PURPOSE:

Information Technology is a critical college resource supporting achievement of student learning outcomes and college strategic goals, as well as supporting effective delivery of college programs and services. Information technology planning considerations are integrated into college and district planning. In 2001, a strategic planning process for information technology was undertaken that resulted in the Information Technology Strategic Plan 2002-2005. The Information Technology Strategic Plan for 2007-2012 was started as the next generation of Information Technology planning that addresses technology specific considerations as well as broader college goals and achievement of student learning outcomes. Changes in the college planning process resulted in the incorporation of the ideas that were developed in the IT Strategic Plan 2007-2012 into the IT Program Plan process, which was inaugurated in 2008. The primary function of the Information Technology program plan is to determine how technology adds value to the institution.

Areas addressed in the development of the Information Technology Strategic Plan 2007-2012, now addressed in the IT Program Plan include then need to:

- Review the progress made in meeting college goals and objectives related to information technology in the period from 2002-2006, including an update from the 2002 IT Strategic Plan, the 2003-2004 Educational Master Plan, and the 2003 accreditation self study.
- Scan the current college and district environment for inputs related to information technology, including college strategic goals, District Strategic Plan 2006, college Information Technology Policy Advisory Committee report of 2006, and college Distance Education strategic planning document.
- Establish objectives for Information Technology related to the college goals and district strategic directions for:
  - Student Success – particularly for first year students
Enrollment Management Planning to Increase Access

- Improved Competence in Basic Skills
- Program Development
- Outreach Center Development
- Improving Staff Functions including Training
- Fostering Student Success in a Diverse Student Body
- Organizational Effectiveness
- Community and Workforce Development

- Develop strategies to achieve objectives based on what is required, who is involved, and potential costs and/or cost savings or avoidance.
- Establish replacement cycles for computers, servers, networks, printers, software, and multimedia rooms to meet instructional and service needs.
- Discuss future directions in technology

INFORMATION TECHNOLOGY PROGRESS 2002-2006

Organizational influences on information technology in the period from 2002-2006 came from three sources:

- The Information Technology Strategic Plan 2002-2005
- The SCC Master Plan for Student Success
- The 2003 Accreditation Report and planning agenda items

2002 - 2005 Information Technology Strategic Plan

The 2002 Information Technology Strategic Plan spoke to the definitions, values, status, goals, and next steps associated with IT in the areas of:

- Technology Based Student Services: Including services that students use to interact with the college such as Peoplesoft (student information system), assessment testing, and online orientation.
- Instructional Technology: Faculty Requirements: Including workstations and resources utilized by faculty in the classroom.
- Instructional Technology: Classroom and Student Resources: Including technology resources that are available for student use such as division labs, open access labs, classroom teaching labs and multimedia classrooms.
- Infrastructure: Including networking and servers and institutional software
- Institutional Support Systems: Including systems that perform non-instructional college functions, particularly in the area of Administrative Services.

During the 2006-2007 academic year, the college Information Technology committee undertook a review of the 2002 plan, assessing both achievements and areas of ongoing concern. As of 2006-2007, progress in the use of technology resources to support student learning outcomes and college processes and services is as follows:
Accomplishments 2002-2006

Technology Based Student Services

- The basic functions associated with the Peoplesoft (student information system) implementation have been implemented. Initial training on Peoplesoft functions, as well as on the reporting functions associated with Crystal Reports, was conducted.
- Systems have been developed to support a range of student services functions – including card access printing, student id cards (to be used as an RT pass), lab use tracking, web based financial aid, tracking systems for International Students, new bookstore systems, job services systems, scholarship systems, online orientations, expanded counseling information and services, and assessment systems.
- Educational planners are available online for counselors to interact with students and foster student success by minimizing the number of times that an educational plan has to be developed for a student and mapping out the course sequence appropriate to the student’s educational goal.
- An e-services support computer facility has been established in B153 to allow students access to both technology and to support staff for technology based student services applications.
- Computer labs have been established to support student services activities for RISE, the Disability Resource Center, Transfer Center, Career Planning, and Assessment.
- Additionally, in spring, 2007 a district wide student email service (iMail) has been implemented with expanded functionality for students (including access to grades) and the opportunity for college staff to contact students using email.

Instructional Technology: Faculty and Staff Requirements

- Beginning in 2003, faculty/staff computers were put on a five year replacement cycle that was renewed year-to-year. In 2006-2007, the Budget Committee requested that a permanent cycle be defined that would take this issue outside of the yearly budget request process.
- Major systems have been implemented to support faculty and staff processes – including:
  - SOCRATES – curriculum management software
  - On line grade submission and roster system (OGS)
  - Turnitin – plagiarism detection software
  - Manila – web site development
  - Blackboard - learning management system that supports web enhanced and hybrid courses, in addition to online courses.
- Training opportunities have been made available for Blackboard, OGS, Manila and SOCRATES.
- Faculty/staff file server accounts have been created and server resources are available from both on and off campus.
• Library services for faculty have increased tremendously, including eReserves, reservations for orientations, and access to online databases.

