

# Appendix A



**California State University, Chico**  
**Office of the Vice Provost for Information Resources**

## **Aligning with the Future Action Plan**

August 2007



## Vision Statement

*“Believing in the wise use of new technologies in learning and teaching, we will continue to provide the technology, the related training, and the support needed to create high quality learning environments both inside and outside the classroom.”*

*CSU, Chico’s Strategic Plan Priority 3*

*Aligning with the Future*, the California State University, Chico strategic plan for information technology, connects the university strategic plan to the continuous development of technology to support high quality learning environments and effective business processes. Our vision is to align technology with the vision, mission and goals of the University through support for faculty and staff development, the investment in our technology infrastructure, and the wise selection of technological opportunities.

### ***The CSU, Chico technology plan envisions an environment that provides:***

- opportunities for innovations in teaching and business practices
- consideration of diverse teaching and learning styles
- online instruction and collaboration free of time and space limitations
- support for the Seven Principles of Good Practice in Undergraduate Education
- flexible state-of-the art learning spaces
- access to training and curriculum development options
- continuous improvement of campus business practices
- tools, training, and resources to assess institutional effectiveness and student outcomes
- capacity for lifelong university connections
- confidence in the value of our electronic learning community

### ***Background***

The IT Strategic Plan builds on a ten year foundation provided by the *Target 2000* and *Beyond 2000* strategic technology plans. Chico has a rich history of leadership in technology and continues to strive for excellence in delivering services and infrastructure while providing relevant and sustainable technology to support and enhance our teaching and learning environment. Assuring the evolution of our electronic learning community by building and renewing the critical technology infrastructure will continue to be a priority during the next five years.

### ***Technology Planning Themes***

The IT Strategic Plan contains five main themes focusing on the areas of teaching and learning, information literacy, electronic learning infrastructure, enterprise information management systems, and information and knowledge management. These themes consider the natural progression in products and services necessary to provide a sustainable technology model for the campus learning environment.



## Theme A – Teaching and Learning

*Provide support for the redesign of curricula to maximize our investment in technology and assure students access to the electronic resources that support curricula.*

*Enhance the teaching and learning experience by supporting diverse and innovative use of a state of the art learning management system.*

*CSU, Chico's Strategic Plan Priority 3*

Create a high quality learning environment focused on student success by providing faculty with the technology tools and support necessary for the delivery of instruction.

### Time Saving Strategies

#### ***Leverage technology to reduce faculty, staff, and student time required by non-learning activities***

- Improve time management (grading rosters, assignment alerts, etc.)
- Reduce time required by non-learning activities (registration, advising, travel, etc.)
- Reduce “technological overhead” (classroom setup, course material preparation, etc.)
- Self-service Web transactions for many faculty, staff, and student processes
- More efficient transactions through technology and process redesign

#### **Action Plan**

Action Items	Time frame	Status
Complete LMS Blackboard Vista implementation	Fall 2007	In Progress
Assist faculty in redesigning Vista classes and converting to new LMS(Blackboard/Vista)	2006/2007	In Progress
Enhance student self-service functionality – new Student Center in PS consolidates administrative functions	Spring 2007	Complete
Enhance faculty self-service functionality – new Faculty Center in PS consolidates administrative functions (grading, advising rosters)	Spring 2007	Complete
New Degree Audit/TC Report more complete and easier to use for students and advisors	Spring 2007	Complete
Connection to Learning Management system (course links) consolidated within portal	Spring 2007	Complete

#### **Performance measures**

- Use of/satisfaction with the Learning Management system
- Faculty perception of student access anytime, anyplace
- Satisfaction with CMS SA
- Utilization of online learning tools (e.g., online syllabus, tests grades, etc.)



## Training Strategies

### *Train faculty, staff, and students on learning technologies, productivity tools, and associated support services*

- Provide faculty and staff training programs that meet the diverse needs of individuals
- Complement existing academic courses with online information, just-in-time workshops, and point-of-need instruction to improve information and computing literacy

### *Action Plan*

Action Items	Time frame	Status
Provide faculty with LMS functionality training	On-going	On-going
Provide training workshops to support of other instructional activities	On-going	On-going
Provide training workshops in support of administrative activities (CMS/PeopleSoft)	On-going	On-going
Provide training workshops in support of desktop software	On-going	On-going
Provide continual technical training opportunities for support staff to maintain currency	On-going	On-going
Provide continual professional training opportunities for support staff to maintain currency	On-going	On-going

### *Performance measures*

- Faculty, staff, and student participation
- Faculty, staff, and student satisfaction
- IT Training courses offered
- Professional development spending



