Cosumnes River College Planning

**Title:** Information Technology Strategic Plan, March 2014

**Office of Primary Responsibility (OPR):** Learning Resources and College Technology

**Collaborative Groups:** Distance Education and Instructional Technology Committee, Information Security Officers, District IT, EdTech Committee, College Planning Committee, Budget Committee

**Referenced Documents:** CRC strategic Plan, IT Program Overview and Forecast (PrOF)

**Planning Year:** 2014/2015

**Purpose and Objectives:** Information Technology (IT) has transformed how we communicate, how we collect, store and retrieve data, and in many ways how we work, teach and learn. It has moved from an innovative approach for problem solving, to a commodity that is expected by all constituents. It is expected that it will be readily available, comprehensive, and reliable. The IT Strategic Plan outlines the goals and objectives for technology on our campus, and considers the resource requirements to support student success and organizational effectiveness. It maps the objectives to the College Strategic Plan, and includes measurements for assessing how objectives are met. Methods for achieving these objectives are considered, including equipment replacement cycles, defining requirements and cost saving options, and beginning to define who is responsible for various aspects of CRC’s information technology.

**Technology Planning Overview**

- Students have increased expectations about availability and quality of technology
- Faculty use of technology will continue to grow as a means of supporting different learning styles, preserving open access, improving retention, and increasing student success. Use will also become increasingly mobile, requiring different levels of support.
- Administrative and support staff will continue to use technology to increase productivity and to respond to the informational needs of faculty and students in a timely manner, as well as to perform relevant research and analysis for the overall health of the college.
- IT support staff must be sufficient to maintain existing software and equipment, be responsive and capable to meet IT requests from end-users, and receive adequate training when necessary to provide for the IT needs of the college.
- Technology planning is integrated with college wide planning in the Strategic Planning processes, the Budget processes, and in Professional Development training opportunities.
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<th>Technology in CRC’s Strategic Plan</th>
<th>IT Program Service Area Outcomes / Goals</th>
<th>Measuring Results</th>
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| **1. Student Success** – Provide excellent instructional programs and support services through twenty-first century skills. | Lab update – computer lab desktop installations are refreshed prior to each semester start.  
Wireless access is available | Software is up to date and installed based on instructional input and need. Computers function well with a minimum of requests for repairs throughout the semester.  
Local IT work with District IT to provide wireless services that are adequate for campus and instructional needs. |
| **2. Technology and Learning Effectiveness** Improve support for teaching and learning in resources and facilities; support the assessment and improvement of teaching and learning through alternative delivery methods. | Help Desk Ticket completion  
Overall IT services are sufficient | Tickets are assigned appropriately to staff.  
The college embraces appropriate solutions for both face-to-face and distance learning, and provides direct and speedy end-user support to solve issues through the Help Desk process.  
Access to IT resources is transparently maintained, and software solutions are employed to provide support for teaching and learning without interruption. |
| **3. Access and Growth** – Expand physical and technological resources through educational technologies. | New technology review  
Overall IT services are sufficient | New and emerging technologies are researched, reviewed and evaluated in order to select what will best meet the campus IT needs. Policies and methods for Mobile Device Management, and Bring Your Own Device support are being explored.  
Technology is used to improve services and increase productivity for students, staff, and faculty through regular and systematic updates of software and hardware.  
Innovative IT solutions are supported where strategically appropriate, secure, and as resources allow. |
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<th>Responsiveness to community needs through responsive programs, services, and delivery methods.</th>
<th>Staff collaboration</th>
<th>IT staff work together to provide solutions for special events, such as streaming video of special presentations to multiple locations on campus. Local College collaborates with District on network and server technologies and promotes completion of shared or complex IT tasks.</th>
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<td>Relationships with District IT staff</td>
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5. **Organizational Effectiveness**  
- Ensure values reflected by processes and practices through sustainable and environmentally sensitive practices; Improve organizational processes and communication through change management, and enhanced understanding of changing environment; enhance efficiency and employee satisfaction in processes and systems, and resource development.

