TELECOMMUNICATIONS INFRASTRUCTURE PROJECT STATEWIDE

# Technology in Education

Volume 4 Issue 1

January 2000

## **CCCCO Educational Technology Awards**

n accordance with its mission to enable the transformations occur-**I** ring in higher education through the integration of technology-based resources, the California Community Colleges Chancellor's Office is pleased to support the California Community Colleges Educational Technology Awards.

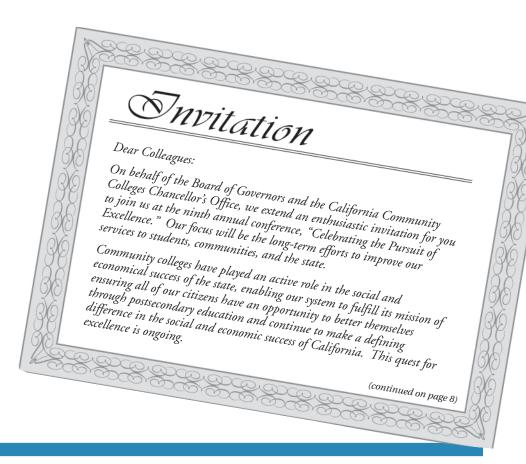
This program recognizes exemplory technology initiatives and honors campus projects that have identified and solved significant problems worthy of emulation. These projects serve users, provide for professional development of campus constituencies, or otherwise apply the potential of educational technologies to the business and mission of the institution.

The categories for awards are: Technology Focus awards including Technology Applications and Distance Learning; Excellence in Leadership; and an award for the Chancellor's Office TIPS newsletter "Contribution of the Year."

The awards are to recognize excellence that evolves out of a comprehensive planning process closely linked to the institution's mission and vision for the future. It reflects strategic, integrated uses of technology to empower faculty, students, and administrators and bring (continued on page 8)

### IN THIS ISSUE

- Off the Wire
  - Linking Classrooms A World Apart
  - College to Graduate Virtual Class
- Online Certificate Degrees at **Butte College** 
  - a TIPS interview
- Tegrity EduCarts Purchased by Regional Center
  - hardware/software for online presentations
- The Digital Virtual Mini-Studio
  - lowering the cost of video in distance learning
- What Stumps Newbies, and **Veterans As Well** 
  - strategies for online delivery
- Moving Ahead AtTechEd2000







#### California Community Colleges Telecommunications Infrastructure Project Statewide (TIPS)

Editor, Layout, Design: Chris Palmarini 530-895-2988 video@4c.net

Web Master: Chris Palmarini 530-895-2988 video@4c.net

Subscriptions: Bonnie Roberts 530-895-2341 RobertsBo@butte.cc.ca.us

Technical Support: Scott Roberts 530-895-2362 scott@4c.net

Project Administrator: Dr. Fred Sherman 530-895-2433 ShermanFr@butte.cc.ca.us

CCCCO Coordinator: Charles Mawson 916-327-5902 cmawson@cccco.edu

- TIPS News is a monthly publication funded by the California Community College's Chancellor's Office, and is dedicated to sharing information related to state-funded projects, statewide meetings, educational innovation, individual recognition, and future opportunities for applying technology in education. TIPS News is distributed statewide to all community colleges, the State of California Legislature, and to other interested groups and individuals.
- *TIPS News* is produced at the Butte-Glenn Community College District located in Oroville, California under a grant funded by the California Community Colleges.

