A Community College First

Classes to broadcast on DISH Network

CCCSAT Staff

The California Community College Satellite Network (CCCSAT) has been awarded a national public interest channel on the DISH Network's satellite broadcast system, to launch December 15, 2000. CCCSAT, representing the largest system of higher education in the world, the 107 California Community Colleges, has the distinction of being the first community college system to be selected by DISH Network for this opportunity. The CCCSAT network will reach over 5 million households across all 50 states and parts of Canada. CCCSAT will draw upon the resources of the California Community College system to provide informational, educational and enrichment programming, which will air 24 hours a day, 7 days a week.

EchoStar Communications is the parent company of DISH Network. The company and its subsidiaries deliver direct broadcast satellite products and services to customers worldwide. DISH Network has the capacity to offer customers over 500 channels of digital video and CD-quality audio programming using a single small satellite dish. New public interest channels are being made available by EchoStar Communications, as a result of a recent FCC ruling requiring direct broadcast satellite providers to reserve certain channel capacity for non-commercial educational and informational programming.

This national public interest channel will leverage the technology investment in the CCCSAT network by the California Community Colleges Chancellor's office. California Community Colleges Chancellor Thomas J. Nussbaum said, "This is another step in making our programs available to people when and where they want them, so that those

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INSIDE

2000-2001 TTIP Guidelines Posted

The Instructional Resources and Technology Unit of the CCC Chancellor's Office has recently posted guidelines and requirements to receive TTIP allocations. TTIP is the CCC Chancellor's Office "Telecommunications and Technology Infrastructure Program."

The TTIP certification document includes the allocation plan for technology planning, local infrastructure and training. It also includes information on "total cost of ownership" and the local reporting requirements. The appendices provide useful background for anyone involved in developing the local expenditure plan.

The document is a link under What's New at the Chancellor's Office website, or go directly to: *http://www.cccco.edu/cccco/esed/irt/tnt/ttip00-01/cert.htm*

Source: @ONE News

NEW WEB ADDRESS!

TIPS Online recently secured the domain, *www.tipsnews.org*. All TIPS News articles are searchable and available for viewing online, and back issues are available to download in PDF format.

The web site offers a searchable archive of articles, and provides links to relevant sites.

Visit TIPS Online at it's new location, and don't forget to change your bookmarks!

www.tipsnews.org

DIGITAL DIVIDE IN U.S. IS CLOSING ACCORDING TO DEPT. OF COMMERCE REPORT

Association For Interactive Media

The digital divide is closing in the U.S. according to a government report released recently by U.S. Commerce Secretary Norman Y. Mineta. The report, the fourth in the Falling Through the Net series, measured the extent of digital inclusion and found more Americans than ever have Internet access and own computers. Produced by the Commerce Department's National Telecommunications and Information Administration (NTIA) and its Economics and Statistics Administration (ESA), the report found that virtually every group has participated in the sharp upward trend of Americans to connect their homes to the Internet.

The report shows that half of US households now have a computer, while 41.5 percent have Internet access, up 15 percent from last year (the report puts the US online population at 116.5 million). Internet access among rural households has risen by 75 percent in the past two years, and the number of minorities connected to the Web has increased significantly. The age divide also seems to be gradually narrowing~of all age groups surveyed, Americans of 50 years and older experienced the highest rate of growth in Internet use; and the gender gap has now been closed.

Other findings of the report show that almost twice as many two-parent households have Internet access as single-parent households, while rural areas are falling behind cities in terms of broadband penetration.

The report also cited:

• an increase in the share of households with Internet access, rising from 26.2 percent in December 1998 to 41.5 percent in August 2000, an increase of 58 percent;

• a rise in the number of households with access to computers, up from 42.1 percent in December 1998 to 51 percent this year, a rise of 21 percent;

• a 31.9 million increase in the number of Americans online over the previous 20 months, to 116.5 million

For a PDF version of the full report, go to: *http://www.esa.doc.gov/fttn00.pdf*

CVC Online Teaching Site Awards

Congratulations to Dennis O'Neil, the winner of the CVC Online Teaching Web Site Award for 2000! The award and $2,500 prize was presented at the CVC Online Learning in Higher Education Conference at the Resort at Squaw Creek, Lake Tahoe.

