Feather River College
Technology Plan

Feather River College Vision Statement

Feather River College cultivates engaged citizens striving for a resilient, solution-based society. As a campus community, we aim to foster the values of education, service, and stewardship in our students, staff, and community. We will continue to develop our educational and co-curricular offerings to support our students' pursuit of sustainable, fulfilling, and dynamic lives.

Executive Summary

The objective of the District's technology plan is to provide a roadmap for addressing project prioritization and key issues facing technology deployment and use at Feather River College. The success of this plan will be measured on FRC's ability to provide better service, reduce maintenance efforts, increase functionality, communicate with other campus plans, and collaborate with external organizations. Additionally, we recognize that this is a living document and that its primary purpose is to serve as a guideline that identifies the process in which the technology plan's effectiveness is measured, deficiencies identified, corrective action developed and implemented and input into the plan.

This plan is a guide for the effective and efficient development, implementation, and support of campus technology systems to enhance instructional delivery, student learning, and all associated district / college support systems enabling departments and programs to perform their missions and achieve their strategic objectives.

Development of the Technology Plan

The Strategic Technology Committee (STC) initiated the development of the Technology Plan by following the following the sequence detailed below:

- Defining the mission of the Information Services Department (ISD)
- Determining the District's mission critical projects
- Identifying key issues and solutions affecting technology deployment
- Developing a performance measurement system to assess progress
- Effectively identify current and upcoming technology needs campus- wide
- Integrate both technology planning and campus technology needs into the technology planning and review process by the Strategic Technology Committee

ISD Mission

To improve instruction and other District operations through the strategic application of technology and information services as guided by other campus planning documents and consistent with the College's Mission Statement.

ISD Vision

- To continue to be a crucial asset and partner providing a significant educational and administrative advantage through the deployment of high quality computing and information services.
- Provide our users with the ability to securely access district educational technology services and information from anywhere at any time.
- To provide support for the BANNER ERP system.
- Implement a flexible computing environment that enables our campus community to interact easily, effectively and efficiently.
- Create a computing environment that enables rapid adoption of learning technologies.
- Create a computing environment where users attain self-sufficiency in their use of technology.
- To maintain and support a collaborative department to achieve shared goals.

Staffing

The ISD is supported by both on-campus and contracted off-campus personnel. On-campus personnel include the Chief Technology Officer, a Management of Information Services (MIS) Specialist, a Desktop Support Specialist, a Maintenance/Telecommunication Specialist, and a Database Administrator. Ideally ISD positions will be filled in a permanent capacity to sufficiently meet current and ongoing needs. Strategic decisions related to technology will allow staffing resources to keep pace with the goals of campus technology efforts.

Off-campus support operations are integrated into the workflow through in-person, voice, and email correspondence. Contracts with off-campus support providers are reviewed by the Chief Technology Officer (CTO) and the STC on an annual basis and revised as necessary. All contracts are reviewed and approved by the College's Chief Financial Officer and are formally approved by the Board of Trustees.

Identification and Prioritization of Technology Projects

Technology needs identified through the College's planning processes (e.g., APRs, campus planning documents, institutional reporting needs) will be summarized and prioritized by the CTO and will be submitted to the STC for review. The STC will audit the prioritization process and provide feedback and recommendations to ensure consistency with campus strategies and mission. Progress reports will be presented and reviewed as necessary by the STC at their regular meetings.

Projects will be prioritized using a set of criteria established by the STC. The STC will review and assess these criteria on an annual basis. Five initial criteria have been established for guiding the prioritization of technology:

- Strategy – Issues of strategy refer to how a particular implementation supports the college's mission and strategic goals. Considerations include:

  - Does the project fit the long term goals of the district?
  - Does the project facilitate student learning outcomes?

- Need – Issues of need refer to the impact, urgency, criticality, and motivation behind and implementation. Considerations include:

  - Is the project critical to campus operations or instruction?
  - Is the implementation mandated?
  - How many services are affected?
  - Are there alternative solutions?
  - How long can we maintain the status quo?

- Cost – Cost refers to the financial, human, and physical resources involved either in implementing or not implementing a project. Considerations include:

  - How much does it cost to maintain the status quo?
  - How much will the project cost?
  - What are the indirect costs?
  - How much will it cost to sustain the implementation?

- Risk – The probability that the project may not achieve all of its objectives; i.e. over time, over budget, or fail technically or culturally.
- Wildcard- This weighting factor allows unexpected needs/requirements to be factored into the prioritization throughout the planning cycle.

  A list of current projects is included in Appendix A of this document and will be updated on a yearly basis.

Assessment Process and Integration with Broader Campus Planning

The STC will review the Technology Plan annually and assess how effectively the objectives of the Technology Plan are being implemented and identify deficiencies (including training deficiencies) that are not being addressed. Additionally, the STC will annually survey end users to better understand and capture the technology requirements of the campus. The STC will use the results of this assessment to produce an Annual Program Review (APR) for the Information Services Department to ensure that any broad-reaching technology issues or needs are captured for the campus planning process.

