

November 2007

## California State University, Fresno

### Technology Plan

#### Ten Initiatives

**1. Provide Academic Technology Designed to Improve Learning Environments and Support Student Centered Instruction.** *Implement instructional technologies designed to improve learning environments and encourage the emergence of a culture change in which academic technology fully supports innovative and student-centered instruction. Move toward individualized, small group, on-demand, and point-of-need faculty training and support. Reward faculty for improving student learning, including improvement through the use of technology. Reduce structural barriers that work against the use of technology among faculty. Use technology to reduce instructional overhead to improve instruction and manage workloads. Expand training and support for students with an emphasis on information literacy and information fluency across the curriculum. Move teaching and learning beyond the walls of the classroom, making learning independent of time and space.*

#### Report on Goals for 2007-2008

- Put Elluminate in the hands of five new faculty members, providing models for use of the software and determining the need for a continued and expanded license.  
*Several faculty members piloted Elluminate with great success. An unlimited seat license will be made available beginning summer 2008.*
- Develop a process for evaluating emerging instructional technologies.  
*A new committee comprising Digital Campus staff and early-adopter faculty will provide support for faculty wishing to experiment with emerging instructional technologies and will provide guidance in prioritizing the investment of staff time in emerging technologies.*
- Expand the use of Atomic Learning by 15% and locally produce at least ten additional online technology training modules  
*Staff shortages prevented the production of additional modules, and, due to staff turnover, incremental use was not tracked.*
- Evaluate LMS systems alternative to hosted Blackboard service and propose an action plan and timeline.  
*The "Bringing Blackboard Home" project is underway, with full implementation scheduled for Fall 2008. Brent Auernheimer is on the CSU team that is evaluating alternative LMS systems.*

#### Additional Accomplishments 2007-2008

- Enhanced communication and collaboration through enhancements to the email services including expanded email quotas for students; reduced communication "noise" through automated spam filtering system and improved performance and functionality of email distribution lists (Listserv).
- Piloted iTunesU. A full-fledged implementation has been stymied by accessibility issues.
- Piloted the use of ePortfolios

#### Goals for 2008-2009

- Work with Q-Dogs and other interested parties to do a large-scale pilot of the Learning

- Content System/ePortfolio by fall 2009.
- Provide a system to support peer review of student work.
- TLT and Madden Library will collaborate to develop standards and architecture for an Institutional Repository for 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.

**2. Continue Advancing Online Administrative Services for Students.** *The university will develop user-friendly online administrative services for students, such as registration, fee payments, purchases, travel, procurement, parking, course scheduling and room assignments, degree progress, financial aid, tickets, pre-requisite checking, etc.*

### Report on Goals for 2007-2008

- Implementation of an integrated Academic Roadmap functions for undergraduate student degree completion is planned. This process will include:
  - Framework for departments to enter roadmaps for degree completion
  - Access for students to enter multi-term course plans
  - Production of degree progress reports including planned courses*Implementation of Degree Completion Planner for Undergraduate Academic Roadmaps is underway.*
- Interactive degree audit functions for graduate students supporting advancement to candidacy utilizing the same degree completion planner interface as undergraduates  
*Implementation of Degree Completion Planner for Graduate Advancement to Candidacy tracking is underway.*
- Enhanced enrollment pre-requisite checking by providing detailed articulation results for transfer class work into the CMS HCM System  
*Continued to next year.*
- Implement secured systems support for pilot expanded testing center services to allow for course exam scheduling outside of class time  
*Implemented Enhanced Testing Center providing course testing outside of class time with system tracking and support.*
- Delivery of enhanced student services including:
  - Enable students to choose EFT refund payments instead of paper checks for Financial Aid payments and other refund options
  - Integrate secure Financial Aid supplemental information capture with data updates into the CMS HCM System
  - Replace ancillary systems with improved technology and systems for core business processes including:
    - Supplemental Financial Aid information gathered through secured web-based forms
    - Scholarship posting, application, review, and award process via hosted web system
    - Purchase and distribution of parking permits via online system*Preparation to enable students to choose EFT refund payments instead of paper checks for Financial Aid payments and other refund options is nearly complete for Fall 2008 disbursements.*
- Implement Bursar In/Out API to interface the Library's new Millennium system with PeopleSoft in order to provide systematic way of placing and/or removing administrative blocks on student records based on their levels of delinquency or library fine payment status.

