CUESTA COLLEGE Technology Plan 2012-2017

San Luis Obispo Campus   **North County Campus**   **South County Centers**   **Distance Education**

San Luis Obispo Community College District

Technology Committee Members (2010-2012)

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INTRODUCTION

Cuesta College is committed to providing access to and promoting the effective use of information technology in support of its mission, vision, and values. In light of this commitment, the College has sought to create strategic and effective planning for the next five years. In support of the 2011-2016 Educational Master Plan (EMP), the Technology Committee has developed the following Technology Plan which charts a course for technological innovation, support for technology use, and the efficient acquisition, maintenance and replacement of its technology infrastructure.

The purpose of the Technology Plan is to assess and prioritize current and projected technology needs, including technology support, training, hardware, software, licensure, policy issues, and technological infrastructure.[1] The primary focus of this document is to consider needs and trends that will have an impact on the College and our students over the next five years, and to establish appropriate priorities, goals, and action steps that will best support the overall vision of the College.

Immediate technology needs, short-term planning, and specific operational details for proposed and existing technology projects are found in the Annual Technology Plan and Review (ATPR). The ATPR is an essential part of Cuesta's technology planning documentation. It provides a summary review of all technology projects from inception through implementation, including an assessment cycle performed by the technology users. Each project in the ATPR is also linked to the Technology Plan, thus showing how the goals and actions/recommendations of the Technology Plan are actualized each year.

Because of the rapid changes in information technology, coupled with frequent and unexpected variations in state funding, this plan should be viewed as a living document. The Technology Committee will review it annually, and the actions corresponding to each of the goals revised or updated as needed.

BACKGROUND

Since 2008, Cuesta College has made strides in improving the planning for and allocation of technology. The College has instituted a central IT budget, devised strategies to streamline processes, and developed a process to integrate planning for technology resources. The Annual Technology Plan and Review (ATPR) has successfully documented such changes and short-term goals, but longer-term planning is necessary to continue efforts to improve the College's systematic approach to technology.

In response to a number of accreditation recommendations from ACCJC in 2009, the College drafted a Strategic Plan and updated the Educational Master Plan for 2011-2016. Both of these important documents call out the need for integrated and effective planning for and implementation of technology at the College. The 2010-2013 Strategic Plan set as a goal the development of "a Technology Master Plan setting forth major technology priorities, which will be aligned with the College's mission, vision, values, Educational Master Plan and other master and operational plans." (Strategic Goal 2.D)

The Technology Committee met that goal in 2011 by writing the 2012-2017 Technology Plan. In the spring of 2011 the Technology Committee prepared for the first draft of this document by developing a Strengths, Weaknesses, Opportunities, and Threats assessment, which, in conjunction with a series of community surveys, assessments, and technology inventories, provided insights to areas of technology needs. A small taskforce met over the summer and used the ten Educational Master Plan Core Principles to guide the focus in writing a preliminary draft. The EMP Core Principles highlight important areas of goal setting for the College. The following Technology Plan works to respond to those principles by establishing goals, organized under themes (see Appendix A that offers a correlation between the EMP Core Principles and the goals of the Technology Plan). In addition, the Director of Computer

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[1] Strategic Goal 2.D, San Luis Obispo County Community College District 2010-2013 Strategic Plan

Services, acting in a role of facilitating administrator and liaison with the other Operational Plans, worked to coordinate goals and action plans with other groups to result in a truly integrated planning process.

SOURCES

The Technology Plan is derived from and supports the Core Principles, goals, and technological needs described in the 2010-2013 Strategic Plan and the 2011-2016 Educational Master Plan. In addition, the following resources and data were considered when writing this document:

- 2010 Annual Technology Plan and Review
- 2010 Campus Computing Report
- 2009 and 2010 Faculty Use of Technology Survey
- Cuesta College Technology Proposal: Allocation, Support and Renewal
- Technology Committee SWOT survey
- District-wide SWOT survey
- T-tab requests from 2011 IPPRs
- Technology Training survey
- Technology Committee vision and brainstorm session
- Technology Master Plans/best practices from comparable institutions
- Equipment inventories
- Review of 2010-2011 technology purchases (via spending codes)
- 2011 Cuesta College Job Satisfaction Survey

FUNDING ASSUMPTIONS

For any planning to be of real value, it must take into account some measure of the funding resources expected to be available or the potential lack thereof. The following assumptions regarding funding were made when writing this document.