Instructional Technology: Classroom and Student Resources
• There has been tremendous growth in the number of computers available to students in classrooms and labs. Dedicated labs are available to support student learning in 7 of 8 divisions. Computer labs have been established in Math, Reading, Writing, English as a Second Language, Tutoring, Music, Photography, Communication, Computer Information Systems, Business, Physical Education, the outreach centers, Physics, Engineering Design Technology, and Graphic Communications, as well as open labs in B153 and the LRC. Only Behavioral and Social Sciences lacks a dedicated computer lab. Computer cascades, the Major IT projects process, VTEA and CTE, and modernization projects are used to maintain equipment in the labs.
• As new buildings are constructed or old buildings are renovated, technological innovation is being incorporated into the design. Computer classrooms are now available in the Technology and Cosmetology buildings in addition to the computer classrooms supporting CIS, writing, library technology, technology, and graphic communications.
• Online library services have increased dramatically, including eBooks, online reserves, and access to online databases, as well as media services resources.
• Wireless laptop carts have been implemented in Chemistry to support instrumentation instruction.
• There has been tremendous growth in the curriculum that incorporates technology – as online courses, hybrid courses, or web enhanced courses. Students have an opportunity to select the degree to which they will incorporate technology into their learning experience. Statistics for Blackboard use indicate that from 2001 – 2007:
  o The number of Blackboard course sections has increased from 78 to 401
  o The number of student enrollments in Blackboard increased from 1140 to 12648.
  o The number of purely online course sections for Spring, 2007 is 110 (or 27% of the total number of sections using Blackboard).*
• A help desk support service has been implemented for Blackboard that students and faculty can access 7 days a week, 24 hours a day.
• Pilot projects have been introduced in the area of online tutoring.
• Over 70 smart classrooms (with computer and multimedia resources built into the room infrastructure) and smart carts (with portable computer and multimedia resources) have been installed to support integrating technology into the curriculum.
• Assistive technology is available in each computer lab, in a dedicated lab in the Disability Resource Center, and through an alternate media facility.
Infrastructure

- The campus network connects all buildings and outreach centers with reliable support at the 10mbps, 100 mbps or gigabyte levels. Network equipment is on a consistent upgrade schedule that will facilitate 100mb computing to the desktop level.
- Virus protection has been enhanced with technologies that “push” antivirus software to the desktop installed on all computers that are connected to the college network.
- Phase one, two, and three of the wireless network have been implemented to facilitate student access to the Internet. The areas that are covered currently include outdoor areas associated with the quad, Technology building, bookstore and Mohr/Lilliard Hall; as well as indoor areas in Rodda North and South, Outreach Centers, Technology Building, cafeteria, Student Center, library, Business Building, College Store, and Hughes Stadium. The need for additional wireless coverage continues assessed. Coverage is planned to include the outreach centers by spring, 2007.
- Servers are on a consistent replacement schedule.
- Systems server software is maintained on a consistent update schedule.
- Software used to support system functions, as well as college-wide applications such as Microsoft products, are being funded at the institutional level.

Institutional Support Systems

- Email is available universally to all faculty and staff members.
- Systems are in place to support van driver training, reprographics and printing requests, and business office processes.
- Document imaging (Keyfile) has been implemented.

Another source of information for Information Technology planning during the period from 2006-2006 was the Educational Master Plan for Student Success, developed in 2003-2004. That plan documented division requests for multimedia classrooms, upgrades to hardware and software for labs and faculty and staff computers, and for additional capabilities in such areas as Theater Arts, Physics, and Behavioral and Social Sciences.
During the 2003 accreditation cycle, there were no recommendations associated with information technology in the 2003 accreditation report. However, there were a number of planning agenda items directly associated with IT including:

**Standard Four: Educational Programs**
- *To Support the integration of instructional technology and students’ acquisition of technology competencies:* By 2003-04, the Instructional Services and Information Technology offices will develop a process and an implementation plan to meet the College’s varied educational technology needs, including faculty computers and software, computer lab replacements and software upgrades, new technology-enhanced instructional facilities, such as multimedia rooms and computer labs, and curriculum management systems that result in “user-friendly” forms and proposal processes, and enhanced access to course outlines.

**Standard Five: Student Support and Development**
- Ensure that on-line admission and registration systems are effective and user-friendly; that implementation of all components of the PeopleSoft Student Administration systems, including prerequisite checking, degree audit, financial aid, assessment, and MIS, are effective and user-friendly; and the PeopleSoft Project include broader user input at all levels of planning, implementation and training.

