



Technology
in Education

TIPS News

Telecommunications Infrastructure Project Statewide

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California Virtual University

A Status Report

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Director, System Advancement and Resource Development, CCCC

The California Virtual University (CVU), created one year ago by Executive Order of Governor Wilson, received a jump start in the Governor's 1998-99 proposed budget. Governor Wilson has proposed a total of \$6.1 million to fund the CVU, with \$1 million each for the University of California (UC) and the California State University (CSU), and \$4.1 million for the California Community Colleges (CCC).

The plan proposed for the com-

munity colleges includes the creation of four regional curricular development assistance centers that will provide technical assistance to faculty and staff in the creation of courses and programs. Each center will be equipped with state-of-the-art technology and highly skilled staff to aid local college faculty and staff in creating technology mediated instruction. In addition, funds will be available for training faculty and staff in CVU related technologies, computer lan-

guages, and pedagogy. Finally, the grants will provide direct support to faculty and staff in the form of mini grants to provide stipends, release time, and equipment for course development. A staff of three at the Chancellor's Office has been funded

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4CNet: Mission Accomplished

Edwin W. Smith
Project Manager, Spectrum Telecom Systems

The 4CNet team, including campus and Chancellor's Office staff from both the California State University (CSU) and the California Community Colleges (CCC), has successfully connected 92 California Community College locations to the 4CNet backbone.

The 92 connections to 4CNet translate into connecting all 106 community colleges and 17 administrative sites, since several Community College districts chose to connect to as a district and provide campus connec-

tions through their districtwide area network.

The final T-1 circuits were installed in December 1997. All CCC sites funded for 4CNet were provided with their data connection, and the majority of sites have connected their Local Area Network to their 4CNet router.

In order to confirm that the installation process has gone well overall and to gain information on how additional improvements can be made, all CCC 4CNet subscribing sites will soon

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Pilot Project For Video Conferencing Over 4CNet Backbone

Bob Ellsworth
Director, Media and Distance Learning, Butte College

Charles Mawson
Analyst, Telecommunications, CCCCCO

In May 1997, the Butte-Glenn Community College District was awarded the 4CNet Backbone Upgrade Coordination Project by the California Community College Chancellor's Office. The project supports the telecommunications infrastructure development effort to accelerate the introduction of advanced telecommunications technologies into institutions of higher learning in the state. One of the essential elements of this effort is to upgrade the 4CNet backbone to include video conferencing.

Butte College, in coordination with the Chancellor's Office and 4CNet, will soon release a Request for Application (RFA) to select four community colleges within the state to participate in a pilot study that will test the impact of carrying video conferencing over the 4CNet backbone. During the fall 1998, the pilots will gather data, assess the performance of the backbone, and make recommendations for future video services.


Each pilot site participating in the project will connect to the 4CNet backbone through an ISDN dial-up or T-1 connection. This connection will allow each pilot to communicate through the backbone to each of the other pilot sites.

Butte College and 4Cnet will provide access to video bridges to permit multi-point conferencing. Each pilot site will use the PictureTel Venue 2000 Model 50 video conferencing system provided to them through the Telecommunications

Technology Infrastructure Program (TTIP) grants in 1996-97.

The study will include a minimum of three technical sessions. Each session will test for system reliability under a variety of conditions. The engineers at 4CNet will monitor the load on the backbone and will evaluate potential equipment configurations. The results of this technical study will set a direction for the future design and configuration of the network to support the anticipated growth of video conferencing statewide.

The study will also include a minimum of three open forums using video conferencing with 4CNet connectivity. Key personnel at each pilot site will participate in an open discussion concerning the requirement and design of a future video conferencing network. All comments and concerns raised by the participants will be included in a final project report. This report will play an important role in the development of a telecommunications plan to support future applications for video conferencing.

All districts should receive the RFA shortly. From the applications submitted, one pilot site will be selected in each of four regions in the state. Existing facilities, anticipated future applications for video conferencing, and available technical support will be high priorities in pilot site selection. 