#### Address all inquiries to:

Chris Palmarini, TIPS News Editor Butte-Glenn Community College District 3536 Butte Campus Drive Oroville, Ca 95965 ph: 530-895-2988 fax: 530-895-2380 email: video@4c.net

- TIPS News reserves the right to make changes in any material submitted for publication to meet copy requirements. To be placed on the mailing list, call 530-895-2341 or send e-mail to: video@4c.net.
- •Articles appearing in this newsletter and other relevant news may also be accessed on the World Wide Web at:

TIPS online http://video.4c.net/TIPS

# - Off the wire

#### LINKING CLASSROOMS, A WORLD APART, VIA INTERNET 2

Chronicle of Higher Education

Students in a University of Wisconsin computer science class recently interacted with students at two Japanese universities by sending video and audio streams over Internet2 lines. "We could communicate as if we were in the same room," says Dr. Lawrence Landweber, who taught the University of Wisconsin class.

Although experts have long viewed this type of distance interaction as the next major step for online learning, technological barriers such as bandwidth requirements have limited such communication. In the past, synchronous distance-learning courses have run through cable or satellite television, which cannot easily be configured to allow geographically separated people to speak to one another.

The Internet2 lines allowed audio and video to travel between Japan and Wisconsin at 40 Mbps, without the jerky movements and muffled sounds that would have occurred with the regular Internet. The course used the new IPv6 standard, which is designed to speed transmission of video and audio to different locations simultaneously.

(New York Times 12/30/99)

#### **COLLEGE TO GRADUATE VIRTUAL CLASS**

Chronicle of Higher Education

The Internet program at Limestone College will graduate 70 students this May, and most never set foot on the college's South Carolina campus. The college began offering classes online in 1996, and the classes became a program of study last year.

In 1999, over 1,700 people took Limestone classes online, using passwords to get to the classes and e-mail to send in assignments. One adult student said the virtual campus allowed him to take classes while keeping his fulltime job and spending time with his family. Another said he is able to work on a degree in computer science at his own pace. Others appreciated the structure of the lessons, involving reading a chapter, answering questions, then going on to a case study.

(Associated Press 12/27/99)

Reprinted from The Chronicle of Higher Education http://www.chronicle.com

# a TIPS interview **Online Certificate Degrees**

-Richard Slavich

**Chris Palmarini Editor, TIPS News** 

at Butte College

eginning in the spring 2000 semester, Butte College will be offering a new way for students to get a Certificate of Achievement in either Natural Resources or Parks and Recreation, and they can stay at home to do it.

"There is a lot of built up frustration among Californians who want to go to school. It's not the cost, it's the time," said Dr. Richard Slavich, a Butte College Agriculture and Natural Resources instructor who offers several science courses over the Internet, in addition to numerous courses via cable television or videotape.

Slavich, the first faculty member to offer Internet classes at Butte College, has elevated his efforts by offering the two totally online Certificates of Achievement. "It's really starting to gain some momentum. I can't believe the interest that comes from the offering of Internet classes here at the college," he said.

Butte College has a reputation of aggressively pursuing distance learning opportunities, lead by Dr. Slavich and others, such as the now common television courses and courses-via-video. In 1998, the college launched into cyberspace to offer selected courses to anyone, anywhere, via the Internet.

To understand the roots of the virtual university, one can look back to the early years of correspondence courses where postal mail was the primary teacher-student contact. Today, class assignments are posted on a Web page, and are accessible to every student via the Internet. Homework and assignments are transmitted via e-mail; the instructor's comments and responses are posted and available to all students at any time; and real time chat rooms and video streaming function as alternatives to the lecture forum.

The Internet is often a stepping-stone for students who normally would not participate in the classroom. "I see more student interaction on the Web than in the classroom," commented Slavich.

The fall 1999 semester has seen the highest enrollment to date for Slavich's distance class sections. "I foresee no limit to enrollment for those institutions that meet the demand future students will place on technically savvy

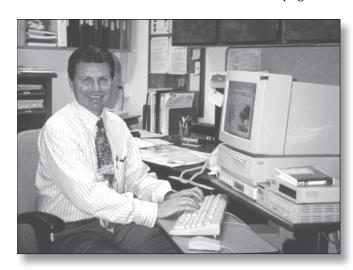
institutions," he said. Other Butte College instructors have also recently begun offering Web courses, but are generally limiting their enrollments during these early exploratory stages.