## Design Strategies

### ***Promote the successful integration of pedagogy and technology through faculty development opportunities***

- Provide training on the successful applications of technology in teaching and learning and support technology integration
- Encourage collaboration and share best practices in teaching and learning with technology
- Communicate and diffuse successful technology integration efforts

### ***Action Plan***

Action Items	Time frame	Status
Support course rebuilding, redesign, assessment, and evaluation during and after migration of courses from WebCT to Vista	On-going	On-going
Use Rubric for Online Instruction and continue discussions with faculty on the wise use of technology and effective pedagogical implementation	On-going	On-going
Support for large course redesign projects	On-going	On-going
Support for Exemplary Online Instruction projects	On-going	On-going

### ***Performance measures***

- Utilization of LMS technologies
- Access to IT resources to support teaching
- Technology benefits/quality of teaching, student learning, creativity in presenting material
- Increased use of best practice learning models (e.g., Exemplary Online Instruction)
- External recognition of CSU, Chico best practice learning models



## Connection Strategies

### *Create a strong connection between classroom and online learning environments*

- Provide tools that allow faculty members to easily bring material from their desktop computer, learning management systems, and the Web, into classroom presentations and discussions
- Demonstrate the effective use of online technology in the classroom
- Allow students to better communicate with each other and access electronic resources inside and outside the classroom

### *Action Plan*

Action Items	Time frame	Status
Increase number of “Smart” classrooms	On-going	On-going
Improve “Smart” classroom ease of use	On-going	On-going
Develop “Smart” classroom plan for building/refresh	Fall 2007	In Progress
Provide tech support for classroom technology	On-going	On-going
Simplify the transfer of enrollment information to LMS by developing real time integration with PeopleSoft	Spring 2007	Complete
Introduce interactive response systems (clickers) into classrooms	Fall 2007	In Progress

### *Performance measures*

- Faculty use/satisfaction with smart classrooms
- % of “Smart” classrooms compared to centrally scheduled classrooms (MOS)
- Perception of availability
- Perception of advantage of technology



## Access Strategies

### *Expand and enhance the distributed learning environment*

- Encourage the successful use of synchronous and asynchronous tools including learning management systems and class participation tools
- Archive existing courses and make accessible for asynchronous viewing
- Develop online courses
- Weave various technologies into an integrated learning environment
- Define campus e-portfolio goals and technological options for implementation

### *Action Plan*

Action Items	Time frame	Status
Investigate strategies to support distance students on modems	2007	In Progress
Integrate Horizon Wimba's Live Classroom and Voice Tools into new LMS	2007	Complete
Work with the Chancellor's Office on the e-portfolio initiative	2007/2008	In Progress

### *Performance measures*

- Increased options for local and remote students
- Increased numbers of non-classroom-based students
- Active LMS classes/students



## Resource Strategies

***Provide electronic resources in all formats to meet the teaching, learning, and research needs of the campus community***

- Promote use of electronic library resources
- Support system wide library efforts to provide electronic journal subscriptions
- Assist faculty in the selection of externally provided online learning materials and provide a searchable media database system that supports multiple formats
- Develop processes for faculty to create and add media to the database and attach it to course materials
- Support and enable faculty to create online presentations
- Create learning media locally when appropriate

## Action Plan

Action Items	Time frame	Status
Continued support of the CSU Electronic Core Collection	On-going	On-going
Support increases in electronic journal subscriptions	On-going	On-going
Encourage increased use of electronic reserves	On-going	On-going
Continue to scan, catalog, and create links to historic map and photograph collection and Chico State Photograph collection	On-going	On-going
Measure users' perceptions and expectations of library service quality (LibQUAL+™)	On-going	On-going

## Performance measures

- Use of/satisfaction with Library
- Perception of technology advantages
- Utilization of resources (electronic journals-article views vs. total searches))
- Use of reserve materials (paper vs. electronic)
- Library surveys (Research Station hits, core statistics)
- LibQUAL+™ analysis



## Theme B – Information Literacy

*Assure that all students achieve basic and discipline-based information literacy skills and that students understand their responsibilities related to the ethical use of information.*

*CSU, Chico's Strategic Plan Priority 3*

Ensure student success throughout their university experience, promote critical thinking skills, and create life-long learning behaviors by providing the basic skills and training necessary to expose students to available sources of information, its relevance and reliability, and the ethical use of that information.

