

Government to Require Distance Education Spy Cameras

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Tucked away in a 1,200-page bill now in Congress is a small paragraph that could lead distance-education institutions to require spy cameras in their students' homes.

It sounds Orwellian, but the paragraph — part of legislation renewing the Higher Education Act — is all but assured of becoming law by the fall. No one in Congress objects to it.

The paragraph is actually about clamping down on cheating. It says that an institution that offers an online program must prove that an enrolled student is the same person who does the work.

Already, the language is spurring some colleges to try technologies that authenticate online test takers by reading their fingerprints, watching them via Web cameras, or recording their keystrokes. Some colleges claim there are advantages for students: The devices allow them to take tests anytime, anywhere. Many students must now travel to distant locations so a proctor can watch them take exams on paper.

But some college officials are wary of the technologies, noting that they are run by third-party vendors that may not safeguard students' privacy. Among the information the vendors collect are students' fingerprints, and possibly even images from inside their homes.

"This is taking a step into a student's private life," said Rhonda M. Epper, co-executive director of Colorado Community Colleges Online. "I don't know if we want to extend our presence that far."

The officials also want flexibility to comply with the proposed law. They worry that the government will force them to use a particular method that could be too expensive or that would emphasize exams over other assessments. They also complain that the provision implies that cheating is more of a problem among students online than among students in a classroom.

Biometric Solutions

Three technologies, which vendors have been promoting at college conferences and which colleges are evaluating, illustrate the promises and pitfalls of this kind of monitoring.

Troy University, in Alabama, has been testing a gadget that features a mirrored sphere suspended above a small pedestal. Called Securexam Remote Proctor, it's about the size of a large paperweight and plugs into a standard port on a home computer. The pedestal includes a groove for scanning fingerprints, a tiny microphone, and a camera. The sphere reflects a 360-degree view around the test taker, which the camera picks up.

Students are recorded during exams, and anything suspicious — such as someone else's presence or voice in the room — is flagged.

To use the system, a student sits in front of a computer and places a finger on the pedestal. Securexam checks whether the digital fingerprint and the image of the student match those the student provided at registration. Then the test opens online via a course-management system. The student is prevented from viewing anything else online.

The system is not cheap. Students pay \$150 for the device. Further, it works only with the Windows operating system and an Internet Explorer browser, creating a problem for students who have Macs, for instance.

Software Secure Inc., based in Cambridge, Mass., developed the device with \$1.1-million in seed money from Troy. In return, the university gets the first 10,000 Securexams that the company produces. If it sells more than that, the university receives a share of the proceeds.

By the end of this fall, the university anticipates that about 800 of its 17,000 eCampus students from across the world will have used Securexam. Thousands more will begin using the device in January.

World Campus, the online arm of the Pennsylvania State University system, is testing another system called Webassessor. It uses proctors, Web cameras, and software that recognizes students' typing styles, such as their speed and whether they pause between certain letters. Students purchase the cameras for \$50 to \$80 apiece. They allow proctors to view a student's face, keyboard, and workspace.

The Phoenix-based provider of the system, Kryterion Inc., employs proctors who remotely observe and listen to as many as 50 students at a time. If the keystroke pattern of a student who is taking an exam does not match the one he or she provided at registration, or if the image of a student taking an exam does not match a digital photograph that the student provided at enrollment, then the student cannot start the exam. A proctor can also stop a student who is acting suspiciously from completing an exam. Students must have a broadband connection to use the service.

Kryterion charges institutions \$20,000 to customize the software and for training. It also charges colleges each time students sit for an exam.

World Campus has been trying out Webassessor this summer on undergraduates in two courses. "At the moment, things look promising for a complete rollout," says Rick L. Shearer, interim director of World Campus.

Challenging Questions

Several other universities are forming partnerships with Acxiom Corporation. The company's system relies on test takers' answering detailed, personal "challenge" questions. Acxiom, based in Little Rock, Ark., gathers information from a variety of databases, including criminal files and property records. The company uses the data to ask students questions, such as streets they lived on, house numbers, and previous employers. If students answer the questions correctly, they proceed to the exams.

National American University Online is testing the system on its students, and the Colorado community-college consortium is also considering using it.

Jeffrey L. Bailie, dean of online instruction for National, says he anticipates that the system will be used on students when they take final exams or other high-stakes assessments. “We want to take just one added step to make sure that the person on the other end is who they’re reporting to be,” he says.

He declines to reveal how much the system costs. But Michael A. Jortberg, who is leading Axiom’s higher-education efforts, says it costs roughly \$10 a student.

Unfair Burdens?

Despite the lure of these technologies, many college officials have decided to wait to test them on their students, noting the cost. Furthermore, officials say, it’s unclear what requirements the Education Department would impose on institutions to comply with the proposed law.

“It’s going to reduce access,” says John F. Ebersole, president of Excelsior College, an online institution based in Albany, N.Y. “It’s going to increase costs.”

Other officials are disturbed that the proposed law singles out online education.

“We’re feeling a little picked on,” says Lori McNabb, assistant director of student and faculty services at the UT TeleCampus, the online arm of the University of Texas system.

She says there’s no evidence that cheating or fraud happens more often with its students than with students in face-to-face classes.

How do professors know that a student enrolled in a large lecture class is the same one handing in an assignment or test, she asks?

She and others say online instructors rely more on discussions, writing assignments, quizzes, group work, and “capstone” projects to judge their students’ performance, and less on big exams. Tests, when they are administered, are often randomized so students in the same class get different questions, which must be answered quickly, making it difficult for those unfamiliar with the material to take tests for students. Instructors become familiar with students’ writing styles so they can spot fraudulent work, officials add.

Mr. Ebersole, despite his worries about reduced access for students, does see one upside to the proposed law. If the provision causes online colleges to document that their enrolled students are indeed the same ones completing course work, online education could garner more respect, he says.

“If it raises confidence and credibility in the eyes of regulators and traditional educators,” says Mr. Ebersole, “it’s worth it.”