**Standard Six: Information and Learning Resources**
- By 2005, the college will develop stable, adequate, and continuing operating budget resources, including sinking funds, to systematically provide for growth and maintenance of library materials and services, computer and network systems and software, and tutoring services and computer labs.
- By academic year 2003-2004, staff responsible for providing information and learning resources will work with appropriate constituency groups to set base annual replacement rates and allocation processes.

**Areas of Continued Concern**
For all of the progress made in the period, the items described in the accreditation planning agenda also demonstrate what still needed to be accomplished with respect to replacement cycles for all computers (not just faculty/staff, servers, and networks), ongoing support for information technology funding, and additional training and functionality for student services processes.

Additionally, based on the review of the 2002-2005 IT Strategic Plan, areas of continued concern exist.
- While progress has been made in identifying common use software applications and facilitating their adoption and purchase, such as Adobe products, individual departments plan and purchase software from department funds.
- While the Total Cost of Ownership model, in which all costs related to the acquisition and support of technology, is recognized as an important principle to
be used in assessing the acquisition and use of technology, it has not been fully adopted as a standard in the acquisition and use of technology. Specifically, ongoing support needs are not recognized and accounted for. Personnel requirements have not kept pace with the expansion of technology for both operational and decision support functions

- The full impact of distance education on the college has not been assessed. This impact would extend to technology resources, training and support for faculty and staff as well as students, and process changes to support students in distance education modes.
- The strategy for making technology resources available to students with disabilities has not been consistently applied. While there is a computer lab within the DSPS programs, technology resources are supposed to be integrated into classroom and open labs as well as the library so that students can have access to appropriate resources at the location where instruction or instructional support is delivered. ADA workstations are supposed to be upgraded at the same time that labs are replaced. This does lead to an inconsistent array of technology resources for students as they move across campus.
- Technology resources are not equally available at the Outreach Centers with respect to the availability of open lab time and administrative applications. Network and staff constraints continue to hamper full delivery of services.

In general, the productivity gains that would be expected from the widespread implementation of information technology have not been realized, demonstrating the ongoing need for training and support and for a review of how the college’s technology resources are being deployed and utilized.
INFLUENCES ON INFORMATION TECHNOLOGY 2007-2012

Looking ahead to the timeframe from 2007-2012, Information Technology planning has to build on the accomplishments of the past, address the issues that remain, and respond to a new set of opportunities and challenges presented both by the college and district environment and by the onrush of developments in the technology itself. While the emphasis of the 2002-2005 plan was on how information technology could support operational goals, the emphasis of during this planning cycle is on how to use information technology to transform the process of teaching and learning. The current influences on 2007-2012 IT planning include:

- College Goals and Strategic Directions
- 2006 District Strategic Plan
- Information Technology Policy Advisory Group (ITPAC) forums
- Distance Education Visioning document and program plan
- Los Rios Community College District policy on Information Security
- Reorganization of information technology function

The Sacramento City College Strategic Directions and Goals for 2009-2010 are to:

- Develop and implement processes to promote engagement and success of first-year students.
- Implement a systematic enrollment management process that aligns student outreach and recruitment with scheduling of classes, programs, and services based on student interest, demand, time, convenience, and culture.
- Improve basic skills competencies in reading, writing, and math and improve preparedness for degree applicable courses through developing skills in reading, writing, math, and information competency across the curriculum and throughout the college.
- Improve processes, services, curriculum, and instructional design to ensure equivalent student outcomes for alternative modalities and locations (i.e., off campus sites, distance education, etc.).
- Revise or develop new courses, programs and services based on assessment of emerging community needs.
- Improve staff processes for all classifications including hiring, orientation, mentoring, customer service, training, evaluation, and exit processes, with attention to the selection and retention of staff that reflect the diversity of our students and community.
- Engage the college community in the process of ongoing institutional evaluation and continuous improvement, in the analysis and review of data, and in ongoing activities related to accreditation.
- Identify and respond to the needs of the college community that is growing increasingly diverse in terms of demographics and culture.
- Deliver programs and services that demonstrate a commitment to learner-centered education and training and institutional effectiveness through continuous process improvement.
A number of these goals reference technology directly. In other goal areas information technology is both relevant and critical to broad college success. These goals will form the framework for the Information Technology Strategic Plan objectives

In addition to the college goals, the Los Rios Community College District conducted a strategic planning process during the 2005-2006 academic year which focused on identifying the challenges and opportunities facing the colleges during this period and then establishing the vision, mission, values, goals and strategies that would guide its decisions in the coming years. In a number of goal areas, strategies and future directions were outlined which identify technology as critical to student and institutional success. Goals and strategies from the district plan include:

Goal: Student Success  
Strategy: Student Access to Technology

Goal: Teaching and Learning Effectiveness  
Strategy: Distance Education

Goal: Access and Growth  
Strategy: Facilities and Technology

Goal: Organizational Effectiveness  
Strategy: Integration of Technology in Planning and Project Delivery

A third set of current inputs into the current IT planning process comes from the results of a series of forums that were conducted in fall, 2006 on information technology issues organized through the Information Technology Policy Advisory Committee (ITPAC). The forums, which were conducted with both student and faculty/staff participation, identified a series of campus and district IT issues to be addressed in the planning process:

- Importance of ongoing dialogue and communication about information technology issues and their impact on students and faculty/staff.
- Need for access to computing resources for both academic and nonacademic purposes.
- Need for clearly stated computer lab policies and more uniformity in how the student experiences technology at SCC.
- Need for instruction to “drive” information technology resources and policies as technology becomes increasingly incorporated into the instructional mission.
- Concerns about access to a uniform level of technology resources for students with disabilities.
- Needs for staff training on software
- Need for guidelines on how to access and use new technologies that may strain current infrastructure

Forums have continued to be held throughout academic years 2007-2008, 2008-2009 and 2009-2010.
The Distance Education Strategic Planning document has been developed and adopted by the Academic Senate, as has the Distance Education Program Plan. Members of the Distance Education Strategic Planning Task Force were asked to develop strategic directions for distance education that relate to:

- Course and program development,
- Instructional Quality
- Student Services
- Governance and Management

The relevant recommendations of the task force will be included in the Information Technology Strategic Planning document.

A fifth influence on information technology planning at SCC is the information security policy developed and adopted in spring, 2007 [http://www.losrios.edu/legal/Regulations/R-8000/R-8871.htm](http://www.losrios.edu/legal/Regulations/R-8000/R-8871.htm). The policy addresses the definition and management of high risk, confidential, and low risk data that is contained throughout the college's administrative systems. The policy will impact planning for training, hardware upgrades, security and access procedures, network management, and workstation/server access and maintenance.

A sixth influence on the Information Technology planning process was the reorganization of the Information Technology structure that occurred in March, 2008. All IT related personnel were assigned to the Information Technology division. Surveys have been administered to measure the effectiveness of the reorganization.

With these influences identified, the structure of the Information Technology Program Plan will employ the following rubric. For the academic year 2010-2011, objectives will be determined for college goals. Outcome measures will be associated with each objective. The lead individuals involved in further defining and implementing each strategy will be identified. Resources associated with each strategy will be identified as known at the present time. If relevant, cost savings or cost avoidance will be identified as well.
<table>
<thead>
<tr>
<th>College Goals</th>
<th>Unit Objective</th>
<th>Outcome Measures</th>
<th>Lead Involvement</th>
<th>Preliminary Statement of Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develop and implement processes to promote engagement and success of first-year students.</td>
<td>Research and prototype technologies that have a proven, positive affect on retention and success, such as podcasting and videocapture.</td>
<td>Delivery of content to students and faculty/staff using new technologies.</td>
<td>IT department, AV, Distance Education coordinator, instructional development coordinator</td>
<td>Podcasting and vodcasting equipment; multimedia server</td>
</tr>
<tr>
<td>1. Develop and implement processes to promote engagement and success of first-year students.</td>
<td>Improve student and staff access to college information by managing the college content management system using Ingeniux.</td>
<td>Availability of content management system.</td>
<td>Ingeniux implementation team, including PIO, Programmer 2, Instructional Development coordinator</td>
<td>Ingeniux maintenance contract</td>
</tr>
<tr>
<td>1. Develop and implement processes to promote engagement and success of first-year students</td>
<td>Create student accounts for accessing college technology resources and storing data.</td>
<td>Student accounts available.</td>
<td>IT</td>
<td>Server</td>
</tr>
</tbody>
</table>
1. Develop and implement processes to promote engagement and success of first-year students

Create lab policies that provide consistent resources to students and which allow for social networking as a component of campus life.

Published lab policies and access to social networking sites.

College lab coordinators and IT staff

None

2. Implement a systematic enrollment management process that aligns student outreach and recruitment with scheduling of classes, programs, and services based on student interest, demand, time, convenience, and culture.

Work with Student Services to implement programs that support recruitment, assessment, and service delivery; use Ingeniux system to foster Student Central concept.

Use of SARS program; availability of Ingeniux web pages; assessment testing and placement accuracy

IT department; Student Services

SARS maintenance agreements. Replacement for Assessment CPTS system

2. Implement a systematic enrollment management process that aligns student outreach and recruitment with scheduling of classes, programs, and services based on student interest, demand, time, convenience, and culture.

Manage wireless network to ensure student access to Internet resources. (also goal 4)

Installation and monitoring/measuring use in different locations; satisfaction surveys

District and college IT

APs
2. Implement a systematic enrollment management process that aligns student outreach and recruitment with scheduling of classes, programs, and services based on student interest, demand, time, convenience, and culture.