- A significant number of demands for technology-related support will compete for limited funding. Consequently, the use of resources allocated to technology will be driven by needs/strategies which are identified and prioritized in this plan.
- The economy for the state of California is not likely to improve much over the next five years, and in fact, may continue to decline.
- The Cuesta College Foundation will continue to support, at some level, the acquisition of new technology through grant requests and specific donations.
- Cuesta developed a funding stream via the MAA (Medical Administrative Activities) program, from which 45% of the income will be used to fund technology at Cuesta.
- Other external sources of funding may be developed, but these acquisitions will be consistent with the overall Technology Plan of the College.
- Cuesta College will write a Title III Grant that may provide additional funding.

GUIDING PRINCIPLES

The following guiding principles, which describe the fundamental values used to make decisions regarding the acquisition and use of information technology, were used in writing this plan.

- Student access and success are the primary focus for the use of information technology.
- Technology must be responsive to changing student, institutional, and community needs.
- The mission of the district drives decision-making regarding the use of technology.
- Effective use of technology requires consistent and accessible quality support for students and employees.
- Maintaining existing technologies is generally given higher priority than expansion or implementation of new initiatives but emerging or innovative solutions would not be overlooked.
- The total cost of ownership (TCO) is to be assessed in all stages of planning and implementation of new technologies.

TOTAL COST OF OWNERSHIP

Cuesta College is moving toward integrating the business practice, commonly referred to as the total cost of ownership, which provides an estimate of the total cost to deploy and maintain a given technology over its lifetime. This is considered an essential aspect of financial planning because technology deployments typically incur, over their lifetime, a variety of direct or indirect operational costs that are less apparent than the initial capital expense of deployment.

One specific aspect of total cost of ownership planning is the cost to replace the technology as it ages. This is particularly relevant to Cuesta College because, while many technology deployments at the College are initiated by special one-time funds (such as grants, new building funds, special programs, etc.), the replacement costs are typically borne by the District. As one-time funded projects age, the District must allocate funds to renovate obsolete systems. By budgeting for the inevitable replacement costs, the College will be better able to plan instructional and administrative programs confident that the underlying technology will be maintained at an appropriate standard.

ASSESSMENT AND REVIEW

The Technology Plan is a five-year plan, so in order to maintain currency and effectiveness, it will be reviewed and the actions updated annually as needed. This annual evaluation of the plan will involve several components. The Technology Committee will conduct assessments in alignment with the Institutional Effectiveness Committee. Additionally, the Technology Committee will evaluate the progress the District has made toward each of the goals since the last review. Part of this evaluation will include referencing the current Annual Technology Plan and Review (ATPR), which tracks larger institutional projects that pertain to technology and correlates those projects with actions in the Technology Plan. Finally, the Technology Committee will review current trends and changes in information technology and education and make any necessary recommendations for modifications or additions to the actions listed under each of the goals.

Also, the Technology committee will evaluate the Technology Plan in its entirety at the end of the five-year cycle. Using survey data and other qualitative assessments, as well as lab-use statistics and other quantitative measures, the technology committee will evaluate progress and currency of all planning elements and make recommendations for plan revision if need be.

THEMES AND GOALS

In the summer of 2011, a task force of the Technology Committee met to review the various data and resources, look for central themes that could be aligned with the ten EMP Core Principles, and within each theme identify recurring ideas that could be refined into goals. Although these goals were originally based solely on some of the EMP Core Principles, two logistical realities became apparent. First, the EMP Core Principles are so broad that it proved difficult to organize the goals around this structure and build true commonality between them. Secondly, most of the goals supported multiple Core Principles, so that listing them beneath a single principle would in fact mute the breadth of support and integration.

Therefore, the Technology Plan is organized around specific themes, establishing goals and action plans beneath these themes. The themes are ultimately derived from the EMP Core Principles, but serve as a more focused and natural organization of the goals and action plans. The goals are intended to be general, long-term major targets or end results that support the mission, vision, and values of Cuesta College, guided by the Strategic Plan and Educational Master Plan. Actions are more specific strategies, activities, and resource allocations designed to achieve the long-term goal. Appendix A provides a detailed correlation between the EMP Core Principles and the goals of the Technology Plan. Appendix B lists action items corresponding to each goal.

STUDENT SUPPORT AND SUCCESS

Cuesta College uses technology for student support and success by facilitating student services processes, providing current classroom technology, and supporting student training.

GOAL #1: THE STUDENT EXPERIENCE AT CUESTA INCORPORATES INSTRUCTION IN CURRENT TECHNOLOGY. THE EXPERIENCE INCLUDES THE NECESSARY SUPPORT RESOURCES FOR BOTH ONLINE AND FACE TO FACE COURSES.

