4. - USING TECHNOLOGY TO ADVANCE ALL ASPECTS OF UNIVERSITY LIFE

What progress was made on expanding college/school web sites?

<u>CAH</u>

I.

• Art and Design has launched a new site based on the university standards.

<u>CHHS</u>

• Several academic programs reviewed and updated existing web sites. On February 19, 2010, the College launched its *Connections* e-Newsletter that featured a strong social Networking effort with Facebook Fan pages connected to most departments in the college.

<u>COSS</u>

- Infrastructure upgrades are nearly complete, providing a much improved platform for technologically advanced campus communication, student learning and collaboration among faculty and staff. The university Web presence will be expanded and so will opportunities for online and Web-enhanced courses.
- Websites for all the departments/programs were completely updated by July 2010.
- The Mock Trial website was made compliant with university standards and linked to the Criminology Department web site.

<u>CSB</u>

• Launched a new homepage and revised websites for graduate programs, the Institute for Family Business, and Business Associates.

<u>CSM</u>

- Added a Forensic Science web link and a METRO grant web link (both professionally contracted)
- Continued to revise and update the College webpage

JCAST

• Continued, but slow, progress on web sites; a major barrier is resources to hire additional personnel for on-going support.

KSOEHD

Curriculum and Instruction

- The MAT introduced the new Blackboard 9 course management system to its Cohorts 4 and 5 fall 2009.
- The MAT also created a new Organization on BB9 in order to better advise its students online.

Literacy and Early Education

- We are continuing to put the Reading Master's Online through the approval process.
- Developed a website for our department.

LCOE

- Infrastructure upgrades are nearly complete, providing a much improved platform for technologically advanced campus communication, student learning and collaboration among faculty and staff. The university's Web presence will be expanded and so will opportunities for online and Web-enhanced courses.
- The College's Associate Dean, Dr. Ram Nunna, is coordinating the redesign (ATI compliant) and maintenance of the website for the College. He has coordinated with an external website designer and has provided program access (user name and password) to the department and program websites and is responsible for gathering information from programs to provide a consistent "feel" for each program's website while seeding the websites with the most current information.
- For some time the Associate Dean has taken the lead in keeping the College website current and consistent with current needs (e.g., showcasing the accomplishments of a staff or faculty member).
- A designated ASC is responsible for the College's electronic newsletter, "eCurrents" which is linked to the College website with updated news about the College on a quarterly basis.

HML

- On library home page, created a federated search capacity (one search box, multiple databases) for our thousands of electronic resources
- Significantly redesigned the library's web site to improve usability and access to resources/information

II. What new online web-enhanced courses or programs were launched?

<u>CHHS</u>

Communicative Disorders and Deaf Studies

• Is transforming most of its deaf education graduate program to all online classes.

Kinesiology

• KINES 250T (Title IX) was offered online in fall 2009.

Nursing

- The Psychiatric Mental Health Nurse Practitioner Program courses are delivered via web based distance learning with Elluminate Live!
- The Department has developed a proposal for a multi-site off campus RN-BSN program that will utilize on-line and web enhanced course work.

Physical Therapy

• Faculty members continue to make more web-enhancements in their courses. In particular, this year Dr. Cheryl Hickey has incorporated multiple sites for tutorials in statistics and use of SPSS on-line for students enrolled in our PhTh 298 PT Project Research class.

Social Work Education

- Online field instructor training was made available to all field instructors. The training is required for accreditation and the use of technology to deliver it has made it more accessible to our partners in the large service region of the central valley.
- Field manuals are now available on line.
- Inclusion of several additional countries in the on line international chat room.

COSS

- Several Political Science courses were converted to online courses.
- The Department of History continued their online courses which include History 100 and SSCI 110 (Liberal Studies).
- Faculty continued to expand their use of Blackboard, attend technology workshops for teaching, and now use the full range of classroom technologies to enhance their lecturers (Power Point, Blackboard, Video, image databases).

JCAST

• New online courses are being developed in the Department of Industrial Technology. The initial planning for an on-line master's degree program has been completed. Faculty will participate in a workshop at the end of the Spring 2010 program to advance this initiative. The first online course will be IT 224 – Quality Management Techniques, taught by Dr. Daming Zhang.

KSOEHD

Literacy and Early Education

• All our courses are online. Reading Online is in progress.