Develop reporting systems to support EOPS and financial aid to ensure that data driven decision making is available in these areas.

Systems in place
IT Programmer; Student Services staff

3. Improve basic skills competencies in reading, writing, and math and improve preparedness for degree applicable courses through developing skills in reading, writing, math, and information competency across the curriculum and throughout the college.

Provide technical support to computer labs

User satisfaction surveys; analysis of help line calls

IT department and divisions

4. Improve processes, services, curriculum, and instructional design to ensure equivalent student outcomes for alternative modalities and locations (i.e., off campus sites, distance education, etc.).

Improve access to information technology resources at the Outreach centers by improving network capabilities and decentralizing computer program availability. Affected programs and processes would continue to be identified.

Improved access to IT resources at Outreach centers.

College and District IT; Outreach Center staff; Student Services staff
<table>
<thead>
<tr>
<th>4. Improve processes, services, curriculum, and instructional design to ensure equivalent student outcomes for alternative modalities and locations (i.e., off campus sites, distance education, etc.).</th>
<th>Implement supportable learning management system offering instruction and student services in online, hybrid, and web enhanced environment, including training and ongoing support.</th>
<th>Learning Management System licensing, implementation and training</th>
<th>Distance Education Coordinator, Instructional Development Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Improve processes, services, curriculum, and instructional design to ensure equivalent student outcomes for alternative modalities and locations (i.e., off campus sites, distance education, etc.).</td>
<td>Improve accessibility of technology resources to students with disabilities by expanding the availability of software resources in student labs and classrooms</td>
<td>Deployment of assistive technology</td>
<td>IT staff, DRC</td>
</tr>
<tr>
<td>5. Revise or develop new courses, programs and services based on assessment of emerging community needs.</td>
<td>Create learning environments that promote teaching and learning, including multimedia capabilities in designated classrooms and configurations that change to meet instructor needs</td>
<td>Installation of equipment; use by classroom instructors</td>
<td>Media Services, IT, Operations, Instruction</td>
</tr>
<tr>
<td>5. Revise or develop new courses, programs and services based on assessment of emerging community needs.</td>
<td>Ensure availability of appropriate hardware and software to support academic programs on a 12 month basis by having staff in critical areas on a 12 month basis.</td>
<td>Support for summer programs in SAH and AT</td>
<td>IT staff</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>6. Improve staff processes for all classifications including hiring, orientation, mentoring, customer service, training, evaluation, and exit processes, with attention to the selection and retention of staff that reflect the diversity of our students and community.</th>
<th>Increase staff use of available technology for creating training programs in computer hardware and software.</th>
<th>Ability to use programs</th>
<th>Instructional development coordinator; IT staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Engage the college community in the process of ongoing institutional evaluation and continuous improvement, in the analysis and review of data.</td>
<td>Support college processes by maintaining Inside SCC</td>
<td>Availability of Inside SCC</td>
<td>IT staff</td>
</tr>
<tr>
<td>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement.</td>
<td>Provide increased customer service and efficient maintenance and replacement of college technology resources by using expanded capabilities of help desk and inventory systems of all technology based resources.</td>
<td>Enhanced use of system with tracking and analysis of helpdesk requests, workstations, network equipment, servers, and software.</td>
<td>IT staff</td>
</tr>
<tr>
<td>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement.</td>
<td>Build on IT reorganization of 2008-2009 to improve processes, cross train staff, and implement new services to achieve college goals.</td>
<td>Surveys of faculty and staff on customer service indicators; analysis of help desk calls.</td>
<td>IT staff; lab coordinators</td>
</tr>
<tr>
<td>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement.</td>
<td>Maintain the availability and usefulness of equipment that is not scheduled for replacement within 2 years by upgrading memory in the case of desktops</td>
<td>Ability of desktops to run applications;</td>
<td>IT staff</td>
</tr>
<tr>
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</tr>
<tr>
<td>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement.</td>
<td>Maintain teaching and learning environments for students, faculty and staff by implementing computer replacement cycle for desktops and laptops that were purchased in the 2005-2006 timeframe or in the 2007-2008 timeframe for computers used in technology rich environments as identified in the IT replacement plan.</td>
<td>Computer acquisition and installations.</td>
<td>IT staff</td>
</tr>
<tr>
<td>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement.</td>
<td>Improve access and reliability of server resources by continuing server replacement cycle</td>
<td>Server replacement and cascade based on criteria of functionality, age of server, availability of backup.</td>
<td>IT staff</td>
</tr>
<tr>
<td>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement.</td>
<td>Maintain availability and stability of technology resources by purchasing maintenance and licensing agreements for collegewide software.</td>
<td>College licenses up to date.</td>
<td>IT staff</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement.</td>
<td>Monitor implementation of security policies to protect high risk data, encrypt equipment with high risk data, and train staff on information security.</td>
<td>High risk data secure.</td>
<td>District and college IT</td>
</tr>
<tr>
<td>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement.</td>
<td>Maintain high speed network including fiber metropolitan area network. Improve access and reliability of networking resources by implementing replacement cycle to obtain 100 mb throughput to the desktop from edge switches and 1g throughput from the core to edge switches.</td>
<td>Installation of replacement switches for switches operating at 10mb and measurement of throughput.</td>
<td>Acquisition of appropriate switch technology.</td>
</tr>
<tr>
<td>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process</td>
<td>Develop ongoing communications mechanisms for facilitating dialogue on IT policies and issues.</td>
<td>Continuous vetting of issues important to the college community on information technology policies, procedures, utilization, training, funding…</td>
<td>IT Committee</td>
</tr>
</tbody>
</table>