The curriculum at Cuesta College challenges students to move between different types of websites, including myCourses, public sites, and the current Learning Management System (LMS), and expects students to be able to access assignments and supplemental instruction from them. Information is presented in spreadsheet, tabular and graphical formats, and students are challenged to not only create similar formats, but also interpret the results using critical thinking skills. Student technical issues might vary from the lack of necessary software on personal computers that would allow them to read files in a standard format (PDF or MS Word) to the use of editing tools to enhance their documents. Classes taught in an online format presume students can navigate the associated websites as well as master the disciplinary content. Resources critical to student success might include dedicated student support counters in the libraries, a full time LMS instructor to interface with students, short courses, or online information to answer student questions. Such technology support could be coordinated so that students preparing for transfer or the workplace would be confident they have acquired basic technology competencies within the context of existing courses.

GOAL #2: ALL CLASSROOMS AT ALL LOCATIONS HAVE AN APPROPRIATE CONFIGURATION OF MULTI-MEDIA SUPPORT FOR INSTRUCTION AND LEARNING.

In the last few years Cuesta has made great strides in installing multi-media instructor stations which reflect current technology and incorporate an easy to use integrated control system. An integrated control system provides a consistent user interface that removes barriers and improves productivity for instructors teaching in multiple rooms and helps streamline classroom scheduling. Presently, approximately 20% of the classrooms have an integrated control system in place. To complete this conversion of classroom media systems in a cost-effective manner, the College must balance instructional needs against the initial and ongoing

costs for installation, maintenance, and replacement of these systems. Specifically, increasing the utilization of each media system by optimizing room scheduling is the key to achieving cost efficiency. Additional considerations will be necessary for classrooms that are leased by Cuesta, as typically the District will have limited authority to make any changes in the configuration.

GOAL #3: CUESTA COLLEGE HAS INTEGRATED STUDENT SUPPORT SYSTEMS TO MINIMIZE HURDLES TO MATRICULATION (ADMISSIONS, ORIENTATION, ASSESSMENT AND TESTING, COUNSELING, AND STUDENT FOLLOW-UP), AND GOAL COMPLETION (CERTIFICATE, GRADUATION, TRANSFER).

The online admission application currently in use is a state-wide system that meets title V regulatory guidelines. Cuesta has an online orientation system that informs students of numerous processes and resources, such as academic planning and pre-requisite requirements. Assessment testing is required for most first time students. Most parts of the process are automated, but some manual processes can slow down the delivery of results to the student. For most students this is the first contact, and therefore first impression, of Cuesta. It is essential that this experience be a positive one for the students.

SUSTAINABILITY

Cuesta College is committed to providing technology resources that are sustainable, secure, and reliable, with appropriate planning and funding to allow regular support, maintenance, and upgrade or replacement.

GOAL #4: CUESTA COLLEGE'S PRIMARY TECHNOLOGY IS SUSTAINED BY AN ANNUAL CENTRALIZED BUDGET INDEPENDENT OF THE IPPR PROCESS AND DESIGNED TO MAINTAIN INVENTORY AND STAFFING AT A STANDARD WHICH SERVES THE WORK OF THE COLLEGE.

Cuesta needs to complete the transition to a centralized funding process, with one-time and annual funding requirements identified and the process for Planning and Budget oversight and approval established. This will greatly streamline the IPPR process as two-thirds of the requests in Spring 2011 were related to the upgrade or replacement of existing inventory and software licensing. The current ATPR contains the most recent figure required to bring existing computers (both academic and employee) up to this standard, and also estimated annual budgetary figures to maintain the standard in following years. Computers less than six years old will be placed on a revolving upgrade schedule. It is likely that external sources of funding will be necessary for the one-time upgrade costs, but verified annual maintenance and replacement costs would be part of the annual College budget. Maintaining an appropriate level of PC and network support staff will be a primary consideration when determining annual funding requirements.

GOAL #5: CUESTA COLLEGE'S CAMPUS NETWORK INFRASTRUCTURE MEETS CURRENT AND ANTICIPATED WORK NEEDS AND IS SUFFICIENTLY FUNDED AND STAFFED.

The College network was installed in 1998 with piecemeal upgrades since that date as limited funds were made available. As of 2011, the estimate to bring the infrastructure to industry standards is approximately $1-1.5 million initially. Although this budget item was ranked as the number 6 priority by Planning and Budget in Spring 2011, the current state budget situation makes it unlikely that the one-time upgrade costs could come from General Funds in the next five years. Accordingly, the College is considering a Title III grant to refresh the network technology. Once refreshed, the College must commit to funding annual replacement to keep the network technology current. The estimated annual cost to maintain the infrastructure is provided in the current ATPR.

GOAL #6: NETWORK APPLICATIONS ARE CONSISTENTLY AVAILABLE TO USERS.