Dennis is an online instructor at Palomar College. His Physical Anthropology course was applauded by our team of judges for its simple yet superb design, systematic approach to learning, ease of navigation, accessibility to disabled students, and interactivity. States one judge, "Dennis' online forum is buzzing with activity" and, regarding the instructional design of the site, "students learn a process - a process of learning that is reinforced in every lesson."

Nominated Web sites were judged on educational content, site design, use of multimedia, interactivity & community, and accessibility.

For more information, please visit the Professional Development Center web site at *http://pdc.cvc.edu/cvcaward/*.

Special thanks to our panel of judges:

Vivian Sinou
Dean, Distance & Mediated Learning, Foothill College

Wayne Chenoweth
Accessibility Judge High Tech Centers Training Unit, DeAnza College

Jennifer Lieberman
Assistant Director of Online Instructor Development OnlineLearning.net

Leslie Kennedy
Assistant professor, ESL and coordinator of technology training for staff development Fullerton College

Linda White
West Director Educational Alliances Pearson Education

WINNER

Dennis O'Neil
Palomar College
Physical Anthropology
URL: http://daphne.palomar.edu/anthro100/default.htm
No password is required. However, to keep the integrity of the class intact, please do not post to student conferences.

HONORABLE MENTION

David Diaz Ed.D
Cuesta College
Whole Health
URL: http://academic.cuesta.cc.ca.us/wholehealth/
User ID = diaz
Password = narcolepsy
(This Web site is a CD/Web hybrid. Thus, it is meant to be accessed via a course CD-ROM. Since online viewers don't have the requisite bandwidth for multimedia delivery, some of the multimedia files will not play acceptably. To purchase a copy of the CD-ROM, contact David Diaz via email at *davidpdiaz@earthlink.net*.)

Scott Hildreth
Chabot College
Astronomy 20
URL: http://thomson.Webct.com/public/shildreth01/
User ID = faculty
Password = faculty

David Megill and Don Megill
Mira Costa College
Introduction to Music and *Music Fundamentals*
URL:http://63.206.32.42/etudes/openhouse/openhouse.html
(student view)   *(faculty view)*
User ID = student   User ID = faculty
Password = student   Password = faculty

Jodi Reed
Cuyamaca College
CIS Web Publishing
URL: http://cis3.cuyamaca.net/jreed/cis212/default.htm
No password is necessary.

Barbara Zingg (instructor)
Scott Vigallon (instructional designer)
Los Positas College
Biology 20
URL: http://www.courseserve.com/cgi-bin/etudes.acgi?request,logframe!cs_id,958648 88
User ID = cvc
Password = contest

Universal Accessibility

Making the Web available to everyone

Judith Norton
Training & Curriculum Coordinator
California Virtual Campus Professional Development Center

The camera zooms in on a little girl sitting under a tree. She announces to her mother that she has just finished reading another book. Her mother suggests that they celebrate by visiting her favorite restaurant. As the little girl approaches the McDonald's counter, she asks for a menu. The server gives her a Braille menu. She is visually impaired.

The interviewee sits in front of his computer sharing information about his job as a stockbroker. He explains how he does his ever-changing job with the use of a screen reader. He is visually impaired.

Both of these individuals could be students in any California community college. It is for these students that we must all have an interest in accessibility for the impaired – and for those with visual or hearing impairments, or learning or physical disabilities. It is our responsibility to provide learning opportunities for all.

According to the U.S. Department of Statistics, approximately 20 percent of the population has some type of disability. As we create the virtual classrooms of tomorrow, those with special needs must be considered as courses are designed.

What is the law in regard to accessibility?

Congress enacted the Americans with Disabilities Act on July 26, 1990. In 1998, the "Assistive Technology Act was passed. The following items were listed in regards to universal accessibility.

The state will provide: resources to pay for assistive technology devices and assistive technology services; trained personnel to assist individuals with disabilities to use such devices and services; and, in general there should be an increased focus on universal design.

How are schools approaching this issue? All California community colleges have a Disabled Students (PS) Department. It is the function of these departments to provide awareness and guidance with regard to accommodating students with disabilities. At Santa Monica College, faculty member Ellen Cutler works with other faculty in understanding student needs and how to implement, for example, a web site that is accessible for students with any disabilities.