At Butte College, the Internet courses are a natural progression for Slavich, who has been pioneering distance learning courses for years, as he continues to develop courses on video and will soon be moving into the DVD format.

"My pressure to develop classes of this type (online) is from my students," said Slavich, explaining how firefighters, farmers, and others who cannot commit to a traditional schedule, seek the flexibility of his distance courses.

However, many students still prefer to be in the classroom with a professor. Slavich agreed, "the textbook is alive and well for the immediate future." There are still big hurdles to overcome, and questions to answer for higher education. For example, educational traditionalists ask: How do you attract students used to traditional classrooms? Is it fair to limit public education courses to only

(continued on page 8)



- Richard Slavich has been pioneering distance education at Butte College for over 10 years.

# **Tegrity EduCarts Purchased by Regional Center**

Combination hardware/software allows instructors to create and publish online presentations

he CVC (California Virtual Campus) Statewide/Rural Regional Center recently purchased two Tegrity EduCarts for Regional Center colleges to use and evaluate. One cart will be housed at Cerro Coso Community College, and the other at American River College.

The Regional Center, in partnership with Tegrity will initiate a loan program, which will provide the opportunity for each college in the region to have the carts on their campus for up to two weeks.

The Tegrity EduCart allows an instructor to create a lecture, filled with rich multimedia content, without a lot of postproduction work. The Tegrity EduCart is a self-contained system which includes a Windows PC, an LCD projector, a document camera, an additional instructor camera, a video capture card, the cart and the Tegrity software which gives the Tegrity system its plug-and-play environment.

Instructors need only a short introductory session before they can use the carts to create their own online class presentations. After the lecture is created, using the Tegrity EduCart, it may then be either saved on the cart's hard drive or published to the web. The lecture is then delivered synchronously or asynchronously to students

using a Web browser. Students need a 28.8Kb connection or better to view the production.

Samples of presentations created using the Tegrity system can be found at <a href="http://www.tegrityclasses.com">http://www.tegrityclasses.com</a> The

"

Tegrity software uses the Microsoft Office suite of programs, specifically PowerPoint and Windows Media Player, so it allows instructors to create PowerPoint presentations while streaming audio and video lectures to accompany them. This capability would require considerable post production work without the Tegrity EduCart. The diagram below outlines the steps involved in the creation of a presentation.

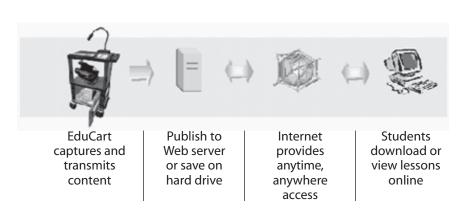
The Tegrity
EduCart allows an
instructor to create a
lecture, filled with
rich multimedia
content, without a
lot of postproduction
work.

More information, as well as pricing and contact information may be found at the Tegrity website at <a href="http://www.tegrity.com">http://www.tegrity.com</a>.

#### Contact:

Paul Meyers at 760-384-6239 or pmeyers@cc.cc.ca.us Yvonne Maller at 916-484-8896 or mallery@arc.losrios.cc.ca.us





# The Digital Virtual Mini-Studio

Ted Boehler
Director, CVC Regional Center 3
Coastline Community College

ust as the computer has revolutionized the space requirements for data storage, digital technology has also dramatically reduced the need for classic production facilities for the creation of educational video content. The Digital Mini-Studio is an example of how Coastline College is using developing technology and off-the-shelf components to drastically lower the cost of distance education.

While the Digital Mini-Studio is analogous in function to previous (analog) mini-studios we have built to support distance learning faculty, the final product is substantively different and considerably less expensive to create. Rather than a videotape for use in a VCR or playback on television, the Digital Mini-Studio creates a file stored in a computer server for streaming over the Internet. Rather than a real set, requiring substantial space and lighting requirements, a virtual 3-D set is generated to use behind the presenter. (The idea is something like the weather map generated on the evening news.)

