

## Plan for Excellence Goal 4:

*Using Technology to Advance All Aspects of University Life*

### Advancing the Nine Initiatives of the Technology Plan

#### Brief update on Progress Indicator: 2006 – 2007

1. Advancing Online Administrative Services for Students:
  - With the upgrade to CMS HCM 8.9, student self service functions were made dramatically improved with the introduction of the Student Center. This one-stop online page delivered through My Fresno State Portal allows access to all core student administration activities including admissions, enrollment, transcripts, account review, and demographic changes. A similar interface was provided as a customer service tool to administrative offices to allow the same view as the student with in-depth information views allowing better student services.
  - In support of the student advising initiative and mandatory advising for all undergraduate degree programs, students can now generate degree progress reports. This self service advising function is limited to current active declared majors but may expand to incorporate reports for potential major changes (aka what-if).
  - Other enhanced features for students delivered this year included:
    - Self service Financial Aid loan acceptance
    - Pilot project for wait-list enrollment functions
    - Enhanced course pre-requisites for pre-enrollment skills tests
    - e-Bill - Electronic student statements (coming in June)

Enhanced services to all students by using current technology

See self-service functions in Advancing Online Administrative Services for Students initiative

- Utilized open source technology for Centralized Access System (CAS) to provide seamless single sign-on functions between core web-based student systems including My Fresno State and Digital Campus (BlackBoard)
- A comprehensive review of ID card services was completed providing a planning framework for advancement in service utilizing card technology across campus location
- An enhanced library administration system, Millennium, was implemented providing better services for catalog access and checkout/return processes
- Expanded email quota for students (from 10 MB to 500 MB) anticipated delivered by the end of the semester.
- Implemented new EDP and POS system at Kennel Bookstore facilitating shorter lines and faster check out. Implemented E-Books and on-line textbook option at Kennel Bookstore. New website for Bookstore online purchasing.
- Bookstore buyback guide comparison report/inquiry which could ultimately provide better buyback prices for students

- Added ability to accept credit/debit card in all Food Services locations
- Use campus One Card for University Courtyard residents for room access and Dining Hall privileges
- University Courtyard On-line application
- Installed wireless technology at the SRC

Improved personnel services by using advanced technology (i.e. Live Scan):

- The eRecruit project has migrated the employment request, posting, applicant acceptance, review, selection, and on boarding processes from a mostly paper process to fully online for management, staff, and instructional student assistant positions. Enhanced tutorials were delivered for this project using technology that integrates with the eRecruit application and produces both online interactive and static documentation instructions.
- Improved services delivered with the CMS HCM 8.9 upgrade included:
  - Manager self service allowing access to employee personal information to department heads
  - Improved access to time administration functions to support variable hourly employee (e.g. student assistants, intermittent workers) and temporary faculty processing functions
  - Enhanced payroll budgeting reporting options
  - Better procedures for tracking non-employees ‘persons of interest’ (e.g. Auxiliary employees, Athletic Corp employees, volunteers, etc.)
- Deployed server structure to support accessibility tools in support of ATI

## 2. Continue Providing Academic Technology Resources:

- Focused on an integrated computing environment delivered on a an updated infrastructure which provides the platform for current and emerging technologies
  - With the completion of the initial physical infrastructure portions of TII and deployment of new network equipment, the foundation exists for enhanced access, availability, services and capacity. Acceptance testing for this new network shows more than 20X the capacity of the old network and has proven continuity through some equipment failures whereas the old network had none. These capabilities provide a more robust infrastructure to run and enhance Academic Technologies.
  - Improved the disaster recovery capabilities through a new backup solution and enhancing existing backup technology. This increased capability has cut restoration times by up to 50% and provides capacity to back up more Academic Technology resources. The addition of off-site storage capabilities provides additional protection not previously available.
  - Improved SPAM filtering. The latest statistics available indicate that this system is stopping 85-90% of incoming messages as spam that has resulted in a 90% reduction in SPAM delivered to the user.
  - Integrated a single sign on capability leveraging our central authentication service with the Peoplesoft portal and Blackboard.

- Improved continuity through the adoption of redundant appliance systems and by moving towards a more distributed server infrastructure. While some of the improvements have already been made, the bulk of these improvements will be completed in 07-08.
3. Continue Providing Smart Classroom Build Out
    - installed in 114 of 132 centrally allocated smart classrooms, Peters Ed Center Auditorium, and 50 laboratories and conference rooms
    - currently installing in 18 remaining centrally allocated classrooms
    - updated standard smart classroom package
    - Faculty Laptop Program continues
  4. Continue Faculty Professional Development
    - Offering workshops and one on one help on software applications as required by faculty and staff
    - Digital Campus Brown Bag sessions
    - Collaboration with the ITS Help Desk
    - Smart classroom orientation sessions twice a year and on an as-needed basis
  5. Continue Courseware Development
    - Piloting ePortfolios and a Learning Content Management System
    - Piloting a Peer Review system of student work
    - Provided a site license and support for group Decision Support software
    - Developing instructional materials approaches for ATI (see 8)
    - Elluminate web conferencing software integrated into Blackboard
    - Endnote bibliographic software has been downloaded over 1,100 times
    - Piloting iTunes U for file sharing
  6. Provide Academic Technology Designed to Improve Learning Environments and Support Student Centered Instruction
    - increased online learning courses from 20 in Fall 2002 to 123 in Spring 2007
    - 1,300 instructors are currently teaching web-based or web-enhanced courses
    - Early adopters are producing multimedia projects. Several piloting pod casts
    - Upgrading to Blackboard 7 end of this semester
    - Considering approach for faculty to place all course syllabi online for accessibility
    - Continuing leadership in Clean Up the Web Campaign
    - Working with new director of the Fresno State - Visalia Center and Distance Learning (DL) for that center
    - Increased marketing of our DL programs in the south valley