Title 5 revisions and distance education evaluation

Cristina Mora-Lopez
CCPAI, Distance Education, CCCCCO

A hearing was held in Sacramento at the January meeting of the Board of Governors (BOG). This was the first reading of the Distance Education Title 5 Regulation board item. The second reading will be heard in March of this year. It is hopeful that the revisions will be adopted by June 1998.

A public hearing was also held to hear comments regarding the regulation changes. Henry Burnett, representing The Association of California Community College Administrators, presented comments to the Board in support of the revisions, as did Bill Scroggins, Statewide President of the Academic Senate.

The following excerpt is from the Distance Education Title 5 Regulation board item of the Board of Governors California Community Colleges January 12-13, 1998

Issue

Revisions to Title 5 Regulations on distance education, for the duration of the evaluation period, are being recommended by the Distance Education Technical Advisory Committee (DETAC). In 1994, the Board of Governors revised the Title 5 Regulations pertaining to Distance Education. The regulations initiated an evaluation period for distance education. The DETAC is the consultative advisory committee formed through Board of Governors Standing Order 409, which is responsible for the overall evaluation of distance education between 1994 and 1999. Pursuant to current regulations and standing orders, the DETAC is scheduled to make overall recommendations to the Board of Governors on the long-term status of distance education within the California Community Colleges by December 1999.

The recommended changes are required to evaluate distance education programs throughout the system completely and accurately. The recommendations are supported by a significant number of community college organizations and have been reviewed through the Consultation Process.

One of the recommended changes addresses a substantial and critical issue for the California Community College system: the relationship between the student and faculty, and how effective it is to deliver education at a distance without regular "personal contact." This aspect

of the regulations has been the most debated and contested component of the changes during the evaluation period. A true and accurate evaluation of distance education cannot be conducted under the current regulations.

The DETAC is promoting the revisions to enable faculty to choose the most effective method to deliver instruction to students at a distance. The proposed removal of the regular personal contact requirement from

credit transferable courses will provide the system and committee with the appropriate data to evaluate the effectiveness of a variety of faculty-student contact models for the remainder of the evaluation period.

Other proposed recommendations for changes to the regulations and guidelines address the extension of the evaluation period, separate course approval, and the submittal of reports to District Board of Trustees and the Chancellor's Office.

Background

The current Title 5 Regulation charges the DETAC with reviewing and evaluating distance education programs throughout the system in a pilot period from 1994-95 through 1998-99. The DETAC is to report to the Board of Governors by December 1999, on the findings and recommend changes to the Title 5 Distance Education regulations. The sections that most affect the review during the evaluation period are:

- 55316.5 (b), Additional Courses
- 55317 (b) and (c), District Reporting
- 55376 (a) and (b) Instructor Contact and related guidelines subsections (a) and (b)
- 55378 Separate Course Approval

Title 5 regulations currently require that each district
(continued on back page)

The recommended changes are required to evaluate distance education programs throughout the system completely and accurately.



College of the Redwoods

Joyce Ksicinski
Resource Development Specialist, College of the Redwoods

The objective of this project is to develop a comprehensive, districtwide, telecommunications plan that will inventory the Redwoods Community College District's current capability and provide strategies to implement future technological development. The District serves an extremely large geographic area (5,890 square miles), and the optimum use of technology is critical for the District to effectively serve its widely dispersed students in the changing cultural, economic, and technological environment.

A comprehensive plan will identify the infrastructure necessary to connect all areas to those where tech-

nology applications currently exist. Once these connections are in place, the District can reach beyond the traditional boundaries to deliver and support educational services to the community and add additional elements to strengthen those areas currently lacking technology.

The development of this plan will be concurrently used in the District's preparation of a comprehensive educational master plan and a facilities master plan. It will also be implemented as part of the design for a new \$10.8 million main library/educational media center for its Eureka campus.