The result is a highly effective teaching environment requiring minimal setup, preparation and maintenance. The finished media clips are used in the College's many Web-based programs and courses. Each graphic "set" background is tailor-made for the particular Instructor and subject matter.

The following briefly outlines the features of Coastline's Mini-Studio layout:

- 1. Desktop remote control video camera captures presenter
- 2. Chroma-key card combines digital background image and presenter
- 3. Combined signal is sent to switcher
- 4. Document camera captures paper-based or hand-drawn content
- 5. PowerPoint type electronic visuals may be used
- 6. Scan converter changes computer signal (PowerPoint, etc.) to video
- 7. Signals are mixed and selected through simple switcher
- 8. Switched analog signal is sent to encoding card (video capture) in computer
- 9. Encoding board internally converts signal for file storage/streaming over the Internet



Coastline Community College is using desktop video production to enhance Web-based courses



# What Stumps Newbies, and Veterans As Well

#### **Online Learning News**

That puzzles those who are new to development and delivery of online learning? Some of the same things that still puzzle online-learning veterans, says Saul Carliner, an assistant professor at Bentley College in Waltham, Massachusetts.

Be ready for these points of confusion, cautions Carliner, who teaches human factors in information design.

- Online delivery is about more than training. Carliner discerns these functions as well: education (distinct from training), performance support, knowledge management and collaboration.
- There are dozens of unfamiliar terms, and those terms aren't entirely consistent in their meaning.
- Most large businesses now have intranets and Internet connections, but online learning requires a variety of technologies to create and deliver it.

Even those familiar with learning technology are sometimes blind-sided by rapid developments, says Carliner. Key changes in the past year include:

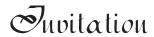
- The proliferation of Web-based training, and the number of companies offering their services in moving training to the Web.
- The growth of knowledge management, which lets workers learn what they need to know on the spot, sans training. "With the growth of online learning

- comes the growth of informal learning; learning that happens outside of a formal context such as a classroom or a scheduled course," says Carliner.
- A shortage of "content people" who can work at a high level designing "learning campaigns," involving a series of interrelated interventions that promote the desired performance.
- The rise of the online slacker. Merely putting content online doesn't ensure that people learn it. This puts a premium on marketing online learning to learners, retaining learners, and evaluating effectiveness of online learning. This also emphasized that learning requires a variety of interventions, and not just more courses.

Carliner will address these issues at TRAINING 2000 in Atlanta during his "Online Learning Primer" at 4 p.m. on February 10, a free event before the official conference opening.

Register for the show at http://www.training2000.com

Reprinted from Online Learning News, a weekly e-newsletter produced by Lakewood Publications. For more information, visit http://www.lakewoodconferences.com/brochure.htm



(continued from page 1)

Please join concerned educators, administrators, and support staff as we examine issues affecting education today and as we recognize the achievements obtained and the further pursuit of excellence for our students. Major system and educational issues explored will include the future of education through distance learning and service learning, activities and programs leading to student success, and emphasizing "community" in community colleges, as well as a large number of other areas.

This year's conference highlights include a wide range of workshops providing information through eight separate streams to provide information on the latest technologicalleducational materials and strategies, various preconference meetings, district and college showcases, and outstanding keynote speakers, including Kaycee Hale, executive director of the Fashion Institute of Design & Merchanising, Alexander Astin, director of the Higher Education Research Institute at UCLA, and John Morgridge, chairman of the board of CISCO Systems. We look forward to hosting this special community of educators, administrators, and support staff.

