused classmates of cheating on a midterm exam, a group of professors decided to take matters into their own hands.

At the start of the final exam for "Principles of Accounting I," the team of professors who taught the popular course posted on its Web site an answer key loaded with false responses to the 30 multiple-choice questions. As some 400 students deliberated over their answers, the exam proctors sat and watched -- ignoring occasionally suspicious noises coming from a few cellphones, according to some of the test takers.

When the professors then compared each student's paper with the false key, they found that a dozen tests matched the fake answers almost exactly. According to Howard Frank, dean of the business school, there was only one reasonable explanation: 12 of the students had cheated.

All of the implicated students either admitted to using their Internet-enabled cellphones to look up the answer key online, or were convicted of having done so by a group of professors and students. Those students received a grade signifying "failure due to academic dishonesty."

The professors received a standing ovation at a faculty meeting, and Mr. Frank called them "heroes" for executing the bold plan. But the "sting" aspect of the exam touched off a minor controversy at College Park. James Jones, director of the university's Student Legal Aid Office, wrote a letter to the student newspaper calling the tactic "ethically wrong." Some students speculated that the university might be vulnerable to claims of entrapment.

The cellphone episode highlights what some professors and administrators say is a growing problem on their campuses: More students are using cellphones, personal digital assistants, and Internet-connected laptops to cheat during exams. In small classrooms monitored by vigilant proctors, the devices offer few real opportunities for cheating. But in large courses like introductory accounting, technologies that were initially thought of as merely distracting are now more likely to be viewed as high-tech crib sheets.

With a cellphone or a PDA, an enterprising student can exchange notes with other exam takers, receive

text messages from classmates outside the lecture hall, or search the Web. And the technology can make cheaters hard to spot.

"I suspect that there is a lot of stuff going on that people don't know about," says Mr. Frank, noting that professors at his institution had banned electronic devices and given students several different sets of exam questions even before the cellphone incident occurred.

"In retrospect, the cellphone thing has been a boon," according Mr. Frank, because it led students to discuss the university's honor code -- and drove professors to enforce it more aggressively.

Many administrators elsewhere say their institutions are trying to follow a similar course. Some are revisiting longstanding honor codes in response to technology. Others are looking for technological solutions to cheating, or are encouraging professors to set their own guidelines for the use of technology during tests.

If cheating opportunities are not cut off in advance, they will prove both convenient and tempting to students who would never think of, say, surreptitiously writing notes on their hands, says Edmond S. Cooley, an assistant professor of engineering and director of information technology at Dartmouth College, who has used PDA's and tablet computers in his courses for three years. "There's a little bit of larceny in everybody," he says. "It's mostly just a question of, What's the price?"

Variety of Responses

While many faculty members say they are content to keep an eye on their classrooms for evidence of untoward activity, some use more-aggressive methods for combating high-tech cheaters. Among other steps, professors may:

- **Ban electronic equipment during exams.** At College Park, more and more professors flag their exams with warnings that any student in possession of a cellphone or PDA will automatically fail, according to Mr. Frank.
- **Create multiple versions of a test.** By now, most professors have learned not to post answer keys -- either online or outside the classroom -- until every student has completed the exam. But in some large courses at the University of California at Berkeley, each student receives an exam with multiple-choice questions in randomly generated order. "No two students are getting the same test," says Alexander J. Cuthbert, director of educational technology at Berkeley's Digital Chemistry Project. Consequently, students who try to get around the university's no-electronics policy won't be able to pass answer keys back and forth on phones or PDA's.
- **Embrace wireless technology, but control it.** For quizzes in his "Integrated Circuits" course at Dartmouth, Mr. Cooley has had his students work on the PDA's that they had used throughout the semester. He posted the tests on a course Web site and designed an authentication code that allowed students to view and complete the exams only when they logged on from the proper classroom at a specific time. He says his system also keeps students from hunting for answers on

the Web while they are taking the quiz.

Modified Honor

If they choose, professors at Dartmouth can even disable wireless connectivity in the classroom, according to Mr. Cooley.