In discussing with Ellen the issue of web-based course materials for the visually impaired, she mentioned that, "any-thing not in text on a web site, needs to be." That made it pretty simple. It is also Ellen's belief that as faculty are taught new technologies – web design, for one – the issue of accessibility be woven into the process. Do not make it a special issue. Make the integration seamless. She also works with students to understand how to use the technologies that are

According to the U.S. Department of Statistics, approximately 20 percent of the population has some type of disability. As we create the virtual classrooms of tomorrow, those with special needs must be considered as courses are designed.

available to them, whether it is screen readers or magnifiers, or alternative keyboards or voice recognition systems. She is there to assist them.

To assist faculty in their design, she has developed "Some Universal Design Challenges" which can be found at *http://pdc.cvc.edu/uaccess/solution.asp.*

At some colleges, such as Cerritos College, the Curriculum Committee addresses the issue of accessibility prior to approving a class going online. In their Curriculum Committee Distance Education Questions *(http://www3.cerritos.edu/ic/curriculum_committee.htm)* they state in number 8, "Attention to access is required if your course entails the use of print media, audio or video conferencing, the Web or software such as Laser Video Disc, CD-ROM or DVD." If this issue is not addressed adequately, the course does not get approved.

What is the World Wide Web Consortium Committee?

It is the World Wide Web Consortium Committee (W3C) that develops interoperable technologies (specifications, guidelines, software, and tools) to lead the web to its full potential as a forum for information, commerce, communication, and collective understanding

The W3C Team includes 65 people working from locations across the globe. W3C is hosted by the Massachusetts Institute of Technology Laboratory for Computer Science [MIT/LCS] in the United States, at the Institut National de Recherche

en Informatique et en Automatique [INRIA] at various locations in France, and at the Keio University Shonan Fujisawa Campus in Japan. With a truly international flavor, the Team includes engineers from more than ten different countries.

What are the Priority 1 requirements?

The W3C committee has developed a list of priorities for web design. Those items under Priority 1 must be implemented on all web sites designed with universal accessibility in mind. For more detailed information, refer to the checklist at *http://www.w3.org/TR/WAI-WEBCONTENT/full-checklist.html.*

What research has found?

Extensive research conducted by D. Michelle Hinn of University of Illinois, recommends the following:

The layout of the web-based environment is critical. A good layout makes it easier for the assistive technology readers and it also makes it easier for those with traumatic brain injury. Think of "web-based instructional environments as electronic organizers for course information." Use consistent design strategies and navigational features for all documents to create an easy to use layout for all users.

If using frames, use the <NO FRAMES> tag. When using frames for navigation, use descriptive frame names such as <FRAME NAME="navigation bar"> instead of <FRAME NAME="left">.

Provide users with an option to view the text on the page with no frames. Consider having a text only page. Be aware of color combinations for their readability.

Hinn found in her research that when students with disabilities were required to rely on an assistant for help, they became angry. They lost their independence in navigating their course on their own.

Where does responsibility for accessibility lie?

There are four areas that have to work together in order for Priority 1 issues to be compliant: the browser, course management system (CMS), assistive technology devices, and the developer of the class. Because all of these technologies are moving at the same time, it is a difficult issue to resolve the issue of accessibility.

Microsoft has strived to make their Internet Explorer browser

workable and must be available to anyone needing to use assistive devices, and the three largest CMS are trying to be more accessible. Additionally, the assistive devices are working to catch up, and course designers need to choose aspects that make their classes more accessible.

In speaking with Wayne Chenoweth about this issue, he suggests the following test in viewing a web site: turn off the graphics and hide the mouse. Navigate the course via the keyboard. This is an important test because it simulates the issue for visual, physical, or learning disabled. Chenoweth also encourages giving graphics a longer description of what is graphically depicted.

How do the various course management systems handle accessibility issues?