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<th>Equipment Evaluation and Updating</th>
<th>PC Renewal Plan for full time staff and Faculty includes a cascade approach to maximize life span and fiscal thrift. Technology promotes conservation of energy resources. Procedures are in place and followed which ensure security of all private data and include an effective and sufficient disaster recovery plan and regular backup processes. Employees are responsible and trained in district computer use policies and regulations, as well as FERPA regulations, malicious software protection behaviors, and responsible file exchange.</th>
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<td>Data backup and restoration</td>
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**Technology Environment**

Broad areas in the technology environment include

1. **Instruction Support**, including desktops in offices, multi-media centers in classrooms, and other devices such as clickers or tablets, as well as human support through help desk tickets and trainings, and software support such as College Integrated Planning System (CIPS) and our course management software, Desire2Learn (D2L).
2. **Organizational Data** for students, administration, faculty, and staff, including online schedules, instruction, catalogs, directories, SOP’s, eServices, Intranet, and PeopleSoft.
3. **Communication** between members and dissemination of accurate and timely data by whether through e-mail or other method of communication.
4. **Student Services**, including orientation, assessments, financial aid, SARS, Ed Plans, and Degree audits, to name some.
5. **Infrastructure** – including network equipment, backup, security, wireless.
6. **Strategic Planning** input
Specific tracks within these areas may include:

1. Equipment
2. Staffing
3. Software Licenses/Contracts
4. Training and Support
5. Development
6. Accessibility
7. Collaborative & Social Networking

**Asset Replacement Cycle**

A replacement cycle will be established for servers, network infrastructure, switches, computers, multimedia stations, system software, application software, and peripherals subject to funding availability. IT will maintain an Asset Inventory List to track type of asset, acquisition date or CPU speed, and department responsible for the asset if applicable. Life cycles, warranties, licensing, and vendor maintenance agreements will be also be monitored by IT. The replacement of existing hardware and software will generally follow one, three, five or seven year cycles, as needs dictate and budgets allow.

**Servers:** On an annual basis the servers will be evaluated to determine which are nearing the end of warranties and/or life cycles, which applications are housed on each server, and whether new technologies might better serve the needs of the college. It is anticipated that end of life servers will be replaced as an operational expense. Redistribution of software or realignment of users and processing requirements on a given server may be employed to extend the lifespan of a server. In all cases, the servers and storage area networks will be assessed to ensure they meet college strategic and operational goals. It is expected that servers have a five to seven year lifespan.

**Network Switches and Infrastructure:** In consultation with District Office, replacements and additions to our switches that allow data connectivity, college web servers, and other infrastructure hardware devices, will be analyzed annually. Where replacements fall under the purview of the College, funding will be considered an operational expense. Where funding is covered by the District, local IT will assist District staff with information and feedback as necessary in the replacement. In the case of new hardware to support District-led technology, such as the Lync phone systems, College IT will work with the District to analyze our needs and facilitate a smooth implementation.

**Wireless Access Points:** IT will provide the college community with information about the age, location, and capacity of the wireless access points on campus, and make recommendations for replacements and additions. Recommendations will be based on age of devices and desired coverage by Divisions for instructional purposes, student and staff support. College IT will work with District IT to ensure an accurate implementation. Funding will be considered an operational expense unless additional wireless access points are requested for a specific Division’s program.

**PC Renewal Plan:** This is a continuing plan for full-time staff and faculty computers, with a replacement cycle of every three to five years. Areas which use technology to provide critical services for students, such as distance education or financial aid, and those faculty and staff whose
job responsibilities are technology based, for example Computer Information Science, Graphic Design, or Architecture, shall be given a higher priority. A cascade approach shall be utilized to maximize life span and fiscal thrift.

Computers shall be replaced with a computer that is similar to the one being removed, or the current standard, Windows-based desktop as defined by IT. End-users who wish to change their platform from Windows to Mac or change hardware from a desktop to a laptop, must show a business need documented in their Program Review, and have the approval of their manager. Additional costs to the Division may be incurred for any changes to the standard installation and configuration.

**Additional PC Replacements:** Using the Asset Inventory list, on an annual basis in the fall semester, IT will conduct an analysis of all PC’s not covered by the PC Renewal Plan. This will include, but not necessarily be limited to adjunct offices, workstations at check-in desks, Admissions and Records, Transfer and Career Center, and single use systems such as those required for SARS, Library check-out, or GoPrint stations. IT will inform the responsible dean of the expected end-of-life for all PC’s within their sphere of responsibility as well as necessary updates for software. Updates and replacements presently are managed through the ITMB process by individual Units, or by categorical funds when possible. Conversations continue about possibly shifting the responsibility for maintaining these machines to a centralized process.