### Skills Strategies

***Incorporate fundamental information literacy skills and concepts into the first-year experience and facilitate integration of information literacy into academic programs***

- Investigate strategies that introduce freshmen to basic technology and information-seeking skills without duplication
- Provide instruction in Introduction to University Life (UNIV001C), CMST 011, English 1, or other large-enrollment general education course(s)
- Provide self-paced information literacy training through Web-based tutorials to ensure point-of-need instruction
- Provide point-of-use/time-of-need library reference services available in the library and on the Web
- Investigate strategies to ensure all students learn and demonstrate mastery of the characteristics of information literacy at appropriate times during matriculation

### Action Plan

Action Items	Time frame	Status
Use Information Literacy Assessment tool (Research Log) to test knowledge.	Fall 2007	In Progress
Develop new campaign to encourage database searches	Fall 2007	In Progress
Redesign Information Literacy curriculum for University 101	Fall 2007	In Progress
Develop partnerships to incorporate Information Literacy into curriculum.	On-going	On-going
Information literacy training workshops for instructors	On-going	On-going
Develop a UNIV101 LMS page for instructors that includes an information literacy module	Fall 2006	Complete

### Performance measures

- Assessment of student learning in targeted courses
- Information Literacy Sessions/student enrollment



## Knowledge Strategies

***Assure all graduates are confident and competent in their ability to use information resources in their chosen career and are prepared for life-long learning***

- Introduce upper-division students to discipline specific information tools and resources in required courses in the major or the Writing Proficiency courses
- Tie information literacy to research methods courses or offer separate courses in disciplinary information literacy

### ***Action Plan***

Action Items	Time frame	Status
Continue participation in faculty/librarian disciplinary initiatives offered by the CSU Information Literacy Initiative	On-going	On-going
Seek opportunities to expand Information Literacy programs for majors and transfer students	On-going	On-going
Support library instruction and information literacy	On-going	On-going

### ***Performance measures***

- Faculty or faculty/librarian assessments of student ability to retrieve, evaluate, and synthesize information into knowledge about the chosen field
- Faculty perception that graduates of program are prepared/use of technology
- Faculty perception of quality of academic programs
- Faculty perception of computers and student learning



## Ethics Strategies

### ***Ensure understanding and application of the ethical principles of authorship, academic honesty, intellectual property, and fair use of information***

- Provide active programs throughout the curriculum to educate students about the principles and requirements of ethical information use, including appropriate citation use and plagiarism
- Support campus honor code. Provide uniform enforcement of academic honesty and intellectual property issues
- Communicate campus procedures on intellectual property and the rights of use and ownership

### ***Action Plan***

Action Items	Time frame	Status
Update/maintain copyright information website	On-going	On-going
Actively engage in the Academic Integrity Initiative, development of campus policy, and continue presence on the Academic Integrity Board	On-going	On-going
Continue to work with faculty in the use of Turnitin application	On-going	On-going

### ***Performance measures***

- Faculty surveys of student understanding of and respect for academic honesty
- University 101 student focus group responses



## Theme C – Electronic Learning Infrastructure

*Assure that all students, faculty, and staff have access to appropriate information and instructional technology both inside and outside of the classroom.*

*CSU, Chico's Strategic Plan Priority 3*

Accommodate the technology needs of faculty, students, and staff by implementing, maintaining, and continuously refreshing the basic building blocks of the technology environment.

### Access Strategies

#### ***Guarantee faculty, students, and staff access to secure and maintainable networked personal computing devices***

- Develop hardware refresh cycle reflecting a secure and supportable computing environment
- Ensure all new computers acquired are purchased with a three-year warranty
- Develop clear standards for supported versus non-supported hardware and software
- Remove machines from the network that compromise the network, systems, or confidential data
- Develop a desktop environment with transparent (to the user) tools to maintain security

#### ***Action Plan***

Action Items	Time frame	Status
Develop a five year desktop refresh plan with guaranteed funding model	Fall 2007	In Progress
Implement limited desktop refresh – extend special prices to campus community	Spring 2007	In Progress
Publish and update supported hardware and software procurement guides	On-going	On-going
Implement additional virus protection tools from McAfee-HIPS	Spring 2007	Complete
CISCO Clean Access (CCA) implemented in residence halls and for Wireless network	Fall 2007	Complete

#### ***Performance measures***

- Percentage of computers which are updated centrally
- Quality of centrally supported computer workstations
- Faculty and staff satisfaction



