

ONLINE

Marijuana use is almost a rite of passage for many college students. But how is a student to tell if his or her indulgence has become excessive?

San Diego State University believes it may have the answer.

Psychologists at the university have created an online program that asks students about their pot use, and then tells them how their habits compare with those of other students.

Students link to the program from the university's Web site and can answer the questions anonymously and at their leisure.

Frequent marijuana users often overestimate the extent to which their peers use the substance, so the self-guided test can be a wake-up call to kick the habit or get help, says Douglas J. Van Sickle, acting dean of students at San Diego State.

The program, called e-TOKE, is now being tested at San Diego State and five other institutions: Colgate and Duke Universities, Texas A&M University at College Station, the University of Nebraska at Lincoln, and the University of San Diego.

Beginning in April, San Diego State plans to sell subscriptions to the program to other universities for \$575 a year.

E-TOKE was modeled on an online test called e-CHUG that San Diego State developed to help students determine whether they had a drinking problem.

Mr. Van Sickle says that e-CHUG has prompted some students who drink excessively to seek help from university counselors. Many of the students who sought help began revealing to counselors that they also had a problem abusing marijuana, he adds.

"We were surprised at how open students were," says Mr. Van Sickle.

Leslie Wilson, a psychologist at the university, says the online tests often make therapy sessions with students more constructive.

Students are "often more willing to look at the consequences of their use when they see the information as coming from themselves" rather than from a therapist or from literature, she says.

Mr. Van Sickle says about 117 colleges use e-CHUG, and many are awaiting the arrival of e-TOKE.

The program also calculates how much time a student spends smoking marijuana in a month, and how much money he or she spends monthly and annually on the substance.

E-TOKE reminds students that the money could have been used to purchase other products, like CD's or clothing, and tells them about the health risks associated with smoking pot.

It tells students, for instance, that those who smoke marijuana more than once a day "tend to have more social and physical problems than those who only use it in the evenings."

E-TOKE also states, based on research by university officials, that 23 percent of students at San Diego State use pot at least once a month.

—ANDREA L. FOSTER

INFORMATION TECHNOLOGY

<http://chronicle.com/infotech>

A Degree You Hope You Never Need

Colleges offer online courses in preventing and responding to terror strikes

BY DAN CARNEVALE

SINCE SEPTEMBER 11, 2001, Rebecca Vieira's job helping federal agents to investigate crimes at a New England naval station has expanded to include protecting the base from terrorist attack.

As a result, she is taking online courses from the University of Massachusetts at Lowell, which has a certificate program in homeland security. The program includes courses on the history of terrorism, weapons of mass destruction, and how to manage a security team responsible for protecting a large area.

"After 9/11 took place, we had to be ready for anything and everything," she says. "Anything that looks suspicious, we have to be aware of."

Ms. Vieira, 41, is also completing a bachelor's degree in criminal justice at Lowell. Because she is taking all of her courses online, she has been able to keep her job as a civilian investigative assistant at the Portsmouth Naval Shipyard, on the Piscataqua River between New Hampshire and Maine.

In addition to applying what she learns to her current job, she hopes that her new skills will help her land a better-paying position amid the growing demand for workers who have knowledge of homeland security.

To meet that demand, hundreds of colleges around the country have created programs on those issues. Many of the courses have been put online, to meet the needs of students working in the field. Some institutions offer certificates; others, undergraduate and graduate degrees. But whatever form the programs take, colleges seem to have no problem filling the virtual seats.

The programs originated with students from the military and National Guard in mind. But to the surprise of many college officials, students from other fields, like business and municipal government, have enrolled as well.

Government agencies and businesses are not necessarily looking to create full-time positions focused on fighting terrorism, program officials say. But they do want their workers to be more broadly familiar with homeland security so employees can apply it to their day-to-day duties.

An online format is ideal for these programs because it allows students to keep

says Mr. Hall. "You have to deliver the education where the students need it and when they need it."

PLANNING FOR DISASTER

Although terrorism is a primary topic of the programs, most of them offer courses that are broad enough to include discussions of any widespread emergency, including natural disasters.

The University of Washington, for instance, runs an online master's-degree program called "Strategic Planning for Critical Infrastructure." It specializes in teaching managers how to protect transportation systems, electric grids, water systems, and other essential infrastructure.

"Our approach is really broader than an antiterrorist type of approach," says Hilda J. Blanco, chairwoman of the campus office of urban design and planning. "Our approach is to make it more resilient to any breakdown."