According to current industry standards, Cuesta College's network applications (such as email, Internet access, Banner, myCuesta, etc.) should be available to users with an uptime of at least 99.95%. Essential to maintaining this uptime are robust facilities that provide resilient power and cooling. However, the data center facilities at Cuesta College are hampered by unreliable power and cooling. And, due to the legacy construction of the data centers, only minimal generator backup is available in the event of a power outage. At the SLO campus, renovation of the original, purpose-built data center is under review. At the North County campus, the new LRC building will house a permanent data center starting Spring 2012. The new NCC data center will provide opportunity for off-site backup of data from the SLO data center that can be utilized in case of a disaster to facilities at the SLO campus. As a foundational component of Cuesta's data protection and recovery architecture, that offsite backup will further enhance application availability. Off-site services are also used to host some applications via Cloud Computing. As this market grows there may be more opportunities to move applications to the Cloud.

GOAL #7: CUESTA COLLEGE'S DATA AND NETWORK SERVERS ARE PROTECTED AGAINST SECURITY BREACHES.

Cuesta has systems, tools and processes in place to help reduce the risk of security breaches. Examples include redundant firewalls between the Cuesta LAN and the Internet, virus and spam filtering on all email, automatically updated virus software on all servers and computers, a testing and deployment process for campus standard software patches, tools to "push out" critical security patches, and enforced requirements for system passwords. In addition, there are regular communications and training for employees on best practices to avoid being tricked by spammers and phishing attempts. Security measures must continually adapt and evolve as the threats are continually changing.

TECHNOLOGY ACCESS, CURRENCY, AND INNOVATION

Cuesta College is committed to providing equitable technology resources and appropriate access to technology at all campuses/centers within the district and through distance education, to delivering effective and meaningful technology as a competitive edge by providing technology resources that meet current industry standards, and to be forward-thinking in the use of new and innovative technologies.

GOAL #8: CUESTA COLLEGE IS WIRELESSLY ACCESSIBLE IN ALL AREAS OF ALL BUILDINGS ON ALL CAMPUSES.

In 2005 Computer Services installed the necessary infrastructure to support wireless access at Cuesta. When myCuesta was launched, it enabled wireless access to the Internet for faculty, staff, and students (in currently active locations) via a personal device through the use of their myCuesta login and password. Since 2005, Computer Services has included wireless access in each new and remodel building project. Additional wireless access has been deployed as individual departments or groups have identified funding. (For example, the ASCC funded wireless access in the student center at the SLO campus.) Going forward, the College will adopt a centralized funding model for increasing coverage of wireless access.

GOAL #9: THE COLLEGE EVALUATES CURRENT AND EMERGING TECHNOLOGIES AND INCORPORATES THOSE WHICH WILL IMPROVE INSTITUTIONAL EFFECTIVENESS AND STUDENT LEARNING.

The technology landscape continues to evolve at a rapid pace. It is imperative that Cuesta keep up with this pace in order to remain competitive with our curriculum and program offerings. Cuesta has made some advances in implementing innovative technology. The Nursing simulation manikin and use of electronic white boards and classroom performance systems are good examples. However, the process for identifying emerging technologies, communicating changes in the technology landscape to the campus

community, and evaluating the appropriateness of current or emerging technology for use here at Cuesta, is in need of improvement. Also, given the current picture of the state budget and economy, Cuesta employees must be as efficient as possible in performing their work. This imposes an additional need to evaluate and implement technology that will increase work efficiency and provide better customer service when it is cost effective to do so.

GOAL #10: THE COLLEGE'S WEBSITE IS REGULARLY UPDATED AND ACCESSIBLE BY ALL PLATFORMS, INCLUDING SMART PHONES AND TABLETS. INTERNAL PORTALS ARE EASILY NAVIGATED.

The Cuesta College website has been under development using tools that will easily accommodate a variety of devices. The primary devices that the website is being developed for are desktop and laptop computers. The new web site is scheduled to launch in March 2012. Following the initial launch, there will be an effort to optimize the display of website information for smart phones and tablets. In addition, a new version of Luminis (the product which drives myCuesta) will be available in approximately 2014, and it will incorporate a new technology that better accommodates mobile devices. The current version has some new features that Cuesta has yet to implement. The system that allows users to easily update their information in the public web site can also be used to update information in myCuesta.

GOAL #11: THE LEARNING MANAGEMENT SYSTEM (LMS) IS ACCESSIBLE BY MOBILE DEVICES SUCH AS SMART PHONES AND TABLETS.

The Learning Management System (LMS) currently in use at Cuesta is Blackboard. In Spring 2011 a decision was made by the Distance Education Committee, in conjunction with the Technology Committee, to convert the campus standard LMS from Blackboard to Moodle. The conversion process was begun in Fall 2011 and is expected to be completed by July 1, 2012. Moodle has an interface that is accessible to tablets and mobile web, and this interface will be available upon initial launch. In the near future, Moodle will offer a mobile web application for the version that we are implementing.