**Multi-Media Stations:** The responsibility for the approximate 96 multi-media workstations across the campus and the Elk Grove Center shall be considered a college-wide obligation. The IT Department, in conjunction with Media Services, will analyze the workstations and projectors on an annual basis, and inform the LRCT dean of the expected life of all workstations. Updates and replacements shall be managed as an operational expense.

**Computer Labs:** There are approximately 50 unique computer labs on campus to serve our students, housing between three and sixty computers. Labs dedicated to a specific discipline or activity (Math Lab or EOPS for example) are assigned to a specific division, and each fall, IT will advise the dean responsible for that lab of upcoming maintenance or the need to replace hardware and/or software. The Unit responsible for the labs will include the cost of maintaining these in their Unit Plan, and funding will be based on rank order through the ITMB/COB process, or through categorical funds where possible. Computer labs which serve the entire college, such as the Learning Resources Center lab, will be considered a college-wide obligation. The IT Department will analyze the computers on an annual basis, and inform the LRCT dean and VPA of the expected life of all workstations. Updates and replacements shall be managed as an operational expense.

**Peripheral devices:** Existing printers, scanners, or other peripheral devices should be replaced as they break or as requirements change based on unit plans. Unit funds will be responsible for this expense. A maintenance fund for parts is established in the IT department to extend the life of existing printers and other peripherals.

**Institutional Software:** Information on software maintenance requirements will be compiled by the IT department and evaluated to determine whether the software is needed to maintain college
goals and department objectives. Costs and terms of maintenance contracts that are maintained by the district should be noted. On an annual basis a listing of all maintenance contracts for software will be developed based on:

- Software type
- Usage Base
- Usage Terms
- Due Date
- Costs

**Applications Software:** On an annual basis, applications software purchased to maintain instructional, student services, or administrative applications will be reviewed to determine whether upgrades are needed or whether maintenance contracts should be renewed or whether there are new software options available to support college goals and department objectives. Requests for funds should be submitted in department/division unit plans and forwarded through the budget process.

**NEW TECHNOLOGY**

IT will accept requests for new technology based projects and solutions. Requests must be reviewed and pre-approval by the dean or administrator of the division making the request. An IT Project Request Form will be made available. Projects will be prioritized by urgency and by their alignment with the Unit Plan and the College Strategic Plan. Requests will be analyzed for feasibility, number of staff hours required, and funding sources for both initial implementation and on-going maintenance, licensing, and eventual replacement. Current projects and the continuing, regular work of the IT Department will be factored into the timelines for implementation of new projects.

**SECURITY**

IT will complete a security and disaster recovery plan in collaboration with the District Network Administrator, the IT dean and the VPA. Business continuity shall be considered, and a plan put in place to determine acceptable down times or data loss, and the appropriate redundancy. The plan should include, but not necessarily be limited to, an analysis of user permissions, user training, server backups, appropriate and adequate encryption, mobile device management, and the use of firewalls within and on the outer edge of the network.

Active security measures in place currently include:

- Regular back-ups on a weekly or bi-weekly cycle of the campus servers
- NTFS permissions limiting access on our network
- User authentication log-on for all computers on campus
- Network segmentation with both District and Local firewalls
- Regular updates of server system software
- Software (Lumension) to automate updates on end-user machines
- Encryption of Police Services computer data
- Near roll-out of online Training on Computer Security Techniques for end-users
- Updating and publicizing of Computer Use Policies
• Publication of FERPA standards

**ON-GOING AND FUTURE GOALS FOR IT**

• Standardization of practices, procedures and business processes for a more uniform and timely delivery of service. On-going review of current SOP’s and analysis of various processes to determine where new SOP’s would clarify operations.

• Continuous improvement through evaluation, reflection, and updating processes.

• Emphasis on transparency, accountability, outcomes, and strategic planning with integrated budget management based on established criteria and program review processes.

• Awareness of maintaining existing equipment and cascading it through the college to maximize life span and fiscal thrift.

• Separation of projects that fall under local departmental funding from those that have a college wide impact and those that are the domain of the district.

• Use IT to increase paperless processes campus-wide for environmental sustainability.

• The IT Strategic Plan should provide a framework for managing the College’s technology assets from one year to the next as new computer hardware replaces old, new software technologies are introduced, new classrooms are added requiring multimedia support, distance learning continues its significant growth, the demands for networking increase, and staff productivity is enhanced with the implementation of new administrative applications. The purpose and scope of an IT Strategic Plan is to allow more flexibility, broader input into prioritization, and the ability to adapt to the changes and breakthroughs in technology and the external environment.

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