Sacramento City College Strategic Master Plan
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improvement.

<table>
<thead>
<tr>
<th>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement</th>
<th>Continue to modify workstation management practices will include both PCs and Macs so that replacement policies, maintenance schedules, and training are addressed in an equivalent fashion.</th>
<th>College processes yield equivalent results for Mac and PC users.</th>
<th>IT staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement</td>
<td>Manage workstations more effectively and efficiently by replacing Windows 2000 operating system and by using server based Deep Freeze</td>
<td>Only Windows XP and 7 will be deployed; server based Deep Freeze will be deployed</td>
<td>IT staff</td>
</tr>
<tr>
<td>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement</td>
<td>Improve workstation management by expanding installation of Verdiem software to manage workstation processes</td>
<td>Lowered energy costs.</td>
<td>IT staff</td>
</tr>
</tbody>
</table>

FUTURE DIRECTIONS
Although the original 2007-2012 plan encompassed a five year period, the majority of objectives identified rely on the issues and technologies that are relevant to a three year period. To look beyond three years requires considering possibilities that are not well defined and may not materialize as new options appear (and disappear) through both market and technical forces. However it would be a mistake to ignore the broader planning horizon. Instead of looking solely within the college environment, a scan of the external environment allows us a broader look at what trends are anticipated in the time frame 2010-2012. Specifically, the Horizon report, developed by the New Media Consortium, provides an exciting look into future trends in educational technology. While the full version of the report is available through http://www.nmc.org/horizon, specific trends relevant to the students and faculty/staff of Sacramento City College include:

- **New scholarship:** time-honored activities of academic research and scholarly activity have benefited from the explosion of access to research materials and the ability to collaborate at a distance. At the same time, the processes of research, review, publication, and tenure are challenged by the same trends. The proliferation of audience-generated content combined with open-access content models is changing the way we think about scholarship and publication—and the way these activities are conducted.

- **Massively multiplayer educational gaming:** The term “serious games” has been coined to describe games that have an educational purpose and non-entertainment goals. Educators are taking a hard look at one type of serious game, massively multiplayer educational games, and finding strong potential for teaching and learning. These games are still time-consuming and often expensive to produce, but practical examples can easily be found. Interest is high and developments in the open-source arena are bringing them closer to mainstream adoption year by year.

This report, and other resources, will need to be monitored so that the technology, training and people resources needed to support these activities are available to the college community.

**PROCEDURES:**

Procedures for obtaining IT obtaining support and planning for new IT resources are conducted through the following means:

1. Specific tasks (trouble tickets, moving or changing computers and peripheral) are scheduled through the help desk (2222 and SCC – Help Line, as well as through HelpStar).
2. Requirements that involve increasing network line capabilities require an ISWR and are forwarded to the district office.

Procedures for obtaining new accounts require an email by supervisory staff to the Information Technology department for access to email, file services, departmental shares, Student Services systems (SARS, Powerfaids, assessment..). Access to web
page accounts requires requests to Graphic Impressions. Requests for access to online services Desire2Learn) are made using the online Employee Self Service (ESS) portal.

3. Procedures for obtaining new computers are conducted through the new faculty/staff hire process and through the unit planning processes.
4. Procedures for accessing systems with high risk data are vetted through the A&R Supervisor and college ISO.

The process for replacing computers, servers, and network equipment is as follows:

A yearly replacement cycle for computers, servers, network equipment, and multimedia rooms is established based on the age of the equipment. The replacement of existing computer workstations (including laptops) will follow three cycles:

- Three Year Cycle: Workstations will be replaced on a three year cycle in those areas which utilize technology to deliver instruction and financial aid servers as well as for those faculty and staff whose job responsibilities are technology based. This would include:
  - Computer Information Science
  - Graphic Communication
  - Electronic Design Technology
  - Outreach Centers
  - Financial Aid (selected)
  - Information Technology/Computer Services
  - Senior Information Technology Technicians (lab support)
  - Graphic Impressions
  - Distance Education
  - Instructional Development

It is anticipated that the type of computer replaced will be the updated model of the existing equipment. Switches to other technology (PC to Mac or desktop to Laptop) will be evaluated at time of replacement.