## Support Strategies

### *Provide software, hardware, and networking support for faculty, staff, and students*

- Provide help desk single point of contact for all areas of technical support
- Provide on-site technical support for repair/maintenance of computing equipment
- Provide online documentation and resources
- Implement/support best practices using both traditional and new technologies, e.g., call routing and real-time and asynchronous online support and resources
- Enhance distance and online education support by including evening hours help desk
- Provide specialized support for assistive technologies
- Accessible Technology Initiative - support for web page compliance
- Provide consultative support to faculty and staff
- Support students via 24 hour access to walk-in support and help desk services
- Provide a robust and secure e-mail system for electronic communication with students
- Work with campus stakeholders on Web Content Management System strategy
- Support wireless access

### **Action Plan**

Action Items	Time frame	Status
Maintain an Assistive Technology Center to provide technologies for students with physical and learning disabilities	On-going	On-going
Web page identification/remediation to meet ATI guidelines	Fall 2006	On-going
Coordinate merger of Enterprise Systems Group with User Support Services	2006/2007	Complete
Centralized support for Smart Classrooms	On-going	On-going
Faculty/staff/student self service password management developed and deployed	2006/2007	Complete
Develop four year plan for server and storage refresh	2007	In Progress
Web Content Management System (WCMS) pilot	Spring 2007	Complete
WCMS governance structure created, proposal for new system	Fall 2007	In Progress

### **Performance measure**

- Faculty, staff, and student satisfaction with support
- Help desk response time
- Service request time in queue



## Training Strategies

***Invest in staff and faculty by providing technology training to develop exceptional skill sets and encourage innovative ideas***

### ***Action Plan***

Action Items	Time frame	Status
Provide desktop office and web development training for campus users	On-going	Complete
Provide training on automating information/training through self-service tools (e.g. Camtasia) for administrative systems upgrade	Spring 2007	Complete
Provide multiple training avenues for new LMS system	Fall 2007	On-going
Provide internal staff development opportunities through conferences/meetings	On-going	On-going
Provide new technology training to keep tech staff current	On-going	On-going
Provide training opportunities for knowledge management team, CMS teams, LMS implementers, Security team, etc.	On-going	On-going
Support library staff training on new library system	2006/2007	Complete

### ***Performance measures***

- Training numbers/dollars/courses
- Faculty/staff satisfaction with training



## Lab Strategies

### ***Support effective design and use of both centralized and decentralized computer labs***

- Analyze the current computer inventory and usage by students
- Investigate ways to share existing labs and to reduce hardware and software costs by combining labs and leveraging purchasing power
- Analyze opportunities to share lab management and provide support for departmental labs
- Review the role of general versus discipline-based student computer labs

### ***Action Plan***

Action Items	Time frame	Status
Implement a multi-tiered model to support discipline based labs	2007	Complete
Analyze lab computer data within each college and across colleges to reduce costs and maintain quality	On-going	On-going

### ***Performance measures***

- Faculty and student satisfaction
- Quality of centrally supported computer workstations



## Classroom Strategies

### ***Provide reliable and quality classroom technology that meets the needs of students and faculty***

- Develop “Smart” classrooms hardware/software standards list
- Provide limited support to department-specific “Smart” classrooms
- Develop and implement an efficient, sustainable plan for “Smart” classroom support
- Continue reviewing/refining hardware/software needs
- Continue to improve “Smart” classroom ease of use and set-up time associated with technology
- Provide selective wireless connectivity for portable and hand-held devices in classrooms as required for instruction need

### ***Action Plan***

Action Items	Time frame	Status
Increase number of “Smart” classrooms to 100% of centrally scheduled lecture spaces	On-going	On-going
Improve “Smart” classroom ease of use	On-going	On-going
Develop “Smart” classroom plan for building/refresh centrally scheduled classrooms	Fall 2007	In Progress
Provide tech support for classroom technology	On-going	On-going
Implement interactive response “clicker” technology	Fall 2007	In Progress

### ***Performance measures***

- Faculty and student satisfaction
- Number of “Smart” classrooms as a percent of total centrally scheduled classrooms
- “Clicker” adoption/satisfaction



## Network Strategies

### ***Expand and manage the network to meet future expectations for voice, data, wireless, and video needs***

- Meet future network demands with a complete build out of the campus network infrastructure (TII)
- Provide effective and efficient network services for voice, data, and video technologies by utilizing the rebuilt network infrastructure
- Build a secure, free wireless service for the campus
- Modernize the current telephone infrastructure to reduce costs and enhance service
- Implement a sustainable funding model to provide support for all network technology
- Develop policies and procedures to effectively manage the network
- Continue development of a network infrastructure to accommodate the needs of remote and mobile (wireless and wired public access point) users