### Additional Accomplishments 2007-2008

- Registration waitlists implemented for all GE classes and many departmental classes
- Conversion to enhanced ID card system underway to provide more options for debit account functions

- Delivery of SupportNet for early notification by faculty of students needing learning support implemented for pilot departments

### Goals for 2008-2009

- Delivery of enhanced student services including:
  - Allowing online registration, payment, and records review for Continuing and Global Education programs
  - Deployment of student roadmaps with integration to degree progress reporting using Degree Completion Planner
  - Conversion of detailed articulation transfer courses into PeopleSoft to allow for course level pre-requisite checking
  - Online parking permit purchases and enhanced distribution methods

**3. Continue Providing Academic Technology Resources.** *Students, faculty, and staff will be provided with an integrated computing environment, built on a solid infrastructure that gives access to current technology and prepares for emerging technologies (e.g. wireless, high bandwidth, local and remote). Every student will have a digital device and anytime/anywhere access to electronic resources, including the library. Every faculty and staff will have digital facilities appropriate to their function, including offices, that are fully supported and refreshed as needed based on a two-year needs review cycle.*

### Report on Goals for 2007-2008

- Deploy the new campus video distribution system. Complete the TII/ITRP network deployment in buildings with new TII infrastructure as a foundation for increased capabilities, new applications and better reliability  
*Completed a campus-wide upgrade to the network resulting in significantly improved network capabilities. The network improvement brought noticeable improvements in network speeds and capacities for faculty, staff and students. These improvements also enable the use of new applications and new methods of collaboration. Enabled network distribution of video, including deployment of an innovative streaming video system, through upgrades to our network, storage systems, and data centers.*
- Replace our current telephone system with a new service that can deliver unified communications for our faculty and staff  
*We have completed an RFP for replacement of our telephone system and expect installation of the new system to begin in June and complete during the fall 2008 semester. However, unified communication, linking data and voice communications together, will not be fully enabled until a new collaboration environment is installed in January 2009.*
- Assure the new library has the appropriate technology foundation to support current and future needs  
*ITS staff continue to work with members of the Library team to install and make use of the most recent technology for the new Library.*
- Enhance our support of technology through a new helpdesk system and integrated quality assurance  
*Improved help desk resources including a new help desk platform, and improved desktop support resources. Redesigned the online help center and the CVIP web site.*
- Extend the capabilities of ITS to support the dynamic needs of a growing university community, keep pace with and support new and emerging technologies
- *Adopted innovative virtualization and storage technology that improved the reliability and availability of central campus services as well as provided an agile environment in which to rapidly adopt technology solutions.*
- *Increased the availability of critical network services through the adoption of notification*

*processes, change control processes, and business continuity practices.*

- *Adopted innovative value-added services for hosting servers within the co-location facility thereby leveraging a robust centralized infrastructure along with automated backup and monitoring systems.*
- *Broadened access for mobile computing through expanded wireless data network for students, faculty, and staff including expansion of wireless data network in the dorms.*

#### **Goals for 2008-2009**

- Work to extend the benefits of the network upgrade (TII/ITRP) to additional buildings that were out of scope in the original project.
- Expand wireless network access to all state buildings during the summer 2008, with ubiquitous campus coverage by January 2009.
- 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.

**4. Refresh Equipment and Technology in the Smart Classrooms.** *All classrooms and labs will be configured and well-equipped to support the appropriate use of technology. All aspects of the classroom/instructional experience will be affected by technology, including examinations, projects, and assigned readings.*

#### **Report on Goals for 2007-2008**

- Obtain input from faculty on the current smart classroom design  
*Held a focus group to obtain faculty input.*
- Begin refresh of the classrooms upgraded in 2002-2003  
*Done*
- Install new MediaLink controllers in the classrooms upgraded in 2002-2003 and 2003-2004 to provide a common interface across instructional environments  
*Done*

#### **Additional Accomplishments 2007-2008**

- Standardized on a new document camera model
- Installed technology in the TA 117 conference room, Ed 444, and two classrooms at the Fresno State Visalia Center.
- Installed NCast lecture capture devices in two distance learning classrooms.