<u>LCOE</u>

• No new web-based courses were offered primarily because technical education such as engineering is difficult at best and impossible at worst to offer successfully through distance learning (a good example is the AVEP program which the College has struggled with through a hybrid DL mode for over six years but is currently in a phase out mode to be complete by Spring 2011).

III. What processes were modified to take advantage of technology?

CAH

- The Linguistics Department reached another milestone in its Green effort by using only digital communication means and disposing their Xerox machine
- Julia Bradshaw, a faculty in A&D is using the CSALT 'Hybrid' initiative to implement a more hybrid learning approach to her classes using technology. This includes use of blog technology and Blackboard.

<u>CHHS</u>

Kinesiology

- The Department has encouraged all faculty, full-time, part-time, and teaching assistants to use Blackboard as part of their instructional activities.
- The Department is using People Soft to reorganize and improve faculty student advising assignments.

Nursing

- The Department established a Nursing Simulation Center with support from a self-support grant and a Song-Brown OSHPD grant. We have instituted complex clinical scenarios that employ high fidelity mannequins and have begun systematic student practice and assessment.
- Work continues on the Knorr Simulation Center and the Nursing Lecture Hall which will be a distance learning classroom.

Public Health

- The department revised its policy on hybrid courses and will begin implementation during the 2010-2011 academic year.
- The department has worked with part-time faculty to encourage them to use Blackboard.

Physical Therapy

- Our undergraduate IHRS program now has a listserv for ongoing communication
- The department website has been updated with appropriate links
- We are now using a national on-line PT application for the MPT-DPT program
- Dr. Cheryl Hickey uses Cantasia Studio and will be in-servicing our faculty on the uses of this technology in the classroom
- We are exploring an interactive anatomy DVD to compliment our anatomy and neuroanatomy courses
- We have tried to go 'paperless' in the PT office (for example, we did not print out our student applicant information (10 pages/student) for our faculty panels to

read prior to interview but instead placed them all on blackboard and used computer labs for them to read prior to the interview.

Recreation Administration

• With the assistance of the college's Director of Development, we have enhanced the use of our Facebook page by creating a fan page. Updates on news/events will take place on our fan page rather than on our website. This will give us the flexibility to make changes remotely rather than at the computer work station in our main office.

Social Work Education

- All required field internship tools are available on line and can be completed on line. The PPS program has required on line submission of all PPS evaluations of student performance which has greatly enhanced the ability to collect and aggregate program data for outcomes purposes and ongoing accreditation requirements.
- Criterion writing workshop and implementation.
- Several faculty participating in pilot of new version of BlackBoard.

<u>COSS</u>

- Geography's new Urban Planning/Environmental Research Lab is now being used by more COSS departments and the department of Philosophy.
- The History Department has utilized the new Student Recreation Center's large classroom with its advanced technology.

<u>CSB</u>

- Extensive use of a CSB Faculty organization in Blackboard to disseminate information and to collect rubric scores from faculty for assessment
- Extensive instructions materials for the GE quantitative analysis course (DS 71) were placed on Blackboard to provide students with extra assistance.
- Several instructors in ISDS started using iClickers in their classes. We collected data to compare student grades in sections with and without iClickers.

<u>KSOEHD</u>

Literacy and Early Education

- We do more on Blackboard that keeps faculty from travelling so much.
- We have recommended students in some cases videotape their lessons and the supervisor watches the video. Results are uncertain at this point.

Counseling, Special Education and Rehabilitation

• Counseling labs set up a new technology system that is accessible on computer and increased access.

LCOE

A phase out of the AVEP DL program is in progress to allow the College to concentrate on its Fresno campus operation. In addition, all new faculty are using "Blackboard" as a regular part of their courses to provide 24-7 access to course material for students. Elements of the use of technology are being included in new Probationary Plans. Classroom modifications include installation or upgrades of fixed LCD projectors and document cameras. The College is nearing completion of upgrades using "Smart Classroom" technology and new workstations for its major computer labs (third floor in Engineering East Annex). In addition, an LCOE project is nearly complete on converting EW101 from computer lab to a quasi-"Smart Classroom." A renovation is underway to convert IT160 from a classroom to a Project Innovation Studio with teleconferencing and "Smart Classroom" capabilities.