### ***Action Plan***

Action Items	Time frame	Status
Network redesign and IP address cleanup	Spring 2007	Complete
Install new networking electronics in buildings as part of the Technology Infrastructure Initiative (TII) Stage 2	Spring 2007	In Progress
PBX configuration and router updates to support the PBX	Spring 2007	Complete
ITRP buildings cutover to new networking equipment in the com closets	Spring 2007	In Progress
Complete TII network upgrades and plan for additional upgrades to be funded separately	Fall 2007	In Progress
Campus DSL rolled out to residents in University Village	Spring 2007	Complete
Free wireless service for campus users provided to campus core. Additional build out to follow	Fall 2007	Complete

### ***Performance measures***

- Network reliability
- Percentage of ports meeting baseline standards
- Number of wireless users
- Percentage of campus covered by wireless



## Accessibility Strategies

### ***Provide adaptive technologies that meet accessibility guidelines***

- Support accessibility within the learning management system
- Support best practices for building/revising accessible instructional materials
- Support Universal Design for Learning (UDL) training
- Support course redesign to include accessibility components
- Integrate CSU system wide priorities, best practices, and tools to incorporate accessibility campus wide

### ***Action Plan***

Action Items	Time frame	Status
Implement upgraded version of the LMS	Fall 2007	In Progress
Provide sponsorship/support for the system wide ATI Initiative	Fall 2007	On -going
Provide information/tools for improving accessibility of instructional materials	On-going	On-going
Utilize Hi Software tool to determine accessibility of campus 50 most used websites and remediate.	Spring 2007	Complete
Develop accessibility training for website administrators	Spring 2007	In Progress

### ***Performance measures***

- Progress report to CO yearly
- Ease of use for students in their course work



## Security Strategies

### ***Sustain a secure electronic infrastructure that protects services and information***

- Implement an incident handling procedure designed to allow a timely response to any intrusions and minimize the impact to the campus electronic environment
- Implement appropriate firewalls and Virtual Private Networks
- Install security software at the network, server, and desktop levels
- Implement authentication systems for remote/mobile/wireless users
- Strengthen network, server, and desktop computer security policies and procedures
- Increase awareness in the campus community of information security

### ***Action Plan***

Action Items	Time frame	Status
Implement Chico Password Station for self-service password mgmt	Spring 2007	In Progress
Implement new student authentication tool	Spring 2007	Complete
Implement procedures, guidelines, and best practices for desktop, server, and network security	On-going	On-going
Update system/server inventory and assign security risk	On-going	On-going
Provide information security training and awareness programs	On-going	On-going
Implement multi-factor authentication for domain administrators and ISO office (Phase 1)	Spring 2007	Complete
Improve security of confidential data by focusing on the reduction of decentralized data and elimination of SSNs	On-going	On-going
Implement CISCO Clean Access (CCA) in residence halls and for wireless network	Fall 2007	Complete
Implement vulnerability scanning tool, procedures, & standards	Spring 2007	Complete
Investigate intrusion detection systems for network level use	Fall 2006	In Progress
Develop a campus wide PKI (Private Key Infrastructure)	Spring 2007	Complete

### ***Performance measure***

- Number and type of incidents
- Number and type of vulnerabilities
- Elapsed time from intrusion to first detection and from detection to resolution
- Training hours
- Faculty/staff awareness of confidentiality and security



## Goal Area D – Enterprise Information Management Systems

*Assure that all learning and business processes and administrative services are supported by an effective and reliable information technology infrastructure.*

*Assure that our student services and other university services are continuously improved through the wise use of technology.*

*CSU, Chico's Strategic Plan Priority 3*

Information systems that support the university community will be maintained and enhanced to meet academic and business process requirements, provide technology tools that maximize faculty, student and staff time, provide access to institutional data for effective decision making, enable access to student services, and employ security standards that protect the privacy and confidentiality of all data.

### Systems Strategies

***Support reliable standards-based enterprise-wide administrative and academic systems and services that provide the campus community with effective business processes***

- Continue upgrades/enhancements of CMS administrative systems
- Upgrade learning management system
- Support business process improvements in administrative/academic systems
- Support currency of systems
- Support introduction of new technologies to reduce costs, and increase performance

### Action Plan

Action Items	Time frame	Status
Upgrade/enhancement of HR and SA CMS modules	Spring 2007	Complete
Upgrade current LMS to Blackboard Vista	Fall 2007	In Progress
Implement Facilitating Graduation project to provide business process improvements for transfer credit, advising, graduation	Spring 2007	In Progress
Implement server virtualization technology	Fall 2007	In Progress
Oracle upgrades to 10G and daylight savings time patches	Spring 2007	Complete