Beyond the APR submission from the STC, individual programs will continue to include technology requests in their APRs. Program leaders should consult the STC when developing technology-related requests/initiatives included in their APR. These requests will be vetted through the campus' established institutional planning process (AP 3250). Technology-related planning items that receive funding through the planning and budgeting process will be brought to the STC for prioritization and to develop an implementation strategy.

The STC (or assigned sub-committee) will annually review all technology-related contracted and/or 3rd party service contractors or service providers to ensure the usefulness and effectiveness of these out-sourced services. The results from this review will be presented to the STC, with input sought from the STC in the event that a contract requires modification and/or termination.

Training

The STC will communicate with the Professional Development Committee to recommend and schedule training on new or in place information technology resources that have been or will be deployed and implemented on campus. These training sessions will be scheduled when the target audience can attend and benefit from these training, typically on campus flex dates. Dependent on demand, training, like other IT resources, will be prioritized to best serve the needs of the district.

Five- Year Road Map

Year 1 (2012-2013) of this Plan will be focused on improving the Enterprise Systems to support the Feather River College vision. Including moving the server room in to the LRC and installing the new 10GB fiber backbone from the LRC Server Room to the MPOE in the Phone Closet in the Administration Building. We have also put a significant effort in to virtualizing our servers and desktops both in the student labs and staff desktops.

Year 2 (2013-2014) of this Plan will be focused on the implementation and support of SharePoint and the deployment of Live@EDU. We will also be migrate our Oracle database from 10G to 11G.

Years 3-5 (2014-2017) of this plan will be focused on improving the campus network both on campus and at the dorms. We will improve the accessibility, speed and responsiveness of the network for staff and students. In addition, the AV equipment is in dire need of being "refreshed" and the need for the standardization of this equipment and operation is a necessary goal.

Appendix A Critical Projects

Project	Rationale
Oracle Upgrade	Oracle runs the back end of our ERP (Banner) system and our current version will no longer be supported after December 31, 2012.
Server Replacement	There are four physical servers that will be coming to their end of life (EOL) during this fiscal year. We plan on moving the functionality of these EOL servers to virtual servers.
Develop and Implement UPS Battery Upgrade	All of the APC UPSs deployed at desktops are approaching EOL. We have developed a battery replacement schedule.
TouchNet Deployment	We are in the process of deploying TouchNet on our ERP portal to accept credit card pay payment.
Desktop Replacement/Virtualization	Approximately 70% of our desktops are well beyond EOL and are in dire need of being upgraded. We have developed a plan to upgrade these EOL machines to virtual desktops (VDI). The backend equipment has been installed to support the deployment of these VDIs and the first round of VDIs will be rolled out during the 2012 Fall term.
Deploy Remote Data Backup and Disaster Recovery	Continue to implement both our onsite and offsite data backup strategy, our goal is to have all of our data backed up offsite and push differential backups offsite to ensure data integrity.
SharePoint Deployment	The District has an issue with having multiple network storage locations for sharing and archiving college documents. Rather than upgrading to the next version of Office, we are planning on deploying SharePoint as a more effective solution to managing and storing college documents. We will also be moving our email exchange off-site to Live@edu thus freeing up the hardware resources to support SharePoint onsite.
New Internet Connection	The PSREC was awarded an ARRA grant to provide additional internet service bandwidth by installing a new fiber optic backbone to serve Plumas County. The College has signed on as an anchor account. This secondary internet connection will provide redundancy and increased bandwidth that will become more necessary as the College pushes more of its services off-site into the cloud.
Upgrade Network Switches	The campus network is utilizing legacy HP switches that are approaching 20 years old. When we moved the Server Room and upgraded the core switches we started the process of upgrading the network switches to Cisco Switches which are more durable and give us the ability to effectively manage our network.
Streamline Desktop Support/Implement Helpdesk	The helpdesk ticketing system that is ready to deploy for the IS department through our Spiceworks platform needs to be formally rolled out to the campus community via a formal training.