The course management systems that are most widely used in the state of California are WebCT, Blackboard, and eCollege. While all of the systems are working on the accessibility issue and understand their responsibility to the student, at press time we found the following:

Blackboard is committed to the accessibility of their learning platform. It is a high priority to make Blackboard work with assistive technology, such as screen readers or text-only browsers. Blackboard is more text based in design, uses fewer frames, is easier to navigate, and has a simpler interface. Specific questions on the accessibility of Blackboard can be addressed to Reidy Brown at *rbrown@blackboard.com.*

eCollege is also committed to the accessibility issue and are currently working on having their software compliant for universal accessibility by 2001. The requirements have necessitated a re-design of their system in order to comply with all types of accessibility issues: visual, hearing, physical and learning disabilities. Currently their product is supported in Internet Explorer, but not Netscape. Specific questions on the accessibility of eCollege can be addressed to Joel Sanda at *joels@ecollege.com*

WebCT reports that version 3 is Priority One compliant. Accessibility consultants to the CVC PDC are currently analyzing its accessibility in the context of the screen reader JAWS 3.7. The current version is difficult to

It's A Question Of Collaboration

Seeking clarification and definitions in the discussion

Virginia McBride
Project Director, "System Think Tank",
Mt. San Antonio College

Educators possess a meeting mentality whereby solutions to problems drop onto the table. Biases drive discussion. Persuasiveness, argument, and justification characterize the meeting flow. Meeting leaders or obvious decision-makers guide participants toward a predetermined solution. In contrast, collaborations, especially virtual ones, need new skills.

For virtual collaborations, the most basic skill is that of asking the appropriate questions; a skill so basic that few educators use it. Rather, they resemble the student who, when asked to phrase a question for an assignment, responded to a professor "I know the answers, but I don't know what the question is." Questions like "don't you agree that ..." and "why do you believe ..." are not acceptable. Any "Yes" or "No" question, beyond housekeeping questions, attacks the listeners, as does any question that begins with "Why." They seek no information. They fail to reveal anything about the questioner. They simply have no place in collaborations.

In collaborations, clarification drives the discussion. If participants are not talking about the same thing, but believe they are, confusion and misunderstanding abound. During the early stages of problem solving, collaborators need to phrase the problem, essentially, as a non-attack question. When given this task, collaborators typically respond with "should we" questions. "Should we install a video conferencing system?" "Should we require horizontal articulation?" "Should we have a common, system-wide application for admissions?" All of these are attack questions in that all can be answered "Yes" or "No." Beyond the attack, they lead to argument and defense. People choose sides and defend positions. The "problem" for each of these questions could just as easily be distance education, fiscal responsibility, or Chancellor's Office priorities.

Consider, instead, if the problem were worded as "How can districts minimize travel costs?", "How can the California Virtual Campus facilitate distance education courses system-wide?", or "How can campuses/districts participate in state-wide initiatives?" All these questions could lead to the same,

single answer. Yet, just as easily, they could lead to widely different answers. Until the question is shaped and refined, collaborators need to delay their natural tendency to propose solutions.

"How" questions evoke possibilities, alternatives. Yet, they are not the only questions that need to be asked. The words within the defined problem demand definition. For instance, in the question, "How can the community colleges implement e-conferencing?," collaborators need to agree on what is meant by "community colleges" — the entire statewide

> *In collaborations, clarification drives the discussion. If participants are not talking about the same thing, yet think they are, confusion and misunderstanding abound.*

system, the separate districts, the individual campuses? What is meant by "e-conferencing" — a linear discussion using e-mail, an asynchronous threaded-discussion using conferencing software, a synchronous voice-conference enhanced with web site materials? The actual definitions matter little. What matters is that agreement is achieved; an agreement which minimizes later confusion.

The next question is "What are the alternative solutions?" In collaborations, all alternatives are acceptable initially, even the bizarre. Next, evaluation questions emerge. "What are the barriers to each alternative?" "What are the benefits?" Finally, the question of which alternative to choose arises. Throughout the question-asking, collaborators avoided attacking each other. Rather, they built trust, the second basic skill of collaboration. **T**

Send your comments to Virginia McBride via email at *vmcbride@ix.netcom.com.*

Prosaic Concerns Drive Distance-Education Programs at One Community College

Jeffrey R. Young
The Chronicle of Higher Education

Pasadena City College's entry into online instruction was driven partly by a desire to alleviate parking problems and partly by a sense that students wanted the convenience of working from home, says Nino B. Valmassoi, associate dean of extended learning at the college here.