### Performance measures

- Faculty/staff satisfaction
- Progress toward degree



## Information Strategies

***Develop a warehouse architecture to collect, store, and deliver campus information while increasing data security and reducing use of shadow systems***

- Provide currency of the data warehouse tables
- Continue to monitor performance and stability of warehouse hardware/software/conversion tools
- Develop warehouse hardware/software architecture in conjunction with CO efforts
- Identify reporting tools

### ***Action Plan***

Action Items	Time frame	Status
Convert 8.0 RDS (SA) tables to v8.9 tables	Spring 2007	Complete
Provide warehouse table structures to other CSU campuses	Summer 2007	Complete
IBM health check on Finance warehouse environment	Spring 2007	Complete
Pilot server virtualization for database reporting tools	Fall 2007	On-going
Analyze campus databases for confidential information to increase data security	On-going	On-going
Review campus reporting tools and system wide licensed tools for reporting (e.g. Hyperion, Discoverer, Oracle)	Spring 2007	On-going

### ***Performance measures***

- Reduction in shadow systems TBD
- Stable warehouse performance
- Availability of reporting tables



## Integration Strategies

**Maximize integration of enterprise academic and administrative systems to ensure data reliability and consistency, improve security, and reduce shadow systems**

- Provide integration of administrative and academic systems
- Upgrade portal solution to provide improved functionality/channels
- Provide campus employees tools to view and update their personal information

### Action Plan

Action Items	Time frame	Status
Integrate the LMS with CMS SA student, course, class data	Spring 2007	Complete
Provide access to new version of LMS through portal channel	Spring 2007	Complete
Implement Benefits Admin module and Student Timesheets improvements. Provide access through portal	Fall 2007	In Progress
Integrate Horizon/Turnitin/Thompson	Spring 2007	Complete
Implement WebDav in new LMS for multiple file transfers	Summer 2007	Complete

### Performance measures

- TBD



## Collaboration Strategies

### ***Work together to effectively use technology to improve workflow and business process across campus***

- Develop and distribute technology planning templates
- Provide governance structure, funding, and project planning support
- Support business process improvements with technology

### ***Action Plan***

Action Items	Time frame	Status
Investigate electronic signature use for official documents	On-going	On-going
Contracted for Hobson's EMT solution for communication with potential students (replaces two other systems)	Spring 2007	Complete
Initiate Facilitating Graduation project for graduation, transfer credit, and EDI improvements	Spring 2007	On-going
Contracted for consulting support for Facilitating Graduation	Summer 2007	Complete
Develop Field Trip process utilizing CMS data and reporting tools to streamline data gathering and comply w/Risk Mgmt	Fall 2007	In Progress
Support HR modules self service build out (Absence Mgmt, Ben Admin, student timesheet)	Fall 2007	In Progress
Develop Omni database for self-service tracking of campus servers	Spring 2007	Complete

### ***Performance measures***

- Increased effectiveness TBD



## Service Strategies

### ***Expand web based technologies to enable self service functionality for campus administrative and student activities***

- Provide self-service password management for faculty, staff, and students
- Keep portal software up to date and responsive to campus needs
- Provide tools and web services for business process improvements
- Provide support for self-service development

### ***Action Plan***

Action Items	Time frame	Status
Migrate department and personal web pages to new web server	Spring 2007	In Progress
Implement Password Station for faculty and staff, provide home grown utility for students to reset passwords	Spring 2007	Complete
Provide faculty, staff, and students enhanced self-service to SA functionality through the portal	Spring 2007	In Progress
Upgrade uPortal and develop additional channels for targeted announcements and survey tools	Fall 2007	In Progress
Pilot projects using Collage - web content management tool	Spring 2007	Complete
Review process for web content mgmt system purchase	Fall 2007	In Progress
Support HR modules self service build out (Absence Mgmt, Ben Admin, student timesheet)	Fall 2007	In Progress

### ***Performance measures***

- Improved self-service opportunities
- TBD



## Pathway Strategies

### ***Deliver a portal and pathways to guide users to relevant teaching, learning, and business resources***

- Develop and maintain campus portal software and integration to other campus administrative systems
- Create, customize, develop new channels within portal to meet business/academic needs
- Provide web services to campus offices/departments

### ***Action Plan***

Action Items	Time frame	Status
Portal main page points directly to Learning Management System course links	Fall 2006	Complete
New Admissions portal tab developed for first time freshman	Spring 2007	Complete
Portal tab for Records/Registration now includes new direct link to CMS/PeopleSoft Student Center	Spring 2007	Complete
Faculty self-service channels updated to point directly to new CMS/PeopleSoft Faculty Center	Spring 2007	Complete
Web Content Management system under review	Fall 2007	In Progress
Web Governance Committee developed to review/recommend web policy	Fall 2007	In Progress
Develop Field Trip Request process using web utilities within portal channel	Fall 2007	In Progress