Sincerely,

Thomas J. Nussbaum Chancellor

California Community Colleges

# MegaConference

April 3-6, 2000

Palm Springs, California

#### REGISTRATION

**phone:** 916•323•5953 **email:** megaconf@cccco.edu

online: www.cccco.edu/cccco/gen/Mega2000

# celebrating

he pursuit of excellence

This year's conference highlights include a wide range of workshops providing information through eight separate streams to provide information on the latest technological/educational materials and strategies, various preconference meetings, district and college showcases, and outstanding keynote speakers."

# **Moving Ahead At TechEd2000**

Celeste Ingrid Marketing Coordinator, TechEd2000

echEd2000, a hands-on conference on March 6-9 in gorgeous Palm Springs, is not just another educational technology conference.

"This conference has become the definitive statement for educational technology," said Dr. Fred Gaskin, Cerritos College President and chair of the event. "The conference brings together all that there is — expert instruction, visionary insights and exhibits by the world's leading technology companies."

Cerritos College, which bills itself as the most technologically advanced institution in the system, sent more than 50 educators to last year's TechEd conference. "We are always concerned about being on the cutting edge, and the conference allowed us to learn new things and validate some we were already doing. Our folks came away with renewed enthusiasm and commitment," said Dr. Gaskin.

In addition to the conference, there will be more than 25 pre-conference workshops presented by a select group of education and business leaders who will explore the hottest topics in education. These in-depth workshops offer participants real world knowledge to take back to their campuses.

For example, two educators from the University of California at Riverside will share their extensive experiences with online education during a workshop entitled, "The Real Deal: A Clear-eyed Look at Online Learning."

"There are upsides and downsides to introducing online teaching techniques," said Kathleen Schwartz, Computer Resource Specialist at UC Riverside. "With this workshop we hope to present an honest picture of online education, including what questions to ask, what to be aware of, and how to execute such a monumental program."

What more could an educational technology conference possibly offer? How about thought-provoking keynote addresses by some of the world's most distinguished technology visionaries, such as Nicolas Negroponte, Co-

founder of the MIT Media Lab and author of the celebrated book on the Cyber Revolution, "Being Digital."

Other keynote speakers include Shirley Ann Jackson, president of Rensselaer Polytechnic Institute; John Warnock, Co-founder and CEO of Adobe Systems; and cultural anthropologist Jennifer James.

TechEd2000 will feature nine computer labs with more than 70 sessions for educators to learn while using the latest educational software. There will also be 120 concurrent sessions, 15 spotlight speaker sessions and 20 roundtable discussions, all led by education futurists at the forefront of technology.

TechEd 2000 promises to be the ultimate state-of-the-art technology experience for educators and educational decision-makers alike. To learn more about registering for this exciting conference, including early bird and group discounts, visit the conference Web site at <a href="https://www.TechEd2000.org">www.TechEd2000.org</a> or call the TechEd2000 registrar at (916) 551-2041.

#### **Online Certificates**

(continued from page 3)

those who can afford a computer and online server provider? How should fees be handled if a student takes courses from different colleges?

"Right now we're at a stage where we can't honestly answer all of those questions, but we (educators) will probably be forced to come to terms with these questions much sooner than later. Nevertheless, Slavich has no plans of slowing down developing distance classes, and he anticipates that the college will offer a totally online Associate degree in Natural Resources by the spring 2001 semester.

#### **Contact:**

Dr. Richard Slavich 530-895-2551 rslavich@cin.butte.cc.ca.us http://cin.butte.cc.ca.us/rslavich/personal

### **Technology Awards**

(continued from page 1)

information resources within reach of all campus constituents – and often the wider community.

On campuses everywhere, individuals within the educational technology community are resolving common institutional and instructional management challenges with ingenuity and resourcefulness. The California Community College, Chancellor's Office wishes to acknowledge such contributions and to draw attention to initiatives that's may serve as models for others.

The California Community College Chancellor's Office Recognition Committee will select recipients of this award. Winners will be recognized at the Chancellor's Office Mega Conference in Palm Springs CA, April 4, 2000.