- Five Year Cycle: All other classroom, lab, multimedia, faculty and staff, and student service/administrative function computers will be replaced on a five year cycle. At the end of three years, the computers in this category will be reviewed to determine whether memory upgrades are needed.
- Cascades: Approximately 10% of computers in place serve basic computing functions and do not require replacement with new equipment (examples are GoPrint, SARS Trak and TrackIt computers...). These computers will be updated with the cascades from the computers replaced on the three year cycle.

The evaluation of the existing base of computers and determination of which computers will be replaced will take place in the fall, prior to the development of unit plans. Lists of which computers are scheduled for replacement in the next fiscal year will be shared with the divisions prior to development of unit plans.

Server Replacement: On an annual basis, the base of existing servers will be evaluated to determine which are out of warranty, which applications reside on which servers, and
whether new technologies exist which would change the college’s approach to servers and storage to ensure that the base of servers and storage meet college strategic and operational goals. It is anticipated that all out of warranty servers will be replaced but that applications may be realigned based on number of users, processing requirements, and storage requirements. Alternatively, applications and data can be deployed on virtual servers.

Network Switch Replacement: On an annual basis the college’s need for local and wide area connectivity will be assessed. Based on that analysis the college’s network typology will be evaluated to determine which switches are out of warranty, are located in areas which require greater throughput, or are located in areas in which there are increasing number of users (requiring more ports). The lead responsibility for the analysis of network requirements, development of typology, analysis of new technologies, and deployment of network equipment is the District Office. The college assists in analysis of user requirements and monitoring implementation.

Multimedia Rooms: On an annual basis the Media Services department will update the inventory of multimedia rooms and note the equipment placed in each room (or cart) and the age of the computer and projecting equipment. The replacement cycle for multimedia classrooms will follow that of the computer replacement cycle – five year replacement cycle for computers and projectors, replacement as other components break, supply budget for projector bulbs. Departments should apply for replacements of components that break through the AV fund. Additional information is available in the Multimedia Program Plan.

Peripheral devices: Existing printers, scanners, or PDAs will be replaced as they break or as requirements change based on unit plans. Units will be responsible for replacing peripheral devices. However, a maintenance fund for parts will be continued to extend the “life” of existing printers.

In addition to hardware, the college recognizes the need to maintain systems software and collegewide applications software. On an annual basis a listing of all maintenance contracts for systems and collegewide software will be developed based on:

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

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, 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 unit plans and forwarded through the budget process.
# MAJOR TASKS AND TIMING:

<table>
<thead>
<tr>
<th>Timing</th>
<th>Who</th>
<th>What</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring</td>
<td>IT department; administration</td>
<td>Plan for 2009/2010 new faculty/staff computers</td>
</tr>
<tr>
<td>Spring</td>
<td>IT department, Budget Committee, administration</td>
<td>Finalize budget for computer, server, and network replacement cycle based on analysis done in fall, 2009.</td>
</tr>
<tr>
<td>Spring</td>
<td>IT department, Budget Committee, administration</td>
<td>Finalize new IT purchases and major IT project recommendations to be implemented in 2010-2011.</td>
</tr>
<tr>
<td>Summer</td>
<td>IT department, fiscal</td>
<td>Order equipment based on replacement cycles and approved IT projects</td>
</tr>
<tr>
<td>Summer-Fall</td>
<td>IT department; district IT</td>
<td>Configure and Install new computers, servers, network equipment.</td>
</tr>
<tr>
<td>Summer</td>
<td>IT department, instructional development, DE coordinator</td>
<td>Training provided on Desire to Learn during Online Institute in June; technology training offered during flex workshops</td>
</tr>
<tr>
<td>September</td>
<td>IT department</td>
<td>All computers will be categorized by their use (faculty/staff, multimedia, classroom, lab, counter, service function…) and acquisition date (based on CPU speed).</td>
</tr>
<tr>
<td>September</td>
<td>IT department, divisions</td>
<td>Computers to be replaced based on their acquisition date and place in the cycle will be identified and departments notified of pending replacement.</td>
</tr>
<tr>
<td>October-December</td>
<td>Departments, Units, Areas</td>
<td>Requests for new information technology resources will be defined in unit plans and facility management/management plans and rank ordered through division/unit and VP level.</td>
</tr>
<tr>
<td>January/February</td>
<td>IT department</td>
<td>Review proposed IT projects and develop specifications and quotes to be included in project submissions.</td>
</tr>
<tr>
<td>January</td>
<td>IT department, instructional development, DE coordinator</td>
<td>Technology training offered during flex.</td>
</tr>
<tr>
<td>Timeframe</td>
<td>Group</td>
<td>Description</td>
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<tr>
<td>--------------</td>
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<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Ongoing</td>
<td>IT department, instructional development, DE coordinator</td>
<td>Technology training offered through workshops offered for flex credit.</td>
</tr>
<tr>
<td>NLT February 2010</td>
<td>IT committee, dean</td>
<td>Review and prioritize lists of proposed IT projects and develop a prioritization recommendation consistent with college goals and objectives.</td>
</tr>
<tr>
<td>NLT April 15</td>
<td>Budget Committee, Categorical program managers</td>
<td>Review proposed information technology plans, prioritize, and make recommendations to the President’s Executive Staff for approval.</td>
</tr>
<tr>
<td>May</td>
<td>President</td>
<td>Approves information technology requests as part of budget process (including replacement cycle, new IT requests, new faculty/staff hire requests).</td>
</tr>
<tr>
<td>June</td>
<td>IT department, divisions</td>
<td>Prepare for purchasing and implementation of approved technologies.</td>
</tr>
<tr>
<td>Ongoing</td>
<td>IT department, categorical managers</td>
<td>Consultation on “off cycle” equipment purchases.</td>
</tr>
<tr>
<td>Ongoing</td>
<td>Instructional development coordinator and DE coordinator</td>
<td>Training in Desire to Learn</td>
</tr>
</tbody>
</table>