### ***Performance measures***

- Faculty and staff use/satisfaction with portal
- Portal availability statistics
- TBD



## Contact Strategies

### ***Provide technologies that enable information sharing and collaboration via email, internet, and telephony***

- Support campus telephone, voicemail, and network infrastructure
- Support wireless connectivity throughout campus
- Develop spam solutions to provide better email capability
- Support communication systems currency
- Implement campus wide notification system to address safety issues
- Promote information contribution and sharing through technology

### ***Action Plan***

Action Items	Time frame	Status
Implement new telephony system utilizing PBX technology	Spring 2007	In Progress
Provide new campus network utility (DSL) for University Village	Spring 2007	Complete
Implement automatic call distribution for Help Desks	Spring 2007	Complete
Provide email synchronization support for cell phones	Spring 2007	Complete
Upgrade student email system	Spring 2007	Complete
Implement upgraded anti-spam system for email filtering	Spring 2007	Complete
Continue to build out campus wireless access	On-going	On-going
Test version 7 of Internet Explorer	Fall 2007	In Progress
Design wireless coverage for residence halls	Fall 2007	In Progress
Analyze/review campus notification system	Fall 2007	In Progress
Initiate Confluence WIKI pilot	Fall 2007	In Progress

### ***Performance measures***

- Cost savings TBD
- Network reliability (availability)
- Peak Bandwidth



## Identity Strategies

***Develop an infrastructure that provides authentication and authorization to enterprise applications while protecting confidential personal and business information***

- Develop technical architecture for identity management on campus in collaboration with system wide efforts
- Support current campus identity management processes
- Support security best practices for authorization and authentication to services
- Work with campus offices providing to provision and de-provision services in a timely manner

### ***Action Plan***

Action Items	Time frame	Status
Enterprise Directory (LDAP) technical architecture upgrade	Fall 2007	In Progress
Participation in the CSU IAM Technical Architecture Group	On-going	On-going
Develop student identity management tool that provides initial authentication for new students without using SSN	Spring 2007	Complete
Develop process for new faculty provisioning	Spring 2007	Complete

### ***Performance measures***

- Improved security for enterprise systems
- Reduction in use of SSN's for authorization
- Reduce time for creation of accounts



## Security Strategies

### ***Establish comprehensive data and technology standards supporting secure academic and administrative activities***

- Analysis and assessment for securing systems resources, networks resources, and confidential data
- Develop processes and procedures for protection of confidential information
- Identify and classify risks to the security of information and systems
- Establish baselines and measures compliance for mitigating risks
- Provide incidence coordination and communication and coordinates forensic investigation
- Provide communication and training about security and confidentiality best practices

### ***Action Plan***

Action Items	Time frame	Status
Develop and present security awareness information for New Hire orientations	On-going	On-going
Utilize Omni database for current campus server information	Spring 2007	On-going
Implement vulnerability management procedures and standards	Spring 2007	Complete
Investigate data encryption technologies	On-going	On-going
Develop procedures to document system and application management procedures	On-going	On-going
Provide tools for scanning servers for confidential information	Fall 2007	In Progress
Facilitate security awareness communication	On-going	On-going
Publish information security practices on the web	On-going	On-going
Provide security training for new employees	On-going	On-going
Initiate systems security meetings to define risk management and security strategies and disseminate best practices	On-going	On-going

### ***Performance measures***

- Survey questions regarding confidential material and the Information Security Office
- Training statistics



## Theme E – Information and Knowledge Management

*“... use technology to support the assessment of student outcomes and institutional effectiveness.”*

*CSU, Chico’s Strategic Plan Priority 3*

Promote continuous improvement in institutional effectiveness and student outcomes by implementing technologies that support academic and administrative assessment of programs, systems, and initiatives.