The Washington National Guard asked the university to create the program before September 11, 2001, and to put it online. "The National Guard said that it has to be online if it's going to appeal to our people," Ms. Blanco says. "Some of our students are actually able to take this course while they're deployed abroad."

As the program grew in popularity since getting under way in 2003, she says, it has attracted more than just military and National Guard personnel, who make up about 40 percent of the participants. Another 40 percent of the students are from private businesses, including locally based Boeing and

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Students with homeland-security jobs "don't have the luxury to take a year off." Their education in the subject must be delivered "where the students need it."

their jobs in the areas they are trying to protect while educating themselves, says Randolph Hall, co-director of the Center for Risk and Economic Analysis of Terrorism Events at the University of Southern California. They can also share their real-world experiences with other students in the online courses, he says.

"The students don't have the luxury to take a year off to complete their education,"



Rebecca Vieira, who helps protect a U.S. naval base, takes online courses in homeland security at the University of Massachusetts at Lowell.

HEBB SWANSON FOR THE CHRONICLE

INFORMATION TECHNOLOGY

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other defense contractors. The other 20 percent come from state and local government agencies.

Colleges should work to fill the growing need for training in homeland-security issues, says Stanley B. Supinski, deputy for education and training at the North American Aerospace Defense Command and U.S. Northern Command. In 2003 he helped create the Homeland Security and Defense Education Consortium, made up of colleges with terrorism-related programs.

Just as the military depended on academic institutions to study the Soviet Union during the Cold War, he says, colleges should bring their expertise to fighting a new enemy. "None of the military personnel really had a concept on how to do homeland defense," says Mr. Supinski, who plans to teach an online course on terrorism for UMass at Lowell. "We wanted to develop more opportunities for them to get educated in those areas."

Members of the consortium include the Air Force Institute for National Security Studies, New York University, Pikes Peak Community College, the George Washington University, and the University of Texas Health Science Center at San Antonio. The group provides a template for institutions to create their own courses, but it does not certify quality. Eventually it hopes to get Congress to appropriate money so that colleges can receive grants for their work.

Last year the University of Southern Cal-

ifornia created an online master's-degree program in homeland security that it piggy-backed onto its research program on terrorism. The U.S. Department of Homeland Security awarded the university a three-year, \$12-million grant in 2003 to do research on the economic effects of terrorism and to teach courses on how to protect against it.

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The university used part of the money to create both online and on-campus master's-degree programs.

Mr. Hall says everything that happens in the classroom version of the courses can be replicated online. "If a person is giving a lecture and writing on a board, that will be digitized and available online," he says. "It has all these same experiences that a student might have on campus, but they can do it remotely."

SEARCH FOR INSTRUCTORS

One tough part of running a homeland-security program is finding enough qualified instructors, says Eve S. Buzawa, chairwoman of the department of criminal justice at Lowell.

The university wants instructors with not

only a strong academic background but also years of hands-on knowledge, she explains. "They have to have a substantive expertise in their particular area," she says. "You can't just suddenly say you're going to teach a course on terrorism."

Allan D. Roscoe, a visiting lecturer at Lowell, served as a federal agent in the Office of

executive director of the Cascadia Region Earthquake Workgroup, a nonprofit organization, and he has worked for the Federal Emergency Management Agency.

Emergencies, he says, go through four strategic phases: preparedness, response, recovery, and mitigation. He teaches students to apply those strategies to any emergency situation. All they need, he says, are the tools and the understanding of how to use them.

"It's kind of like, it rains outside, you get the umbrella—you know where it is," he says. "It won't be, it's raining outside, what do I do?"

Students learn to use appropriate technologies to help them plan for disasters.

Washington, for instance, offers a program on geographic-information systems as part of its online master's degree in homeland security. Students learn to use computers to analyze maps and geographic formations in assessing risks and planning for possible disasters.

Katherine E. Maxey, an inspector with the U.S. Federal Protective Service Police in the Department of Homeland Security, took the geographic-information course. "In my work I use street maps on the computer to map out crime stats," she says, adding that she learned from the course how to compile such information so she can carry it on her BlackBerry while on patrol.

HOT TOPICS

Many of the students who enroll in the programs say they are learning valuable information about risk assessment and security.

Bob Foedisch, another Washington student, is 62 years old and has worked as a laundry worker in a hospital, a merchant seaman, and a building engineer. Now he has a temporary job helping Boeing with its computer databases.

"I'm the old man in the group," Mr. Foedisch says. "This puts together everything I've learned."