#### **Goals for 2008-2009**

- Complete the installation of a distance learning classroom for the Joint Doctorate in Forensic and Behavioral Sciences
- Evaluate potential uses for the NCast lecture capture system
- Install HD technology in two distance learning classrooms
- Work with schools and colleges to begin refresh of laboratories and conference rooms in addition to centrally allocated classrooms

**5. Continue Faculty Professional Development.** *Faculty will have full access to professional development in the area of technology for teaching and learning and support in the use of technology in teaching. Faculty will be provided with a support team for Web-enhanced and Web-based course design and will be assisted in integrating technology into the curriculum.*

#### **Report on Goals for 2007-2008**

- Survey faculty and staff to determine current training needs  
*A survey of new faculty members indicated need for early instruction on the use of the Blackboard Learning Management System. Ed Nelson's faculty survey indicated that faculty wanted additional training opportunities on the use of the smart classroom technology.*

- Consolidate registration and tracking for CETL, Technology Training, and Digital Campus events to facilitate analysis and reporting of participation.  
*We have not yet found a suitable replacement for the current registration systems.*
- Increase total number of available professional development and training events by 15%, and increase attendance by the same percentage
- Institute a project-based professional development program to assist faculty in the production of online or hybrid courses and multimedia-based instructional modules.  
*Twenty faculty members are participating in the eScholars program, in which they receive a small stipend for attending training events and completing a project. Several are producing online courses, a few are producing hybrid courses, and others are producing instructional modules.*
- Develop and put in place training for Microsoft Vista, Facilitate, Office 2007, and the replacement for MeetingMaker  
*Microsoft Vista is not yet a campus standard and the MeetingMaker replacement has not been selected. Training is available on Facilitate Express and Office 2007.*

### Goals for 2008-2009

- Develop an online orientation to the smart classroom equipment.
- Expand the Instructional Design team.

**6. Continue Courseware Development.** *In order to ensure that instruction is effectively adapted to the learning needs of students, the university will establish a well-funded courseware production unit. Courseware created by faculty at Fresno State will be used on campus and may be marketed externally.*

### Report on Goals for 2007-2008

- Through the project-based professional development program, support the design of at least three online and six hybrid courses.  
*Faculty members are in the midst of their design projects. The entire LEE Masters in Reading is being converted to an online program through the eScholars program.*
- Through the project-based professional development program, involve Digital campus and the Digital Production group in the production of four new multimedia learning modules.
- Hire an additional staff person to assist faculty in the production of accessible instructional materials  
*The position description has been prepared, but we have learned that the instructional designer will be leaving Digital Campus, and we wish to advertise for both positions at the same time.*

### Additional Accomplishments 2007-2008

- Introduced more faculty members to the possibilities that Elluminate provides for synchronous web-based instructions or office hours.
- Obtained an unlimited seat license for Elluminate.
- Digital Campus increased direct support of instruction from 10% to over 25% of their time.

### Goals for 2008-2009

- Continue increasing the number of hybrid and online courses.
- Continue the eScholars program.
- Increase faculty use of Elluminate.

**7. Provide Information Security Supportive of the University's Technology.** *In order to provide for information security, further develop an environment supportive of new technologies, pilot projects, the library, managed and unmanaged computers and yet still provide assurance that the confidentiality, integrity and availability of information is maintained. Prioritize policy development based on a high-level risk analysis conducted by the security think tank. Insure all members of the Fresno State community have appropriate training and awareness regarding information security*

*issues pertinent to their current responsibilities.*

### **Report on Goals for 2007-2008**

- Security policy development and enhancement to better clarify acceptable use and data classification and handling  
*Developed policies on acceptable use network connection policy.*
- Integrate security awareness training with institutional practices so members of the community have the understanding they need to make appropriate decisions without placing the university at undo risk  
*Increased technical proficiency of students, staff, and faculty through security training.*
- Provide enhanced protection of university resources without compromising needed access through the deployment of firewalls and intrusion detection systems  
*Implemented network device security compliance and deployed security devices at the edge of and within our network.*
- Build our identity management capabilities so the confidentiality, integrity and availability of data is enhanced and made easier for the user  
*This work is going forward based on recommendations from a consultant. The first step is to examine business practices and policies in preparation for purchasing an identity management system.*

### **Additional Accomplishments 2007-2008**

#### **Goals for 2008-2009**

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

**8. Promote Universal Accessibility and Ensure ADA Compliance.** *In order to ensure that all technological initiatives are in compliance with federal and state legislation, including the Americans with Disabilities Act and Section 508 of the Rehabilitation Act, the members of IETCC and STLT will work to ensure universal accessibility for all and coordinate the initiatives with the university's effort to comply with all California State University regulations and requirements related to providing disability access.*