### Analysis Strategies

#### ***Implement integrated technologies for decision support to assure institutional accountability and facilitate data driven analysis***

- Collaborate with the Chancellor’s Office to develop a multi-campus reporting strategy
- Customize standard reporting solution to meet campus specific needs
- Perform analysis to determine where data resides and the users of information
- Develop views and implement tools to provide reports of management data that measure institutional performance
- Provide integrated institutional management reporting (e.g., ad hoc, operational and decision making)

### ***Action Plan***

Action Items	Time frame	Status
Work with Chancellor’s Office on CMS reporting strategy	Spring 2007	Complete
Build tables and views for Human Resources reporting	Spring 2007	On-going
Develop reports for NCATE, Credentials, and EOP	Spring 2007	Complete
Initiate analysis technique to determine data needed for enrollment reporting (Circle Diagram)	On-going	In Progress

### ***Performance measures***

- Improved institutional effectiveness TBD



## Outcomes Strategies

***Provide technologies that support measurement of learning outcomes, progress towards degree, and institutional effectiveness***

- Develop campus specific views of reporting data for administrators, faculty and staff
- Customize standard warehouse tables to meet campus specific needs
- Develop campus specific views of reporting data for faculty and staff
- Research and develop views of management data that measure institutional performance

### ***Action Plan***

Action Items	Time frame	Status
Consolidate four separate copies of student warehouse into one set of tables with census-snapshot data	Spring 2007	Complete
Add fields to APDB (tables) to make it compatible with student warehouse data	Fall 2007	In Progress
Add fields to ERSS (CSU developed enrollment reports) to make compatible with student warehouse data	Spring 2007	Complete
Add HR tables and views to data warehouse	Spring 2007	Complete
Use results from data analysis process to develop additional views for Registration Profile	Fall 2007	In Progress

### ***Performance measures***

- TBD



## Measures Strategies

***Introduce technologies that support assessment of institutional performance as well as student learning in targeted courses, within departments and programs, and across campus***

- Collaborate with campus constituents to develop campus standard data dictionary defining terms, data, views, and reports
- Web-enabled data/information access and reporting
- Develop campus specific views of reporting data for departments, colleges, administrators
- Collaborate with planning groups for scorecard and dashboard development

## Action Plan

Action Items	Time frame	Status
Pilot for Confluence WIKI	Fall 2007	In Progress
Web-enable the Academic Program Review process	Fall 2007	In Progress
Conduct data needs analysis resulting in development of web-base self service Field Trip Application form	Summer 2007	In Progress
Attended Higher Ed Symposium focused on reports/dashboards /scorecards	Spring 2007	Complete
Working with system wide QI tool, PBViews for assessment on campus strategic priorities	Fall 2007	In Progress
Testing a methodology to analyze data needs of college departments (Circle Diagram)	Summer 2007	In Progress

## Performance measures

- TBD



## Training Strategies

### ***Employ standard analytical tools and functional training programs to broaden knowledge of effective use of measurement and reporting utilities***

- Develop reports using tools that meet campus standards
- Customize reporting solution to meet campus specific needs
- Manage security roles and consolidate security tracking
- Work with campus report developers on standardizing reports
- Provide training opportunities for developers/report writers

### ***Action Plan***

Action Items	Time frame	Status
Implement Microsoft based reporting tool for web based reporting	Fall 2007	In Progress
Utilize system wide ETL tools for loading data warehouses	On-going	On-going
Provide Kimball training and dimensional modeling training for reporting team for standard warehouse development procedures	Spring 2007	Complete
Review/test reporting tool software for campus use (e.g. Hyperion, Discoverer, Dundas & Corda chart tools, etc.)	Spring 2007	In Progress
Provide training to campus report writers on the Microsoft SQL Server 2005 Reporting Service tool	Fall 2007	In Progress
Develop a system to manage RDS security based on PS roles	Fall 2007	In Progress

### ***Performance measures***

- TBD



## Information Strategies

### ***Implement integrated technologies that provide timely and straightforward access to data and reports about campus, and the CSU***

- Maintain currency of warehouse tables/reports
- Provide reporting /assessment service for one-stop shopping for data needs
- Customize standard reporting solution to meet campus specific needs
- Develop campus specific views of reporting data for faculty and staff
- Develop views of management data that measure institutional performance to improve executive decision making

### ***Action Plan***

Action Items	Time frame	Status
Convert CMS v8.0 queries and reports to v8.9	Spring 2007	Complete
Developing a web-based integrated institutional management reporting service	Fall 2007	In Progress
Build tables and views for Human Resources reporting	Spring 2007	On-going
Improve the enterprise systems reporting infrastructure to meet administrative and academic needs	On-going	In Progress
Convene Knowledge Management Initiative team (KMIT) for scorecard development in pbViews and WASC reporting	Spring 2007	In Progress

### ***Performance measures***

- Tables and queries converted/built
- New tables/reports developed



## Aligning with the Future - Action Plan

### Enterprise Technology Roadmap

CSU, Chico continually updates and expands the enterprise wide technology infrastructure to better support instructional, administrative, and strategic priorities. Due to the dependencies between projects, success requires careful planning and coordination of human and technical resources.

