Information Technology in the News

COLLEGES CLAMP DOWN ON CHEATERS

A survey of college students by Don McCabe, founder of Duke University’s Center for Academic Integrity, revealed that 75 percent of those questioned say they have cheated at least once. College and university officials are seeking new measures to stop academic dishonesty in the digital age. Many institutions are testing or implementing new tools that detect Internet plagiarism or obstruct cheating on laptops or wireless devices. The University of North Carolina and Clemson University are testing software that prevents students who are taking computer-based tests from accessing any other program on that computer, preventing them from hiding test answers in e-mail messages, for example. Academic officials say the most significant problem they face is students who copy information for papers, or entire papers, from the Internet. Boston University has tried unsuccessfully to shut down the sites that sell term papers online, but software to detect Internet plagiarism and to deter students from trying Internet plagiarism is now available. Columbia University has developed software that automatically footnotes Internet sources while students are writing a paper. (USA Today)

UNIVERSITY OF WASHINGTON TO OFFER FREE ONLINE SHORT COURSES

The University of Washington has announced plans to offer abbreviated versions of its courses online at no charge. The online courses will cover a wide range of topics, from jazz history to business writing, with each designed to take about two hours to complete. “We wanted it to be long enough to be a meaningful experience and not so short that it would just be a teaser,” explained Bill Corrigan, the university’s director of distance-learning design. The courses will also serve a marketing purpose, as university officials hope that those who take the abbreviated versions will be intrigued enough to sign up for the full versions. The University of Washington’s announcement follows the news earlier this year that MIT would provide its course materials online at no charge. (Chronicle of Higher Education Online)

SUPERCOMPUTER TAPS THE MYSTERIES OF THE EARTH’S CRUST

Researchers at Princeton University, led by Assistant Geosciences Professor Peter Bunge, are using a huge parallel supercomputer to compute how the earth’s internal mechanics work. Supplied with four gigaflops of processing power and special 3D software developed at Los Alamos National Laboratories, the team hopes to develop models that will one day predict earthquakes and volcanic eruptions. The convection simulation software will help the team to translate earlier 2D work into a more realistic 3D model. Previously, scientists did not have the computing power necessary to perform those computations. (Computerworld)

DISTANCE LEARNING GROWING IN ILLINOIS

Enrollment in higher-education distance-learning programs in the state of Illinois has risen 44 percent from spring of 2000, reports the Illinois Virtual Campus (IVC), a joint project of the University of Illinois and the Illinois Board of Higher Education. Online courses led all distance-learning programs in terms of popularity, followed by “stored-media” programs that are available on DVD, CD-ROM, audio, or videotape. IVC reports that community colleges are the main source of distance-learning programs, offering 75 percent of all programs, followed by public institutions.

U.S. RECRUITING FOR COMPUTER SECURITY

The National Science Foundation (NSF) is counting on the lure of scholarship money to attract talented college students to computer security positions in the federal government. The Scholarship for Service program will provide a total of $8.6 million to college students in the form of two-year scholarships. Students who receive the scholarships must work for the federal government for the first two years after their graduation. Students will also take part in internships at federal agencies. The participating institutions are the Naval Postgraduate School, the University of Idaho, Iowa State, Purdue, the University of Tulsa, and Carnegie Mellon, each of which will receive at least $1.4 million toward the program. Officials in the federal government believe that the program will help reduce its shortage of computer-security professionals. “The technical growth has been so fast that security hasn’t really caught up with it,” said the NSF’s Bill Noxon. However, GlobalSecurity.org Director John Pike argues that the government’s computer-security problems cannot be solved only by bringing in more personnel. He says there need to be higher standards for security imposed on vendors. (Wired News)
universities at 20 percent, and private institutions at 5 percent. IVC now offers an online database of available distance-learning courses. “I think ultimately people need to go to classes when they can attend,” explained the project’s assistant director, Vincent Donahue Jr. (Citicom.com)

STANFORD STUDENTS IN PALM PDA WIRELESS TRIAL

Palm is working with students at Stanford University Law School to determine how well PDAs aid learning. Through the online law database West Group, the Stanford students will have wireless access to a legal research service and several eBook titles. Students and faculty receive a Palm PDA, six months of wireless access, software, and a portable keyboard. Other campuses are also experimenting with such wireless technology, including the University of North Carolina at Chapel Hill, where students can access the high-speed Internet on their laptops through Cisco transmitters. The University of Maryland has established the Hinman CEO program to provide select students with a living environment that contains business tech tools, including high-speed connections, voice-over Internet capacity, and video teleconferencing. Meanwhile, the National University of Singapore says it plans to make lectures and tutorials available over the Web, with students using laptops connected to a campus-wide network to access the lectures. (Newsbytes)