EMPLOYEE PROFESSIONAL DEVELOPMENT

Cuesta College is committed to providing all employees with appropriate and sufficient training in the use of technology resources.

GOAL #12: CUESTA COLLEGE PROVIDES APPROPRIATE TECHNOLOGY TRAINING IN ORDER TO ACCOMPLISH NECESSARY JOB-RELATED RESPONSIBILITIES.

Cuesta currently has a Technology Trainer on campus who develops, teaches and advertises technology instruction, tips and training in support of all Classified, Faculty and Management personnel. The Technology Trainer holds face-to-face class sessions and provides online training modules for Banner navigation. The Technology Trainer currently distributes a survey each Fall/Spring semester to gain a sense of what technology training is needed to best meet the needs of all constituent groups employed at Cuesta College. Not all training can be provided by this in-house resource.

GOAL #13: THE COLLEGE PROVIDES TRAINING FOR NEW AND EXISTING INSTRUCTIONAL TECHNOLOGY, INCLUDING CUESTA'S LEARNING MANAGEMENT SYSTEM AND OTHER ONLINE INSTRUCTIONAL TOOLS.

The conversion process from Blackboard to Moodle was begun in Fall 2011 and is expected to be completed by July 1, 2012. Part of this conversion includes appropriate faculty and support staff training. Support staff in both Computer Services and Library Support began taking online administrative training modules in the summer of 2011.

Cuesta has yet to develop a successful model for training and supporting faculty with other new classroom technology that is appropriate given our current staffing levels and organization. For example, in the 2009-2010 Academic Year, via the Technology Committee, Cuesta developed a campus standard Classroom Performance System (CPS, aka clickers). For numerous reasons the decision was made to provide pedagogical support via a mentor system that relied on faculty members who had previous experience with the technology. This process failed to result in a successful adoption of the CPS technology in the classroom by the faculty. For instructors to incorporate a new instructional technology, they need assurances that adequate, effective, and timely training and technical support will be available as needed. The College needs to determine a better process to successfully launch and support new technology in the classroom.

STEWARDSHIP / EFFICIENCY

Cuesta College is committed to an efficient use of technology resources. This includes the use of currently available software to increase employee and department productivity.

GOAL #14: CUESTA COLLEGE WILL MAXIMIZE THE CAPACITY OF BANNER TO IMPROVE PROCESSES AND DATA COLLECTION.

There is currently a list of at least 80 projects requested to enhance Banner. Some of the projects require little technical support to implement. The projects are reviewed and prioritized at a monthly meeting that the Director of Computer Services has with the three Vice Presidents.

GOAL #15: CUESTA COLLEGE WILL CONSOLIDATE THE NUMBER OF STUDENT COMPUTER STATIONS TO MATCH STUDENT DEMAND WITH INSTRUCTIONAL NECESSITY, WHILE SIMULTANEOUSLY IMPROVING THE LEVEL AND SUPPORT FOR STUDENT COMPUTING.

Cuesta has twice the number of student computers and half the support staff as recommended by the TCO (Total Cost of Ownership) model that was published by the Chancellor's Office.[2] Given the reality of the budget, additional staffing is not likely in the near future. Therefore, the College needs to reduce its inventory. Historically, Cuesta has operated with the mindset that a student computer lab is under the ownership of a particular department. This mindset is changing, partially due to the reality of budget reductions and also as a result of the ACCJC recommendations. Software was installed in student labs beginning in Fall 2010 to log the usage of the computers. This data can be used in determining appropriate actions for computer consolidation and efficient classroom scheduling.

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[2] Technology II Strategic Plan 2000-2005; Board of Governors, California Community Colleges

APPENDIX A

TECHNOLOGY PLAN GOALS SUPPORTING EDUCATIONAL MASTER PLAN CORE PRINCIPLES

		1 – Academic Excellence	2 – College Culture	3 – Innovation/Competitive Edge/Emerging Technology	4 – Institutional Effectiveness	5 – Local Service Area	6 – Resource Development	7 –Student Access	8 – Student Success	9 - Sustainability	10 – Workforce Development
Theme	**Student Support and Success**										
Goal 1	The student experience at Cuesta incorporates instruction in current technology. The experience includes the necessary support resources for both online and face to face courses**.**	x		x		x		x	x		x
Goal 2	All classrooms at all locations have an appropriate configuration of multi-media support for instruction and learning.	x		x							
Goal 3	Cuesta College has integrated student support systems to minimize hurdles to matriculation (admissions, orientation, assessment and testing, counseling, and student follow-up), and goal completion (certificate, graduation, transfer).			x			x	x	x		
Theme	**Sustainability**										
Goal 4	Cuesta College's primary technology is sustained by an annual centralized budget independent of the IPPR process and designed to maintain inventory and staffing at a standard which serves the work of the College.		x	x	x					x	
Goal 5	Cuesta College's campus network infrastructure meets current and anticipated work needs and is sufficiently funded and staffed.		x		x					x	