- Planning remodel & refresh of DL Center in Visalia for summer
- Working with departments to offer additional degree in Visalia via Online and/or DL
- The Digital Production Group increased direct support of instruction from 1% to over 10% of their production time; Examples are Mass Communication and Journalism to enhancements
- Endnote bibliographic software software has been downloaded over 1,100 times

7. Provide an information security framework supportive of the University's technology initiatives:

- Identified critical issues for enhancing our security posture including policy development, security awareness training, targeted security training for information technology staff, and modification of our governance structure for security. Advancements in these areas include:
  - Development and approval of information security policies consistent with our culture. The approved policies provide a high-level description of the various methods used at the network level to protect information. These polices include: Minimum Security Baseline Policy For Network Connected Devices and Network Connection Policy.
  - Development and delivery of online security awareness program for staff, faculty and student assistants. Over 1400 people have completed this training as of the beginning of April 2007.

- Centrally funded (STLT) targeted security training for our Windows server and Unix server administrators. This training has resulted in improvements to central and distributed servers supporting many different applications.
- Modified an IETCC subgroup to provide a cross-functional security advisory structure to assure future security issues are addressed holistically.

## 8. Disability Access

Launched and expanded the Clean Up the web Campaign

Installed one accessible station in each open computer lab on campus

Launched Assistive Technology Initiative (ATI)

- Developed steering committee, three subgroups
- Began revision of course syllabi policies
- Initiated work with Kennel Bookstore to streamline textbook orders
- Conducted several sessions with Department Chairs, academic Senate and Deans on Instructional material development

## 9. Continue Funding Technology Initiatives

Annual Budget for the Technology plan is reviewed regularly through Senior Technology team Meetings.

Decreased administrative costs related to instructional and academic program costs:

- Completed selection of a flexible document workflow system, Handysoft Bizflow, to support automated tracking of processes through the various review and approval steps. This collaborative tool will be utilized to track simple work order/service requests and complex, multi-step processes from initiation to completion.
- Improved faculty adoption website which will include more information for faculty to make textbook adoption decisions
- Implemented an Endowment & Scholarship file interface between Foundation/Advancements for improved donor annual reporting

Implemented a pilot project using RFID:

- Leveraging the temporary storage systems for the Henry Madden Library Resources, passive RFID tags have installed on the 1 million plus items in the inventory. Digital devices have recorded the RFID and barcode item codes for loading into the new Millennium Library Administrative System. Self check stations and security gates utilizing the RFID technology have already been installed in the HML Library.

## **2. Proposed Steps for Next Year:**

- Implementation of an integrated Academic Roadmap function for undergraduate student degree completion. 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
- Enhanced enrolment pre-requisite checking by providing detailed articulation results for transfer class work into the CMS HCM System
- Implementation and deployment of a document workflow system and process design methodology to automate simple forms and complex workflow processes
- Implement secured systems support for pilot expanded testing center services to allow for course exam scheduling outside of class time

- 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
    - ID card system replacement to integrate identification, service entitlement, and debit card functions
  
- Delivery of enhanced administrative services including:
  - Improved personnel services for Absence Management, ePerformance, and succession planning
  - 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
  
- Business continuity improvements through migration to redundant servers and distributed data centers.
- Complete the migration to the new network infrastructure and the enhanced capabilities that will provide.
- Additional security infrastructure to protect and detect threats to university assets.
- Enhanced departmental services through advanced co-location facilities with high capacity networks, appropriate environmental protections and backup power.
- Improved support through process improvement, new support ticketing system and full accountability for problem resolution.
- Integrate voice and data and enhance voice capabilities through deployment of a new PBX solution.
- Availability of a new centralized file service
- Additional security policy development and adoption
- Ubiquitous wireless deployment
- Creation of best practice documents for use by distributed technology staff
- Enhancements to Identity Management services

### Classroom Technology

- Complete installation of smart technology and the refresh in existing rooms
- Incorporate wireless Internet access into classroom settings
- Streamline response to trouble calls by training staff to utilize the new Global Viewer
- Continue to research and incorporate new technologies in the classroom as it becomes available

### Online Learning

- Continue faculty stipend programs
- Focus on Universal Design of instructional materials in various formats to enhance both student learning and the accessibility of materials
- Implement and support Fresno State iTunesU
- Implement course shells for syllabi to be placed online and accessible

### Distance Learning

- Install a DLC for the Joint Doctorate in Forensic and Behavioral Sciences
- Obtain a commitment from at least one department to offer a degree program at the Fresno State Visalia Center

### Technology Training and Support

- Bring CETL to work more closely with Technology Training and Digital Campus
- Develop additional online training modules
- Provide student assistants to work with faculty in Digital Campus and in faculty offices

### Other

- Pilot ePortfolios and a Learning Content Management System
- Pilot a system to support Peer Review of student work
- Provide site license and support for Group Decision Support software
- Work with Instructional Materials team to develop technologies in support of ATI
- Continue Clean Up the Web Campaign