Project	*Rationale*
Participate in the Banner Consortium	There is a Banner users group that is working on developing a consortium that would centralize all Banner services for participating Banner schools. Joining this consortium would allow our onsite IS staff more time to focus on the Districts support and service. Joining this consortium is imperative from an administrative standpoint since it is the only way FRC can access needed BANNER modules and third-party software that FRC cannot otherwise afford.
Improve Website Presentation and Performance	The FRC website is dated and needs to be more useful and effective. Migration of the website platform to WordPress has begun along with the development of new graphics. We have started working on a website that would enable individual athletic programs to break out and more effectively manage their portion of the website.
LRC AV and Distance Education Plan and Deployment	Complete the LRC AV equipment installation and work with our DE coordinator to identify the hardware/software needs to effectively capture and distribute our course related media.
Upgrade/Replace wireless access points	With the increase of personal wireless devices that are both being brought and used on campus it is vital that the college have a robust wireless internet network with adequate bandwidth.
Improve DSPS Technology Support	Improve communication and IT support for the DSPS computer lab.
Upgrade and Standardize Classroom AV Equipment	The current AV equipment consists of different manufactures and is problematic for Faculty to operate due to the lack of uniformity in the AV equipment and controls. We will implement a standardization plan.
Move Email Services Off Site	Due to licensing and hardware issues we will be migrating our email services offsite to Live@edu. This service is offered by Microsoft to schools for no additional cost.
Organize and Facilitate Training for Staff on New Technology	Schedule and implement a training schedule for staff to cover new technology that has been deployed on campus.
Student Learning Database	Setup and install an onsite database that can be accessed by the data custodians on campus.
Consolidate SSL Licensing Cycle	To improve tracking and coordination we need to coordinate the SSL licensing for our servers.
Argos Migration	Explore implementing ARGOS to support Banner reporting.
Streamline Desktop Support	Implement better tracking and communication of desktop support requests to allow the end user to track where their service request is in the system.

Projects Prioritized Using Criteria Analysis Matrix (CAM)

The five criteria are weighted equally. A rating of 1 is the most desirable; a rating of 5 is the least. The five ratings are averaged to establish the prioritization value. Projects are sorted according to prioritization value and assigned an overall priority of high, medium, and low.

CAM- CRITERIA ANALYSIS MATRIX

Project	Priority	Project Rank	Money	Strategic	Need	Risk	Wildcard
Improve Website Presentation and Performance	High	1.4	1	1	1	1	3
Oracle Upgrade	High	1.6	1	1	1	2	3
New Internet Connection	High	1.6	2	1	1	1	3
Move Email Services Off Site	High	1.6	1	2	1	1	3
Deploy Remote Data Backup and Disaster Recovery	High	1.8	3	1	1	1	3
LRC AV and Distance Education Plan and Deployment	High	1.8	2	2	1	1	3
Desktop Replacement/Virtualization	High	2	4	1	1	1	3
Participate in the Banner Consortium	High	2	2	1	2	2	3
Server Replacement	High	2.2	5	1	1	1	3
TouchNet Deployment	High	2.4	2	3	1	3	3

SharePoint Deployment	Medium	2.4	3	2	1	3	3
Upgrade/Replace wireless access points	Medium	2.4	3	3	2	1	3
Improve DSPS Technology Support	Medium	2.4	2	3	2	2	3
Develop and Implement UPS Battery Upgrade	Medium	2.6	3	5	1	1	3
Upgrade and Standardize Classroom AV Equipment	Medium	2.6	2	3	3	2	3
Organize and Facilitate Training for Staff on New Technology	Medium	2.8	3	3	3	2	3
Streamline Desktop Support/Implement Helpdesk	Low	3.2	3	5	4	1	3
Upgrade Network Switches	Low	3.4	4	4	3	3	3
Student Learning Database	Low	3.4	4	3	4	3	3
Streamline Desktop Support	Low	3.4	1	5	5	3	3
Consolidate SSL Licensing Cycle	Low	3.6	2	5	5	3	3
Argos Migration	Low	4.2	5	3	5	5	3

General Satisfaction of Network and Support

Availability of wired network

ITS keeps the IT systems it provides up and running

ITS provides services that are valuable to you

ITS delivers promised services on a timely basis

Services provided by ITS as a whole

Central Web hosting speed (page loading time)

FRC's network overall

FRC's ISD Problem resolution overall

Reliability of wired network

Availability of wireless network on campus

Email features

Email ease of use

Email speed

Wireless signal strength/quality of connection

Availability of wireless network on campus

Wireless guest registration process

Wireless access in the residence halls

Reliability of wired network

Internet network access to other colleges

Feather River College ISD network services

Overall email reliability

Feather River College email storage space

Signal strength/quality of wireless connection

ISD/DBA/MIS turnaround time for resolving your problem

Helpdesk timeliness of initial response to your inquiry

ISD helps you use technology effectively

Ability to get through to a person

Ability to solve problem

Microsoft Outlook calendar synchronization to your mobile device

FRC.edu website and applications via your mobile device

FRC's IS Department Rating

Client-oriented approach

Keep the IT systems up and running

Delivers promised services on a timely basis

Helps you use technology effectively

Provides services that are valuable to you

Rate IT services as a whole

FRC ISD Support

Ability to get through to a person

Timeliness of initial response to your inquiry

Ability to solve problem

Turnaround time for resolving your problem

Telephone Services

Requesting/ordering additional telecommunications services/changes

Reliability of the telephone system

Ease of use-

Training

Overall satisfaction with FRC voicemail

Telecommunications problem resolution