		1	2	3	4	5	6	7	8	9	10	11
Goal 6	Network applications are consistently available to users.										x	
Goal 7	Cuesta College's data and network servers are protected against security breaches.											
Theme	**Technology Access, Currency, and Innovation**											
Goal 8	Cuesta College is wirelessly accessible in all areas of all buildings on all campuses.	x		x				x		x		
Goal 9	The College evaluates current and emerging technologies and incorporates those which will improve institutional effectiveness and student learning.	x		x	x	x		x	x	x	x	
Goal 10	The College's website is regularly updated and accessible by all platforms, including smart phones and tablets. Internal portals are easily navigated.			x				x	x			
Goal 11	The Learning Management System (LMS) is accessible by mobile devices such as smart phones and tablets.	x		x		x		x	x			x
Theme	**Employee Professional Development**											
Goal 12	Cuesta College provides appropriate technology training in order to accomplish necessary job-related responsibilities.	x	x	x	x				x			
Goal 13	The College provides training for new and existing instructional technology, including Cuesta's learning management system and other online instructional tools.	x	x	x	x			x	x	x		
Theme	**Stewardship / Efficiency**											
Goal 14	Cuesta College will maximize the capacity of Banner to improve processes and data collection.				x		x	x		x		
Goal 15	Cuesta College will consolidate the number of student computer stations to match student demand with instructional necessity, while simultaneously improving the level and support for student computing.	x								x		

GOALS AND CORRESPONDING ACTIONS/RECOMMENDATIONS

Actions (A) and Recommendations (R) are specific strategies, activities, and resource allocations designed to achieve the long-term goals. When actions require the participation or authorization of groups or individuals outside of the Technology Committee, they are listed as a Recommendation to the District Strategic Planning Committee. Once the recommendation has received the necessary support/authorization, it will be upgraded to an action. If the action leads to a specific project, the project will be tracked in the Annual Technology Plan and Review (ATPR) with appropriate cross-references to this document listed. The right column lists departments, groups, or individuals that may share some level of responsibility for or involvement with the implementation of each action or recommendation. Any actions listed that require consultation or approval from a shared governance body at the College (i.e. Academic Senate, Planning and Budget) will go through the necessary College process.

Student Support and Success

1. The student experience at Cuesta incorporates instruction in current technology. The experience includes the necessary support resources for both online and face to face courses**.**

1.1 Develop standards and competencies for information technology for all Cuesta students.	R	Academic Senate, Student Success and Retention Committee, Technology Committee
1.2 Identify student technology support needs that are currently not being met. This includes support for Distance Ed classes.	R	Academic Senate, Student Success and Retention Committee, Technology Committee, ASCC
1.3 Develop appropriate resources for students to meet their technology support needs. May include online interactive and face to face interaction and information.	R	Academic Senate, Student Success and Retention Committee, Technology Committee
1.4 Hire a Student Technology Resource Instructor.	R	Director Learning Resources/DE, P&B, Cabinet

2. All classrooms at all locations have an appropriate configuration of multi-media support for instruction and learning.

2.1 Computer Services works with Academic Affairs to determine a reasonable multi-media configuration for classrooms.	A	Computer Services, Academic Affairs
2.2 Identify the number of rooms requiring multi-media in order to meet the instructional needs.	A	Computer Services, Academic Affairs
2.3 Prioritize classrooms and identify annual funds to install the equipment in each classroom. Add replacement costs to annual replacement budget.	R	Computer Services, Academic Affairs, Appropriate Impacted Departments
2.4 Investigate options such as partnering with the leaser or using portable equipment, if it makes sense, to increase the functionality of leased classrooms.	R	Computer Services, Academic Affairs

3. Cuesta College has integrated student support systems to minimize hurdles to matriculation (admissions, orientation, assessment and testing, counseling, and student follow-up), and goal completion (certificate, graduation, transfer).

3.1 Assemble a Student Services taskforce of staff and service faculty from appropriate departments and identify areas that could be improved with technology.	R	Student Services, Computer Services
3.2 If the change requires a programming effort with Banner, use existing process to prioritize these requests. If the change doesn't require programming resources, then evaluate and prioritize for implementation.	R	Student Services, Computer Services
3.3 Review the content and organization of myCuesta as it pertains to first time students.	R	Student Services, Computer Services

Sustainability

4.   Cuesta College's primary technology is sustained by an annual centralized budget independent of the IPPR process and designed to maintain inventory and staffing at a standard which serves the work of the College.