<u>HML</u>

- Expanded student laptop program by almost 150 laptops
- Creation of a Multi-Media Production Lab in the library
- Creation of a Digitization Center (4th floor south wing)
- New Geographic Information Center established in the Library (GIS-based)
- CALOCKSS project initiated to harvest and preserve all state government edocuments (unique in the state)
- Link+ rapid inter-library loan
- Equipped and began using our Studio 2 online classroom complex
- Instruction and Outreach Services created 2 new Information Literacy tutorials, bringing the total to 4. In 2009, 3,185 students took them. These tutorials are in Blackboard and available 24/7.
- Seven Secrets to Success online technology tutorials/tours available from library's homepage 24/7. 5,311 students have gone through the tour.
- Assignment Research Calculator (time management and research tool) taken by approximately 500-700 students/month
- Reference Services added new technologies to greatly increase access to students and faculty who need research assistance of any kind; University community members can contact the department using instant messaging, texting, email, and by calling a toll-fee telephone number.
- Library now vigorously focuses on adding electronic resources, when possible, to provide 24/7 online access to their contents; substitution of e-journals for print etc.
- Implemented a new statistics program that allows much more detailed data collection on service provision; contacts are now recorded online in a variety of categories that can be analyzed/manipulated in numerous ways to determine optimal staffing patterns, etc.

• Extensive initial planning for the creation of a digital repository that would provide online access to faculty research, student research, and a variety of other valuable university efforts

The particular area of interest in the Strategic Plan for Excellence III is "Using technology to advance all aspects of university life". That section's bullet points are:

- Improve and expand the university's web presence
- Ensure students are technologically proficient at graduation
- Enhance student learning through the increased and effective use of on-line and web-enhanced courses and reward faculty for improving student learning through the use of technology
- Embrace and adopt technology to improve the lives of all members of the university community and help them to manage their workloads
- Remove barriers to the use of technology by faculty and staff and provide new structures that support collaboration
- Continue to explore innovative uses of technology to ensure efficient, timely and convenient on-line services that allow all members of the university community to manage routine administrative processes
- Expand accessible technology for the entire campus community

Updated 12 April 2010

Five Technology Strategies for 2008-09

Background

Through a series of retreats and meetings, STLT reviewed the previous "Ten Initiatives" document, the President's goals and strategic initiatives for 2009-10, and CSU technology initiatives. The result is this document moving from initiatives and goals to broader strategies for technology.

The five strategies are

Academic Technology for Student Centered Learning

Services for Improved Efficiencies and Satisfaction

• Communication and Collaboration

Integrity and Security of Technology Systems and Information

Universal Access

Academic Technology for Student Centered Learning

This strategy incorporates the previous initiatives to "provide academic technology designed to improved learning environments and support student centered learning", "continue providing academic technology resources", "continue courseware development, and "refresh equipment and technology in smart classrooms". Additionally, this area addresses the president's 2008-9 sixth and seventh goals to enhance and expand the use of academic technology, and to enhance and integrate information systems such as Blackboard, PeopleSoft, and Keycard.

Specifically, we intend to

Enrich both physical and online learning environments

Support faculty moving from content delivery to designing learning experiences

Improve our use of technology to enhance assessment of student learning

Facilitate classes that combine traditional instruction with learning-by-doing

Develop additional online degree programs

As evidence, we expect to

Collaborate with CSU colleagues to discover, document, and implement best practices for academic technology.

Brent is on the CSU DAT (Directors of Academic Technology) executive committee, this campus' CSU LMS representative, and is on two DAT subgroups on Web conferencing and lecture/classroom capture. Lynda serves on the Accessible Technology Initiative Leadership Council.

Work on a large-scale pilot of the Learning Content System/ePortfolio.

The Learning Content system is still being explored. A pilot version of a content system the foundation of a centennial photography project. The pilot project is a collaboration between Digital Campus and the university archives.

Provide a system to support peer review of student work.

ePortfolios are implemented in KSOEHD using a commercial product. The larger ePortfolio committee decided to put a university-wide deployment on hold. Peer review and ePortfolio depend on having a content system.

• Collaborate among TLT and the Library to develop standards and architecture for an institutional repository of digital media; better integration between library services and the learning management system; and ways to address faculty and student needs for digitization and the production of digital media.

Collaboration between TLT and Library staff is ongoing, the centennial photography pilot project is a concrete example. The library and Digital Campus are working on moving eReserve material to Blackboard.

Work with faculty and staff to select a collaboration solution that will effectively address the means for people to work smarter together through enhanced communications tools.