AUSTRALIA PLANS A NATIONAL, HIGH-SPEED INTERNET BACKBONE

Universities and research organizations in Australia will be connected through a high-speed Internet backbone, the government has announced. The backbone will include eighty universities and research organizations. Australia’s government has committed $19 million toward the backbone’s construction, with an additional $47 million expected to come from universities, private-sector firms, and government research organizations. The backbone will involve institutions from all across the country, said Australian Academic Research Network Executive Director George McLaughlin, adding that it could also link to institutions in the United States and Canada using undersea links. Australia’s Minister of Communications Richard Alston said the backbone will lead to increased research and industrial development in the country. “The successful project . . . will lay the physical foundations for a national innovation network,” he said. (Chronicle of Higher Education Online)

BERKELEY DEVELOPING WORLDWIDE STORAGE SYSTEM

University of California at Berkeley researchers are developing a storage system, called OceanStore, that will store data on Internet servers around the world. The system, invented by John Kubiatowicz, works by taking documents or other data and breaking them into numerous parts, with each part then stored on a different Internet server. Each fragment of the same document contains a globally unique identification tag that will enable the system to retrieve the whole document. The retrieval system is designed to leave behind a data trail each time it retrieves a specific document so that successive searches for that document will take less time. Kubiatowicz says OceanStore will be especially useful in preventing a catastrophic loss of data because not every fragment of a document will be needed to retrieve the complete document. Several companies, including Nortel and IBM, have shown interest in OceanStore and have given $500,000 in initial funding. (Computerworld)

MIT TO OPEN A VERSION OF ITS MEDIA LAB IN INDIA

MIT, the Indian government, and the private sector are cooperating to finance Media Lab Asia, where researchers will work on advanced technology with the aim of helping the rural poor. Media Lab Asia is an outgrowth of MIT’s Media Lab, which has launched numerous technologies, such as wearable computers and digital video. Like the original Media Lab, Media Lab Asia will receive the bulk of its funding from private-sector firms; Microsoft and Hewlett-Packard are among the companies that have already said they might support the project, claim

E-commerce

SCHOOL’S NOT OUT YET FOR E-COMMERCE

Enrollment in e-commerce classes taught at Stanford University and other colleges nationwide has fallen along with the slowing of the e-commerce industry. The curriculum, however, remains important, according to proponents. Rather than drawing back from e-commerce education, many institutions are opting to place e-commerce classes within business programs, just as traditional business has begun to include e-commerce in the real world. The eMarketing Association has even begun pushing e-commerce education at the high-school level, arguing that such a paradigm shift has some enduring lessons to be taught, despite what some have derided as a passing craze. eMarketing Association CEO Robert Fleming says such training will be important for students entering the business world in the future because Internet marketing and retailing will be pervasive. (E-Commerce Times)
WEB SITE OFFERS MUSEUM E-TOUR FOR DISABLED

Wright State University in Dayton, Ohio, has recently dealt with an issue now confronting many Web site operators: making sites accessible to those with disabilities. The issue is gaining importance as the Internet becomes a more integrated part of everyday life. The federal government has mandated changes to site accessibility, and site operators are seeking the best way to accommodate disabled users without having to rework their sites from top to bottom. Wright State University’s Accessible Arts program found a possible solution while building a site that will provide virtual access to the Dayton Art Institute. Site visitors will be able to view close-ups of paintings and other pieces of art through EyeSpy, an image server from AXS Technologies. The Accessible Arts program chose the AXS product because it does not require the use of a mouse, the control of which can often pose difficulties for those who have impaired mobility. Michael Paciello, the founder and CTO at consulting firm WebAble, said making sites accessible is not a matter of overhauling the entire site but is rather a process of better site management. (Chronicle of Higher Education Online)

RESEARCH IN INTELLIGENT TECHNOLOGY

Ongoing projects at several major research universities provide a glimpse of such cutting-edge technology as the Automated Highway System, now under development at Carnegie Mellon University. This project would lead to computer-controlled driving, researchers anticipate. Also at Carnegie Mellon, in conjunction with the Johnson Space Center, work continues on the Distributed Robots Architecture Project, which is developing robots that complete tasks by working together. At Stanford University, the IBROW project is working to develop UPML, or the Unified Problem-Solving Method Description Language, which will provide problem-solving programs for Internet-based distribution and use. Another Stanford project, EON, is an attempt to create decision-support software for medical situations. At the MIT Media Lab, researchers are working on BUZZwatch, a program in natural-language processing that will follow common themes throughout online forums of data such as the Web, newsgroups, or chat rooms; such a program could lead to advances in data-mining and search-engine technology. Other MIT projects include work on electronic smell recognition and a countertop that features a projection system. (PCAI)

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