The online program is starting off slowly, with ten courses offered this semester and ten more in the works for next term. To get things rolling, the college offered grants of up to $2,000 to professors who were interested in developing online courses. Officials also set up a small computer lab, with scanners, digital cameras, and other tools, and hired a technical-support person to coach the would-be cyber-professors.

Pasadena City College has also received help, and distance-education software, from the California Virtual Campus, a statewide project to promote online courses at community colleges.

Q. Why did you decide to begin offering online courses at Pasadena City College?

A. My approach and the district's approach is that we have to look at it because it's a need that our students have. That's the first thing.

Second off, we are a landlocked college. We're on 55 acres, and we handle about 28,000 students. And so one of our biggest problems is just the physical facility and not being able to have that many people on campus. And parking is, of course, a part of that. ... You look and say, "If only 10 percent of the students were online and didn't have to come to the campus all the time, that'd be 3,000 parking spaces that wouldn't be required, roughly speaking."

Q. You said that students "need" distance education. What did you mean by that?

A. Look around -- this is the future. And, by the way, if we don't meet that need competitive-wise, someone else will. In 20 years from now, there will be a large portion -- and I don't know what that percentage would be -- of the people who are going to want online instruction. We have to be aware of the fact that if we don't do something, we're going to be left out.

Q. When did you start the program?

A. Just about a year ago is when we started [preparing]. The approach has been to go slow, not to jump in. [Some other colleges] jump in and go full-bore without really seeing what the implications are going to be. And some of the colleges have gone way overboard. People get the idea that this is the only way to go, and that they should throw all their resources behind it. We're going to take it slow.

Q. To what extent has the California Virtual Campus, which provides support services for distance education for community colleges in the state, been an incentive for you to jump in?

A. It's a great big incentive, because we don't have expertise, and there are a lot of people out there [at the C. V.C. who can help]. Why do we have to reinvent the wheel?
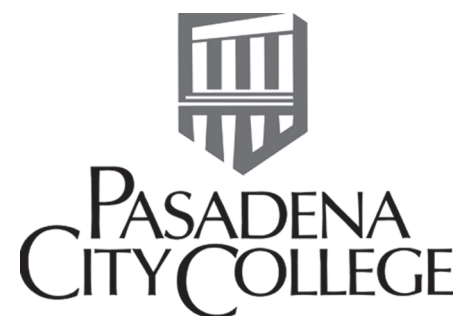
Q. Would you have gone ahead if that program didn't exist?

A. We would have gone ahead with it, but it makes the job a heck of a lot easier.

Q. Do you have any dreams of enrolling out-of-town students in the college's online courses?

A. That would be great, but our philosophy is we need to serve our community first. That's our responsibility. And if we're going to try to build a business where the main focus is to go outside of our district, we're not meeting the needs of our community to do that.

If we could have students in China, that's great, and there's nothing to stop them [from enrolling]. But that's not our main focus. **T**

PASADENA CITY COLLEGE

Universal Accessibility

navigate because of the use of frames and the programming used for several features, i.e. Chat and Whiteboard. Specific questions on the accessibility of WebCT can be addressed to Glen Low at WebCT. His email address is *glen.low@webct.com.*

The bottom line, at this time, is that even when a vendor states they are Priority 1 compliant, participants who are listening to the course with a screen reader will require mobility training to get accustomed to the software.

What can YOU do?

Probably the biggest thing you can do as an educator is take an interest in the issue of accessibility. As your interest grows, you will find yourself thinking of ways to include components that are accessible -- it will become second nature. Do what you can to make your class more accessible. Work with the faculty on your campus and/or attend workshops to understand how to make the necessary changes to your online class. And secondly, share this information with a colleague. As time progresses, implementation and interest will grow.

Do YOUR part! **T**

Sources and links to web sites on accessibility are available online at *http://pdc.cvc.edu/newsletter/*

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EchoStar

who haven't been able to take advantage of higher education will now have that chance. It will also give our faculty more options in designing distance education courses and another tool to reach students." The DISH Network public access channel will extend CCCSAT's educational outreach and bring quality programming to a national audience. The programming will be as varied as one might find on a community college campus. **T**