He hopes the degree, which he expects to complete in 2006, will help him switch to yet another career: protecting seaports from attacks. "That's a real need for our country," he says. "About 85 percent of our commerce comes through our ports, and it's a real vulnerability."

Among the lessons he learned taking the online courses is that the politics involved in the issues can get ugly, especially with such hot-button topics as terrorism. Although most class discussions remain civil, Mr. Foedisch has found that some students do not always tolerate opposing views. "I learned that even online, people can get angry," he says.

Ms. Maxey says she and her professor often disagree on the appropriate role of government in collecting information on potential terrorist threats. As a federal officer, Ms. Maxey argues that the government needs more leeway in gathering data about possible threats—much to her professor's chagrin. "I do have conflicts with a lot of the other students," she says.

Mr. Roscoe, at UMass Lowell, sees some of the same issues pop up in his classes. He argues that people should be less worried about issues like the Patriot Act than about the threat of terrorism itself. "Your insurance company knows more about you than the government does," he says. "You cannot fight a war on terrorism like you can fight a war on crime."

He tries to focus his lessons on homeland security rather than government policy. "I wouldn't presume to teach politics—that's not my area," Mr. Roscoe says. "Crime and death and violence is."

Colleges' Spending on Technology Will Decline Again This Year, Survey Suggests

BY VINCENT KIERNAN

IN THE LATEST CONFIRMATION that campus information-technology budgets are tight, a new report estimates that IT spending by American colleges will slump by 4 percent in the current academic year, compared with 2003-4—the second consecutive year of declines in spending.

Information-technology spending by all U.S. higher-education institutions is estimated at \$5.15-billion this year, down from a total of \$5.36-billion last year, according to the report. The projected decline probably is a result of austere college budgets, but also may reflect improvements in the capabilities of computer hardware that have let colleges scale back some expenditures, the report said.

The figures come from an annual survey conducted by Market Data Retrieval, a Connecticut-based market-research company owned by Dun & Bradstreet. The survey drew responses from officials at 1,427 accredited two- and four-year colleges and universities.

The report estimates that colleges will spend a total of \$2.4-billion on hardware, \$1.3-billion on software, \$1.2-billion on outside services such as service contracts, and \$242-million on technology training.

Although academe's total spending on information technology is declining, spending by private institutions is expected to rise, by 28 percent. The overall decline in spending reflects the fact that information-technology budgets at public

institutions have dropped 13 percent from last year to this, says the report.

Institutions with enrollments over 25,000 reported an average budget of \$6.1-million, while institutions with enrollments under 2,500 averaged \$465,000. The report also concluded that private institutions spent an average of \$553 per student on information technology, compared with \$203 per student by public institutions.

DISTANCE EDUCATION DECLINES

In other findings, the report said that Dell is the computer vendor for 59 percent of the colleges that designate a single preferred vendor. Gateway, in second place, had 15 percent of the market. Apple placed fifth, with 2 percent.

Also, 64 percent of the institutions said that they offered distance-education programs, down from 67 percent last year. The report said the slight decline is consistent with the findings of a study by Robert Zemsky, an education professor at the University of Pennsylvania, and William F. Massy, professor emeritus of education and business administration at Stanford University.

Their report, released in June, is titled "Thwarted Innovation: What Happened to E-Learning and Why" (*The Chronicle*, July 2).

And 79 percent of the colleges surveyed for the Market Data Retrieval study reported having wireless networks,

up from 70 percent last year and 45 percent in 2002.

That finding is consistent with the results of a report on campus networking that was issued last week by the Educause information-technology consortium. "We have reached the point where more classroom seats are connected wirelessly than with wires," the Educause report says.

Richard N. Katz, vice president of Educause, said in an e-mail interview that Market Data Retrieval's findings "are somewhat more gloomy" than the findings of a recent Educause study on campus IT budgets. But he said that the two reports were consistent in finding widespread cuts in college IT budgets and in showing that the cuts are more common among public institutions than private institutions. The 2004 Campus Computing Survey, released in October by the Campus Computing Project, found that 24 percent of institutions made cuts in academic-computing budgets in 2004. That compares with 41 percent of colleges in 2003 and 33 percent in 2002 (*The Chronicle*, October 29).

The Market Data Retrieval survey, which was sent to 5,400 institutions in October, had a response rate of 26 percent.

Copies of the report, "The College Technology Review, 2004-2005 Academic Year," cost \$49 each and can be ordered by sending an e-mail message to Market Data Retrieval at mdrinfo@dnb.com, or by calling (800) 333-8802. ■