- With the deployment of Zimbra, all faculty and staff (not just those with Meeting Maker access) can schedule meetings and share documents through Zimbra.
- Student email is being moved to gmail. This gives students access to the Google suite of collaboration applications.
- Delivered SupportNet system to allow instructor referrals and tracking of students struggling in classes to get mentoring and learning center support

Continue transition to HD (high definition) video technology in distance learning classrooms

Accomplished with the completion of upgraded HD videoconferencing equipment in the distance learning classrooms.

Continue the eScholars program supporting faculty developing online experiences

The eScholars program continued, providing faculty incentives to develop learning modules and disseminate their experiences. This year, eScholars is focusing on the development of online certificates and degrees.

Increase faculty use of online real-time collaboration technology.

Usage of Elluminate is increasing. Faculty are using it for online office hours as well as areas for online real-time student groups to meet. For in-class real-time collaboration, the university standardized on iClicker classroom clicker technology. The bookstore handles sales and buyback of used clickers.

Work with schools and colleges to begin refresh of laboratories and conference rooms in addition to centrally allocated classrooms

Continuing. Centrally allocated smart classrooms are refreshed on a regular schedule. TLT Classroom Services is working with college and schools (most recently, LCOE) to

refresh smart lab space. Note that TLT Classroom Services pays for projector bulb replacement for central- and non-centrally allocated classrooms. This is thousands of dollars a year.

Relationship to Presidential goals for 2009-10

- Continue to give student success a priority
- Provide encouragement and support for the development of innovative pedagogy which increases student learning.
- Complete planning for centennial activiteis and initiate the centennial celebration in April, 2010

Services for Improved Efficiencies & Satisfaction

This strategy incorporates previous initiatives to "continue providing academic technology resources", and "continue faculty professional development".

Specifically, we intend to

Eliminate re-work and reduce busy work

Make communication more meaningful to recipients by targeted communication based on interest (CRM, internal communications)

As evidence, we expect to

Provide effective training opportunities for part-time faculty.

TLT continues to develop online technology training modules (such as for Zimbra) and are continuing subscriptions to AtomicLearning. The Chancellor's Office made available the accessibility suite from Lynda.com. Online training is available 24 hours a day from anywhere with a network connection.

Continue collaboration with Human Resources to develop a campus-wide online training center

Launched, see http://www.csufresno.edu/etraining/ . Some of the HR and safety training is offered through a Blackboard shell.

Deliver enhanced administrative services

• Delivered Pay-for-Print 2.0 with enhanced integration to Bulldog Card debit functions and wireless printing options

- Delivered electronic funds transfer option to replace refund checks for student financial aid and refunds and employee reimbursements
- Delivered online registration and payment for Continuing and Global Education students enrolling in for-credit classes

Implementation of data warehousing technologies to provide enhanced decision support infrastructure

Provide online parking permit purchases and enhance distribution methods

Launched.

Relationship to Presidential goals for 2009-10

• Provide leadership for the expasion of professional development activities for faculty, staff and administrators with an emphasis on the use of webinars, online programs, and other activities that are developed locally.

Communication and Collaboration

This strategy incorporates previous initiatives to "continue advancing online administrative services for students", "provide information security support of the university's technology, "continue the clean up the web campaign and implement a web management plan", and "continue funding technology initiatives".

Specifically, we intend to

Effectively provide a portfolio of IT resources available to students, staff, and faculty.

Communicate about IT resources internally and externally.

As evidence, we expect to

- Work together with faculty and staff to select a collaboration solution that will effectively address the means for people to work smarter together through enhanced communications tools.
 - o Launched Zimbra.
 - Developed template for small web-based database applications for campus delivery (e.g. RSVP system)

Deploy student road maps with integration to degree progress reporting using Degree Completion Planner

- Ongoing development of Degree Completion Planner system to allow integration of Academic Roadmaps to student multi-term course planning
- Delivered integrated new student orientation registration system to track Dog Days reservations and payment
- Enhanced advising tracking functions to support Student Success Task Force recommendations for Freshman Advising and Super Senior degree planning

Convert detailed articulation transfer courses into PeopleSoft to allow for course level pre-requisite checking

Complete moving web sites to the university standard

- Underway, see http://cleanuptheweb.csufresno.edu/. Websites continue to be moved to the web standard.
- *Researching Web content management systems to meet accessibility and campus functional requirements*
- Initiating review of campus web architecture to develop new page templates and development guidelines to meet campus identity, function, and accessibility requirements
- Developing compliance review procedures for all campus web sites to ensure they meet accessibility requirements
- Continue removing inactive or inaccurate web sites.