**EVALUATION/OUTCOME MEASURES:**

Stated Above.
# RESOURCE REQUIREMENTS 2010-2011:

<table>
<thead>
<tr>
<th>College Goals</th>
<th>Unit Objective</th>
<th>Resource Requirements</th>
<th>Projected Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develop and implement processes to promote engagement and success of first-year students.</td>
<td>Improve student and staff access to college information by managing the college content management system using Ingeniux.</td>
<td>Ingeniux maintenance contract</td>
<td>Included in institutional software</td>
</tr>
<tr>
<td>1. Develop and implement processes to promote engagement and success of first-year students</td>
<td>Create student accounts for accessing college technology resources and storing data.</td>
<td>Server</td>
<td>Included in server replacement costs</td>
</tr>
<tr>
<td>2. Implement a systematic enrollment management process that aligns student outreach and recruitment with scheduling of classes, programs, and services based on student interest, demand, time, convenience, and culture.</td>
<td>Work with Student Services to implement programs that support recruitment, assessment, and service delivery; use Ingeniux system to foster Student Central concept.</td>
<td>SARS maintenance agreements. Replacement for CPTS system</td>
<td>Included in system maintenance costs.</td>
</tr>
<tr>
<td>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement.</td>
<td>Provide increased customer service and efficient maintenance and replacement of college technology resources by implementing an help desk and inventory system of all technology based resources.</td>
<td>Help desk/inventory system</td>
<td>Maintenance contract (included in system software).</td>
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<tr>
<td>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement.</td>
<td>Build on IT reorganization of 2008-2009 to improve processes, cross train staff, and implement new services to achieve college goals.</td>
<td>IT staff; lab coordinators</td>
<td></td>
</tr>
<tr>
<td>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement.</td>
<td>Maintain the availability and usefulness of equipment that is not scheduled for replacement within 2 years by upgrading memory in the case of desktops or purchasing printer parts for the 700 printers that currently are operational on campus.</td>
<td>Memory upgrades</td>
<td></td>
</tr>
<tr>
<td>9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement.</td>
<td>Maintain teaching and learning environments for students, faculty and staff by implementing computer replacement cycle for desktops and laptops that were purchased in the 2004-2005 timeframe or in the 2006-2007 timeframe for computers used in technology rich environments as identified in the IT replacement plan.</td>
<td>Computers</td>
<td></td>
</tr>
</tbody>
</table>
9. Deliver programs and services that demonstrate a commitment to learner-centered education and institutional effectiveness through continuous process improvement.

<table>
<thead>
<tr>
<th>Improve access and reliability of server resources by continuing server replacement cycle</th>
<th>Servers</th>
</tr>
</thead>
</table>

| Maintain availability and stability of technology resources by purchasing maintenance and licensing agreements for collegewide software. | Licenses. |

| Maintain high speed network including fiber metropolitan area network. Improve access and reliability of networking resources by implementing replacement cycle to obtain 100 mb throughput to the desktop from edge switches and 1g throughput from the core to edge switches. | Switches |

| Develop a process for faculty/staff to convert, upload, and manage multimedia content on the LRCCD flash media server | |

**REVIEW CYCLE:**
Yearly
FORMS
Unit Plan and IT Resource Request (available Inside SCC)