College of Marin

Scott Miller
Administrative Dean, Business and Facilities, College of Marin

The College of Marin's (CoM) ability to serve students, develop relevant instructional programs, and use a current technology administrative system is severely impaired by the lack of a college network.

The College has the academic expertise to leverage a network investment, and has obtained funding through the Telecommunications Technology Infrastructure Program for 4CNet connectivity, video conferencing, and satellite communications. CoM's commitment to serve the diverse and lower income

communities in Marin County is bolstered by recent funding made available as part of a Redevelopment Project in the City of San Rafael. However, the College's inability to transmit distance learning content internally has caused it to delay implementation of this project.

The College of Marin proposes to engage a professional telecommunications consulting firm to assist it in developing a comprehensive plan for voice, data, video, and satellite connectivity. The plan will be driven by a vision of ubiquitous connectivity to all points on campus and to all com-

munities the College serves, including off-campus locations. The plan will include an assessment of student, curricular, and administrative needs, and an assessment of present limited capabilities. It will develop a full set of technical standards for the CoM network consistent with CCC standards. Most importantly, it will develop an implementation framework, which will include identifying the highest priority areas that would yield maximized benefit to students, faculty, and administration. This will bring the network to the most appropriate areas first.

Student Services Application Pilot Grant

Charles Mawson, Analyst, Telecommunications, CCCCCO
Jan Paulson, Director, Management and Information Systems, CCCCCO

Student Friendly Services

The California Community Colleges Telecommunications Initiative, initially funded by the 1996 Budget Act of the State of California, seeks to establish a comprehensive telecommunications infrastructure linking all of the California Community Colleges. The deployment of "value added" applications across this infrastructure is a critical element to its success and usefulness. The Chancellor's Office is requesting applications for a Student Services Application Pilot titled "Student Friendly Services" to assess the feasibility of California Community Colleges' future involvement in the intersegmental Student Friendly Services (SFS) Project.

The amount of the grant is \$60,000 and it will run from June 15, 1998 through December 31, 1998. The application date of the RFA is April 27, 1998, and only one grant will be awarded. The grant award will be for 6 months only, and there will be no continuation funding for any award resulting from the favorable review of a grant proposal developed pursuant to this RFA.

What Is Student Friendly Services?

Student Friendly Services (SFS) is an initiative of the California higher education and the K-12 systems to assist prospective students, their families, their counselors and California's institutions of higher education with college and University pre-admission and admission processes. Its goals are to:

- Create a single Web site with links to pre-admission and admission information for all institutions of higher education in California*

Users of this Web site will be able to access Web sites for the University of California System, the California State University System, the California Community College System, and the Association of Independent California Colleges & Universities, to obtain information about the campuses they are considering, to find out how to apply for admission, and, in some cases, to apply to specific institutions.

- Develop a facility which students could use to create and maintain an electronic portfolio*

The portfolios or electronic files will contain student demographic records, educational history, and descriptions of extracurricular activities. Students will be able to update them, so that the information contained therein is always current.

- Develop an interface with the California State Information System (CSIS, K-12) which will enable institutions to exchange academic records electronically*

Records will be sent via Electronic Data Interchange using the SPEEDE/EXPRESS format. This approach provides a secure means of automating a process which can be extremely time consuming when done manually.

- Create a means whereby SFS application data will, with student authorization, be automatically entered into electronic undergraduate admission applications and, with the approval of the Federal Department of Education, into electronic financial-aid applications*

This would mean that students with an SFS electronic portfolio will not have to re-enter portfolio information when using the CSU Mentor or the UC Pathways systems on-line applications, because the information will automatically populate the form.


Once completed, the Student Friendly Services Project will enable users to obtain information or work on applications for admission to most of California's institutions of higher education whenever convenient and will facilitate and expedite the entire process.

What Are the Goals of the Student Friendly Services Grant?