Continuing. Function will continue with the new Office of Web Services.

Implement a sustainable model for funding the new telephone system

Completed with the deployment of VoIP system.

Improve coordination between the School and College techs and ITS/TLT/CIS

Underway. This is a primary goal of the IT reorganization. Active Directory (AD) is being implemented. ITS launched a new ticket-tracking system is being implemented and includes Digital Campus and TLT tech staff.

- Align IT funding and IT priorities
- Stream video and audio live and on-demand for public and instructional purposes.

In progress. Digital Campus staff integrated the streaming video system with Bb to provide on-demand, per-course instance video. This is required for compliance with the federal TEACH Act. Digital Campus also supports http://iTunesu.csufresno.edu for faculty wishing to podcast. TLT staff work with campus units to deliver real-time video of campus events such as the beginning of semester assemblies, commencement, hooding, and international students convocation. The cost of developing effective video and the need to meet ATI requirements for accessibility are retarding broad adoption of instructional video.

Relationship to Presidential goals for 2009-10

Complete the implementation of a new phone switch system and implement new e-mail and calendaring systems.

Integrity and Security of Technology Systems and Information

This strategy address the responsible use of IT technology and the life cycle of data.

Specifically, we intend to

Ensure that students, staff, and faculty understand their responsibilities with respect to intellectual property, confidentiality, and privacy.

Provide systems allowing the responsible use of data and IT resources through a variety of devices and interfaces.

As evidence, we expect to

Examine and revise business practices and policies in preparation for purchasing an identity management system

- Policies were revised, and Shibboleth was implemented.
- *Implemented two-factor authentication on core application and database servers to enhance security*
- Upgraded Bulldog Card System providing enhanced keyless security access

Extend the benefits of the network upgrade (TII/ITRP) to additional buildings that were out of scope in the original project.

Completed.

Expand wireless network access to ubiquitous campus coverage by January 2009.

Completed.

Work together with faculty and staff to select a collaboration solution to effectively and securely allow collaboration and enhanced communication.

Completed with the implementation of Zimbra.

Participate in CSU initiatives for identity management and protection of intellectual property

Richard is actively involved at the CSU level.

Relationship to Presidential goals for 2009-10

Undertake a review of selected administrative processes with the goal of consolidating and/or improving business processes, saving valuable resources and improving services for the University community.

• Complete an organizational review of information technology and initiate appropriate changes. Review the provision of web services and develop an organizational model to serve the campus.

Universal Access

This strategy incorporates the CSU Academic Technology Initiative (ATI) for universal access to IT.

Specifically, we intend to

Ensure that students, staff, and faculty understand their responsibilities with respect to accessibility of IT resources and materials.

As evidence, we expect to

Actively participate in the CSU ATI areas of procurement, web accessibility, and instructional materials.

We actively participate in the communities of practice for each area. We are submitting to the Chancellor's Office voluntary self-assessments of our progress in each area. These reports are being presented to AIT, IETCC, and STLT for input on priorities for future progress.

Increase faculty awareness of the need to use and produce accessible materials, and of ways to do so.

A second Accessibility Awareness fair was held, universal design for learning was added to the Bb repertoire of training classes, and the universal design website (http://ulearn.csufresno.edu/) was launched. The ATI Awareness and Training subcommittee is distributing a monthly ATI bulletin. All Digital Campus training for faculty includes accessibility and universal design, and specific sessions are offered on producing accessible documents, producing accessible PowerPoints, and testing web sites for accessibility. Training materials for the development of accessible materials have been organized in the Blackboard Faculty Forum to provide easy access. Digital Campus is supporting the use of LecShare to produce accessible PowerPoint presentations. In addition to managing access to Automatic Sync transcript and captioning services, TLT integrated DocSoft captioning into the NCast course capture system used in distance learning classrooms. This automatically produces a transcript (though not necessarily a high quality transcript).

Improve the rate of on-time textbook adoptions

Implemented.

Relationship to Presidential goals for 2009-10

Complete an organizational review of information technology and initiate appropriate changes. Review the provision of web services and develop an organizational model to serve the campus.

CONTRIBUTORS:

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