4.1 Replace computers more than 6 years old. The one-time cost for these replacements is determined and reported in the ATPR.	R	Technology Committee, P&B, Cabinet
4.2 Computers are replaced on a revolving upgrade schedule to keep them less than 6 years old. The annual cost for these upgrades is determined and reported in the ATPR.	R	Computer Services, Technology Committee, P&B, Cabinet
4.3 Funding and management for software licensing is centralized.	R	Computer Services, Technology Committee, P&B, Cabinet
4.4 The total cost of existing support contracts is compiled. Each contract is examined in terms of the needs of the College.	A	Computer Services
4.5 Hire PC and network support staff required to maintain college systems.	A	Director of Computer Services, P&B, Cabinet
4.6 Cuesta establishes a Central IT budget with sufficient funds to meet annual requirements. This budget is independent from the Cluster IPPR process.	R	Computer Services, Technology Committee, P&B, Cabinet

5.   Cuesta College's campus network infrastructure meets current and anticipated work needs and is sufficiently funded and staffed.

5.1 The administration leads an effort to obtain external support to replace the SLO campus infrastructure by 2014. Likely sources of external funds include Foundation donors and/or grants.	R	Computer Services, Technology Committee, P&B, Cabinet
5.2 Computer Services produces a detailed cost assessment for hardware replacement that accounts for deferred maintenance costs, including data communications as well as servers and storage. Costs for consultants and contractors need to be included.	R	Computer Services
5.3 Determine year over year cost to maintain the infrastructure, including support contracts, staffing and regular replacement.	R	Computer Services, Technology Committee, P&B, Cabinet

6.   Network applications are consistently available to users.

6.1 Computer Services and Physical Plant renovate existing data center in 4109 to house servers on the SLO campus with redundant cooling and power to mitigate power outages.	A	Computer Services, Facilities
6.2 Identify and implement cost effective backup and recovery solutions that meet the evolving business needs of the College.	A	Computer Services
6.3 Computer Services continues to include cloud computing (aka off-site) resources when evaluating new applications and solutions. Weight the cost/benefit/risk during	R	Computer Services

the evaluation.		

7. Cuesta College's data and network servers are protected against security breaches.

7.1 Hire an outside consultant to do a security audit of Cuesta network and system in 2012.	A	Computer Services, Public Safety
7.2 The results of this audit is reviewed, prioritized and budgeted.	A	Computer Services, Public Safety
7.3 Develop a comprehensive employee training plan to teach all employees best practices to protect themselves, the data, and Cuesta technology resources from a security breach. Look for outside and on-line resources. The plan needs to be ongoing and the content kept up to date.	R	Computer Services, Professional Development Committees
7.4 Utilize the Technology Trainer and Professional Development committees to implement the training plan.	R	Computer Services, Professional Development Committees

Technology Access, Currency, and Innovation

8. Cuesta College is wirelessly accessible in all areas of all buildings on all campuses.

8.1 Technology Committee develops a prioritized list of buildings and outdoor spaces for wireless deployment by May 2012.	A	Technology Committee, Computer Services
8.2 Computer Services provides estimated budget for the top four priority spaces.	A	Technology Committee, Computer Services
8.3 Work within the budget funding processes, including Foundation Grants, to make annual progress on this goal.	R	Technology Committee, Computer Services, B&P, Cabinet

9. The College evaluates current and emerging technologies and incorporates those which will improve institutional effectiveness and student learning.

9.1 Technology Committee and VP Academic Affairs create a faculty forum where information about changing curriculum technologies are brought to light and evaluated.	R	Technology Committee, VP Academic Affairs
9.2 The Director of Computer Services meets monthly with the 3 VPs to identify priority projects from the Banner requested project list. Use this process to focus limited resources on projects that move Cuesta toward the goal.	A	Director of Computer Services, VP Academic Affairs, VP Student Services, VP Administrative Affairs
9.3 Technology Committee, VP Student Services, and VP Administrative Services create a faculty/staff forum where information about changing technologies are brought to light and evaluated.	R	Technology Committee, VP Student Services, VP Administrative Services
9.4 Computer Services assigns staff to evaluate new technology and facilitate their adoption to the rest of the College.	R	Computer Services, appropriate staff from other departments

10. The College's website is regularly updated and accessible by all platforms, including smart phones and tablets. Internal portals are easily navigated.