The goal of this grant is to assess the California Community Colleges' future involvement in the intersegmental Student Friendly Services (SFS) Project.

The purposes of the RFA are to:

- Examine issues, benefits, problems and any other factors relevant to CCC involvement in SFS Project with respect to CCC unique mission and goals.*
- Assess the pros and cons of CCC participation in statewide SFS project.*
- Assess whether any additional functionality specific to the community colleges should be included in this project.*
- Provide statewide cost estimate for CCC participation in SFS project.*
- Make recommendations on CCC involvement and future role in the SFS Project.*

Colleges can download a copy of the RFA from the Chancellor's Office Web site (<http://www.cccco.edu>) or contact Patricia Servin for printed copies of the RFA (916-322-3488 or pservin@cc1.cccco.edu). 

Virtual University

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to coordinate these activities.

The CVU is a partnership consisting of the CCC with the UC, CSU, and private accredited colleges and universities of California. The CVU (unlike its counterpart, the Western Governor's University) will not offer accredited courses or degrees separately, but will instead provide easy, student friendly access to the increasing number of courses and programs offered by the member institutions. Individual colleges will be responsible for their own offerings and ancillary services, such as counseling and learning resources. The CVU will facilitate offerings and course development, best practices and sharing of resources and programs.

One of the major reasons behind the creation of the CVU includes the increasing needs of business and industry for employee training, particularly to fit varying schedules. In addition, the projected demands from the 400,000 new CCC students expected from Tidal Wave II over the next seven years can not be met with the current rate of capital construction in the CCC's. Finally, we believe that California has the very best public higher education system in the world and can use its expertise to create a world class CVU, with the potential of developing additional revenue streams.

A major issue facing the CVU is the need for immediate and long term financing, which we expect to meet through a mixture of public, private, and foundation partnerships. We have already secured several corporate sponsors, as well as commitments from a major foundation. Another major challenge is the technology infrastructure that has begun to be met by such projects as 4CNet.

To maximize the CCC buying

power, the Chancellor's Office has initiated a series of cooperative group purchases for computers, computer based training software, and other technology related equipment, leveraging the size of the CCC system to our advantage. We are also dealing directly with the "face-to-face" regulations that have limited our offerings,

The CVU will provide great opportunities for faculty and staff in the development of courses, programs, and even complete AA/AS degrees.

and the Board of Governors is scheduled to approve major changes that will allow for non "face-to-face" offerings beginning in 1998-99.

Other major issues include financial aid, particularly allowing computers to be counted in determining financial need, accreditation issues, and access for disabled students.

The CVU will provide opportunities for faculty and staff to develop courses and programs, and even complete AA/AS degrees. It will provide support for course and program incubators and research of best practices.

We believe that the CVU will provide access for a large number of non-traditional students who may well make up a "Tidal Wave II 1/2," increasing demand for CCC education, and their contribution to California's

economy. We also believe the CVU may well provide more faculty/student contact than traditional distance learning courses, and even more than many large lecture classes. We also are certain to face the important issue of competency based credits and possibly competency-based funding.

If you wish to learn more about CVU, please join our open listserv by sending e-mail to mailserv@cerritos.edu with the message *subscribe ccc-cvu-list*. If you are interested in serving on a CVU task force, which will meet primarily by listserv, please send e-mail to ltoy@cc1.cccco.edu.

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"Video Equipment Needs" Survey

Charles Mawson
Analyst, Telecommunications, CCCCCO

As an ongoing effort to improve the use of video conferencing in education and administration, Pacific Bell and the Chancellor's Office sent out a video equipment needs survey in late January to determine future video conference equipment and training needs of the California Community Colleges.

The purpose of the survey was to see if the colleges could get the best price possible for additional equipment and training by showing vendors the volume for such services. (Note: the previous price for PictureTel units is no longer valid.) Colleges were also asked to supply alternative sources of equipment and training that were compatible with the current PictureTel Venue 2000 Model 50 systems purchased with 1996/97 funds.