### **Report on Goals for 2007-2008**

- Develop and obtain approval for policies in the three ATI areas  
*The procurement policy at the system level is not yet clear, so a campus-specific policy has yet to be drafted. The policy on acquisition of instructional materials was approved as interim. The web policy has been sent to the Web Council for comment.*
- Develop and implement a plan for informing the campus community about ATI and accessibility  
*The web site, <http://www.csufresno.edu/accessibility>, has been announced. A communication was distributed from the provost to the faculty. The Department Administrative Assistants have been reminded of the requirement for timely adoption of textbooks and the need to provide course materials in electronic format. The ATI Awareness and Training subcommittee developed and distributed print materials and is continuing this work. Guidelines for the production of accessible materials have been incorporated into technology training sessions.*
- Pilot the use of Pachyderm and closed captioning for the production of accessible learning materials  
*Purchased several licenses for Dragon Naturally Speaking to assist faculty in the production of transcripts of instructional materials such as podcasts.*

### **Additional Accomplishments 2007-2008**

- Participated in the CSU multicampus EnACT grant on Universal Design for Learning.

- The Instructional Materials Policy has been passed by the Academic Senate
- The syllabus policy has been to the senate floor and with minor modifications will return to senate by end of the semester
- A review of all academic policies is underway with the intent to modify these policies for accessibility should be completed by the end of the semester
- The policy on ordering accessible classroom materials should be completed by the end of the semester and has been approved as interim.
- Policies for and standards for classroom materials are under development

#### **Goals for 2008-2009**

- Work with departments to provide course shells for all courses for provision of digital versions of syllabi and other course materials.
- Increase faculty awareness of the need to use and produce accessible materials, and of ways to do so.
- Improve the rate of on-time textbook adoptions

**9. Continue to Clean Up the Web Campaign and Implement a Web Management Plan.** *The university will continue to adopt the Clean Up the Web Standard, moving from higher level to lower level web pages so that all web sites will be accessible and readily maintained. A web management process will be put in place to ensure that web sites are accessible, contain current information, and are free from broken links.*

#### **Report on Goals for 2007-2008**

- Continue moving administrative web sites to the standard  
*Ongoing*
- Develop templates based on the standards that faculty can use for their professional web sites  
*Only about 120 web sites were identified as "owned" by faculty, so the development of templates was a lower priority than administrative web sites and "dead" or inactive sites. However, discussions about the Web Policy have indicated a political need for faculty web site templates, and this goal is continued to next year.*
- Design a web management process  
*The web management process is embodied in the Web Policy that has been sent to the Web Council for review and recommendations.*

#### **Additional Accomplishments 2007-2008**

- Identified "dead" or inactive sites and targeted them for removal.

#### **Goals for 2008-2009**

- Continue moving administrative web sites to the standard
- Gain approval of the Web Policy
- Develop templates based on the standards that faculty can use for their professional web sites
- Remove "dead" or inactive sites

**10. Continue Funding Technology Initiatives.** *The university will identify and secure funding to support technology initiatives at Fresno State from the university budget.*

#### **Report on Goals for 2007-2008**

- Implementing a methodology for account coding to improve efficiency and tracking

#### **Additional Accomplishments 2007-2008**

- Significantly refined predictions for the STLT budget
- Identified "reserve" line items for activities such as equipment refresh.
- Met at an STLT retreat to identify major priorities

#### **Goals for 2008-2009**

- Implement a sustainable model for funding the new telephone system

- Continue discussions that result in better alignment between funding and priorities

**Additional Items: Other Major Accomplishments, 2007-2008.** *We do not have a goal dealing with administrative services or other nonacademic work.*

- Delivery of enhanced administrative services including:
  - Improved personnel services for Absence Management (leave processing) on schedule for July 2008 go-live
  - Online tracking of employee training for internal and external classes
  - Preparation to enable employees to choose EFT refund payments instead of paper checks for employee reimbursements underway for May 2008 implementation
  - Electronic workflow for Undergrad Curriculum Proposal process underway using HandiSoft Bizflow

**Other Plans for 2008-2009**

- Delivery of enhanced administrative services including:
  - Conversion of university forms into automated workflow using Bizflow
  - Enhanced project/grant tracking with improved accounts receivable/billing and time/effort reporting functions
  - Implementation of data warehousing technologies to provide enhanced decision support infrastructure