10.1 In Spring 2012, Marketing will evaluate the work effort to optimize the appropriate content for smart phone and table display. Determine a project plan and	R	Marketing, Computer Services

identify the necessary resources and timeline for this project.		
10.2 Convert existing myCuesta channels to be able to use the content management system to update the content.	A	Computer Services, appropriate staff from other departments
10.3 Train appropriate users on using this system. The goal would be that additional content can be added to myCuesta and easily updated so that it is kept current. This will be done by August 2012.	A	Marketing, Computer Services
10.4 Determine a solution and identify resources and funding required to implement technology for Cuesta's web site to be accessible via mobile devices.	A	Computer Services

11. The Learning Management System (LMS) is accessible by mobile devices such as smart phones and tablets.

11.1 Evaluate and implement the mobile web application for Moodle.	A	Computer Services, Director Learning Resources/DE, DE Committee

Employee Professional Development

12. Cuesta College provides appropriate technology training in order to accomplish necessary job-related responsibilities.

12.1 Each department develops customized "how to" user documentation for internal department technologies, policies, and processes.	R	Department Banner Functional Leads
12.2 Train faculty on new and existing classroom technology.	R	Professional Development Committees, HR, Tech Trainer
12.3 Provide training on full use of Banner.	R	Functional Leads, Consultants
12.4 Provide employee technology training.	R	Professional Development Committees, HR, Tech Trainer
12.5 Provide training for technical staff to keep up with current/changing technology.	R	Professional Development Committees, HR, Tech Trainer

13. The College provides training for new and existing instructional technology, including Cuesta's learning management system and other online instructional tools.

13.1 The Director of Library Learning Resources provides hands-on, in person training for the new LMS during 2011-2012 Academic year.	A	Director Learning Resources/DE, DE Committee, Technology Committee
13.2 Appropriate support staff in both computer services and library support complete online administrative training modules in the new LMS system.	A	Director Learning Resources/DE, Computer Services
13.3 Additional/ongoing faculty training on campus standard LMS is scheduled on a regular basis.	R	Director Learning Resources/DE, DE Committee
13.4 In cooperation with Computer Services staff and instructional technology expert, develop and implement a process for beta testing and training faculty on new and existing instructional technologies. Evaluate models that have previously been used.	A	Director Learning Resources/DE, Technology Committee, Computer Services
13.5 Hire a Technology Resource instructor.	R	Director Learning Resources/DE, P&B, Cabinet

Stewardship / Efficiency

14. Cuesta College will maximize the capacity of Banner to improve processes and data collection.

14.1 Hire more technical staff that is required to support current and additional Banner functionality.	R	Director of Computer Services, P&B, Cabinet
14.2 Move forward with implementation of Web Time Entry. Web time entry will replace the current monthly leave form for permanent employees to the web. This will eliminate much of the monthly paperwork that is required with our current paper-based system. Web Time Entry for all permanent classified employees will be implemented by 2012.	R	Payroll, HR, Deans Assistants
14.3 Use the tools available in Banner and R25/S25 to maximize the efficiency of scheduling classroom and its content such as tables, chairs, computers, software, etc.	R	Facilities, Academic Affairs
14.4 Implement online requisitions in Banner. Previously a modification was required for this project. There have been upgrades since that time. Evaluate the current software.	R	Purchasing
14.5 Enhancement to Faculty Load and Payroll integration (aka FLAC). This is a fairly new feature of Banner that improves the integration between the scheduling system and the payroll system as it pertains to faculty load driving faculty pay.	R	Deans Assistants, Payroll, HR
14.6 Banner has a module that supports tying scanned documents to entities in Banner (a student, a vendor, or an employee). Financial Aid is the next department on the list to implement this product. Pilot an implementation using outside technical resources for the implementation.	R	Computer Services, Financial Aid

15. Cuesta College will consolidate the number of student computer stations to match student demand with instructional necessity, while simultaneously improving the level and support for student computing.

15.1 Review student computer usage data and make recommendations based on this data for classroom scheduling and computer replacement.	A	Technology Committee
15.2 Consolidate existing student computer labs and remove old computers out of inventory without replacing.	R	Computer Services, Academic Affairs (including impacted departments)

APPENDIX C

REVISION HISTORY

Technology Plan

October 28, 2011: Final Draft approved by Technology Committee

November 8, 2011: Presented to College Council to receive input; endorsed by College Council

November 14, 2011: Presented to Strategic Planning Committee to receive input

November 15, 2011: Approved by Planning and Budget Committee and recommended to Superintendent/President

November 17, 2011: Presented to ASCC to receive input; endorsed by ASCC

November 18, 2011: Presented to Academic Senate to receive input

December 9, 2011: Version 2 of Final Draft incorporating input from other groups approved by Technology Committee

January 31, 2012: Approved by Planning and Budget Committee and recommended to Superintendent/President

February 1, 2012: Approved by Board of Trustees