Completing the survey did not obligate the college's purchase of any equipment or training. Completed surveys should be sent to Charles Mawson at:

cmawson@ccl.cccco.edu or 916-327-5902.

A current California Multiples Award Schedules (CMAS) price list for PictureTel peripherals is available on the TIPS web site at: <http://video.4c.net/TIPS/resources>

• Video Conferencing Problems

If you experience problems with connecting your PictureTel Venue 2000 Model 50 system, there are several steps you can take to diagnose the problem:

Self Test

1. Run a full self test on your system by selecting the "Set-up" button on the keypad and choosing #4. Then choose #1 "Run Self Test", and Then choose #1 "Run Full Self Test"
2. Be sure that the three ISDN modems are plugged in, and note if any of them have a blinking light. If they do, try rebooting the system, and see if the green lights stay on.

If the system checks out OK but you still have problems:

Call PacBell (1-800-341-5555) or your local ISDN supplier to check out your ISDN lines (not PictureTel). If PacBell cannot fix the problem they will direct you to contact PictureTel. Remember also that you have three ISDN lines; even if one or two lines are down you can make a manual call at a lower speed.

TTIP Revised Facsimile Specifications for Library Technology and Electronic Resources Initiatives

The Library Technology and Electronic Resources Ad Hoc Committee agreed upon a Group 4 (G4) comparability standard for library facsimile machines. This standard had also been adopted by the California State University system. In response to concerns and inquiries regarding the G4 standard, the facsimile standard has been revised from a Group 4 to a Group 3 (G3). Facsimiles with these specifications range from \$2,600 to \$4,000. Specifications for the G3 standard can be found on the *TIPS Online* Web site at: video.4c.net/TIPS/resources.

The Department of General Services has a master service contract agreement for facsimile equipment, and colleges may purchase off of this contract (#4-96-00-0009-A 7/1/97 through 8/31/98). Contact information will be placed on both the "ccc-lib-lrc-list@cerritos.edu" and "cc-tutoring-lac-list@cerritos.edu".

• CMAS Fax Vendor Options

California Community Colleges have the opportunity to purchase telecommunications equipment for libraries through the California Multiple Awards Schedule (CMAS). There are four CMAS participating Fax vendors who submitted an interest in providing the equipment.

A list of these vendors can be found on the *TIPS Online* web site at: <http://video.4c.net/TIPS/resources>

• CCC Installation Update



Units Ordered: 125

Units Installed: 75

It is anticipated that all units will be installed and operational by March 1, 1998.

Distance

(continued from page 3)

offering distance education courses report annually to their board of trustees and submit a copy to the Chancellor's Office on July 1 (Section 55317 (b)). The regulations also require that courses offered for transfer require instructor and student to have "regular personal contact" (Section 55376 (a) and (b) and related guidelines). Sections 55316.5, Additional Courses, and 55317 (c), Ongoing Responsibilities of Districts, are to become inoperative on July 1, 2000, unless a later adopted regulation deletes or extends this date. Recommended changes would extend the date by 18 months to January 1, 2002. Section 55378, Separate Course Approval, would require review of courses with specific emphasis on regular effective contact between

instructor and student.

Three public meetings were convened in November 1997 to allow public comment in support or opposition by individuals, in person, via facsimile, e-mail or regular postal service. The meetings were held in Oakland, Los Angeles, and Sacramento. ☺



4CNet

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receive a final information packet consisting of network documentation and graphics, as well as a 4CNet Feedback Questionnaire. All CCC subscribers to 4CNet are encouraged to complete and return the questionnaire. Follow-up efforts will continue to assure successful connections for all campuses.

Now that the installation process is complete, all 4CNet subscribers should use the Customer Support Center's number (562-985-9533) for all service issues or questions. This will open a Problem Ticket that can be followed to resolution. 4CNet Customer Service Center's functions and procedures will be covered in more detail in next month's issue of *TIPS*.



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