"Some universities are trying to shut off wireless," he says, "but you have to be careful to make sure there's not one person in the back of class who's getting reception."

Some colleges have acknowledged the ubiquity of electronic devices, as well as concerns about cheating, by refocusing codes of academic conduct.

Traditionally, most colleges with honor codes have let students take their exams unsupervised. But at College Park, faculty members have adopted what they call a "modified honor code," which requires that every exam be proctored by a professor, who can watch for both high-tech and low-tech forms of cheating. Students can also take an optional pledge stating that they completed a test without any outside help.

But at Dartmouth, among other colleges, faculty members have endorsed more-liberal codes, which ask each student to be responsible for his or her own academic integrity and allow professors to set their own guidelines for monitoring tests.

And nearly all institutions continue to let professors make and police their own policies on the use of cellphones and PDA's during tests.

Mr. Cooley says Dartmouth's academic honor code and its provisions on computer use in and out of the classroom adequately cover concerns about high-tech cheating. "By and large," he says, "professors are given a free hand in how they choose to administer exams."

High-tech cheating is yet another reason for colleges without honor codes to adopt them, says Donald L. McCabe, a professor of organization management at Rutgers University at New Brunswick who founded the Center for Academic Integrity, a research center in Durham, N.C. "I'm a big believer that what we need to do is engage students in a dialogue about cheating," he says. "The research I've done suggests that honor codes have reduced the level of cheating almost everywhere they've been applied."

Just how widespread is such technological abuse? That's hard to say, according to Jason Stephens, a research assistant at the Carnegie Foundation for the Advancement of Teaching. But the potential for electronic cheating is considerable.

A Culture of Cheating?

In a recent survey, Mr. Stephens found that about two-thirds of high-school students admit to at least minor cheating on quizzes and tests, and he estimates that college students are not far behind. While most students acknowledge that cheating is wrong, many find ways to justify subterfuge in their own work, he

says.

"Technology further facilitates that sort of rationalization," he says. "Students can say, 'Why should I be forced to memorize a fact or a formula when I'm going to have this information at my fingertips online?'"

Survey courses, Mr. Stephens says, may be particularly tempting targets for technology-savvy students because the classes are harder to police and feature fairly objective grading standards. By the time most students get to college, he argues, they have already used the Internet, if not portable devices, to cut corners on tests and assignments.

"I'd say that between laptops, cellphones, PDA's, and pagers, probably 95 percent of my students come in to class with some type of electronic device," says Gwen Griffin, a professor of English at the University of Minnesota at Mankato. "Our students are in an age group where they've grown up with this technology and they don't know any different, so you can't just eliminate it completely."

Few institutions release the details of student-conduct hearings, so it is difficult to determine how many accusations of cheating involve electronic technology.

Last year a small number of students at DePaul University were tried for cheating with PDA's, and a student at the University of Chicago was alleged to have used a variety of machines to steal answers to exams.

Representatives of both universities declined to comment on the cases.

Some professors have banned wireless devices from class altogether -- not because of the prospect of cheating, but simply because they are distracting.

"It's become a cultural issue, much like using a cellphone in a restaurant," says Mr. Cooley, noting that professors aren't the only ones who don't want cellphones or PDA's in the classroom. "Students have pushed back against the use of laptops and cellphones in the classroom because that's just a lot of noise."

At Mankato, Ms. Griffin added a clause to each of her syllabi prohibiting electronic devices because students complained that their peers' computerized note taking and PDA game playing was making it hard to follow her lectures. Since she banned the devices, she says, she has had few complaints.

"I used to have my share of problems with students playing games on their PDA's," she says. "One student actually had headphones on while he was using his in class. I asked him what he was doing, and he told me he was taking notes."

At the time, however, she hadn't yet started her lecture.

<http://chronicle.com>

Section: Information Technology

Volume 50, Issue 45, Page A27

[Front page](#) | [Career Network](#) | [Search](#) | [Site map](#) | [Help](#)

[Copyright](#) © 2004 by The Chronicle of Higher Education