



TECHNOLOGY PLAN

FALL 2011



Modesto Junior College Technology Plan

Table of Contents

Technology Plan	2
Work Plan	11
Outcome Measures	20
District IT Crosswalk	21
Appendix A: College Technology Committee Charge/Membership	24
Appendix B: Preliminary Budget	25
Appendix C: Glossary of Terms	26

Technology Plan Draft Workgroup

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Executive Summary

As has been the case among many older California Community Colleges, the integration of technology at MJC has been characterized by periods of intermittent growth followed by retrenchment due to lack of sustained funding. Technology changes rapidly, as often as every 12 to 18 months; yet hardware, software, support, and service may not be available or need costly and frequent updates to remain secure and operational. External funding from the State in the form of TTIP dollars and funds from the Measure E bond have allowed the College to barely keep abreast of current technology needs. Over the past several years, as technology needs and expectations across the campus have increased, technology spending itself has lacked an integrated, cohesive and sustainable planning cycle. In fact, MJC currently has no replacement plan for any technology—desktop computers, instructional servers, AV systems, or learning management systems. In many areas, technology spending has not taken into account the total cost of ownership as new purchases occur nor have existing systems been evaluated for planned replacement. This has led to a lack of adequate technology training, technology integration and necessary staff support.

In order to address the significant gaps that exist between technology needs and technology funding, the college has embarked on a technology evaluation process. The President appointed a Technology Task Force in the summer of 2010 tasked with gathering information about the state of campus technology. A college-wide survey of students, faculty and technology support staff was conducted in order to determine how people currently use technology and what services they would like to see used on the campuses. A state-wide community college survey of Distance Education programs was also conducted by the task force. Additional surveys will be conducted in the future to determine training and support needs.

In terms of planning initiatives, the college needs to create an atmosphere of technology innovation along with a culture that rewards and values continued technology-enabled learning among all stakeholders. To this end, technology training and support must be institutionalized and appropriately funded in order to create a supportive environment for all technology users. In the same vein, the college must establish minimum standards for instructional and non-instructional technology in order to assure that newly constructed and renovated buildings are fully capable of deploying currently used technologies as well as being capable of adapting to future needs. This includes the creation of a fully-funded desktop and classroom/lab replacement cycle that is tied to a stable funding source. Technology staffing needs must be aligned in a more direct and sustainable way with currently-used technologies in order to assure that hardware and software used by faculty, staff, and students is functioning as intended. As noted above, the College must move to institutionalize technology planning by incorporating it into the Program Review and budget allocation process.

The purpose of the Technology Plan is to create a roadmap that can be used to meet the objectives described above. The roadmap establishes goals, objectives and activities

designed to be measurable and achievable. These goals are designed to address the technology training needs across campus, the establishment of minimum technology standards and the establishment of a process for the evaluation, adoption and resourcing of college technologies. The overriding theme of the individual goals is the need to identify and establish consistent resources for all technology initiatives across the campus.

Objectives, activities and measurable outcomes of this plan will be shared with and reviewed by campus stakeholders through MJC's structure of collaborative decision-making.

MJC Vision

As the first choice for educational excellence in our community, Modesto Junior College will enrich lives by challenging all students to become successful, lifelong learners who strengthen their community in a diverse and changing world.

MJC Technology Vision

To contribute to a culture of academic excellence, lifelong learning, and civic engagement through the acquisition and support of new technology and technology-enabled learning for faculty, staff, and students

MJC Mission Statement

Modesto Junior College provides a comprehensive student-centered learning community for all who can benefit by offering innovative instructional and student support programs that respond to the educational needs of our diverse community.

MJC Technology Mission Statement

Modesto Junior College provides current and innovative technology, training and support to its faculty, staff and diverse student population to enhance learning and prepare users for a technology-based society.

Annual Review

The College Technology Committee will annually review the existing Technology Plan beginning in the spring of each year, amending the document as necessary.

Goal 1: Ensure faculty and staff receive adequate training and professional development in order to assure successful implementation and utilization of technologies.

Current Situation: Technology training is currently sporadic and fragmented rather than well-planned and ongoing. Staff can request help with software and hardware by contacting the technology help desk, and they can participate in periodic District Information Technology (IT) or Title V trainings and current MJC course offerings. Beyond that, staff members seek help where they can get it. For example, training is often requested of technicians during service visits. Because any assistance the technicians offer during a visit is rushed and unplanned, the result is frequently spotty and incomplete instruction. This is not to say that campus technicians are unable to provide training, however they do not have the time. Additionally, within departments, technologically savvy individuals are regularly asked for their expertise, placing an added burden on many of them. The result of insufficient training and professional development opportunities is that existing technology on campus is not used to its full potential. The committee acknowledges there is reluctance on the part of some staff to engage in technology-related staff development, offering an additional challenge to the integration of new technologies.

Objectives:

- 1.1 Identify persons responsible for conducting technology training needs assessments and trainings for the following areas:
 - a. Learning Management System
 - b. Classroom technology
 - c. Video streaming and teleconference technology
 - d. Campus computer labs
 - e. Mobile computing
 - f. Web 2.0 applications
- 1.2 Allocate resources for technology training needs assessments, trainings, and professional development
- 1.3 Identify variables that cause staff to be reluctant to participate in available trainings
- 1.4 Develop, administer, and evaluate technology training needs assessments
- 1.5 Design, deliver, and assess technology trainings
- 1.6 Develop a culture of technological competency on MJC's campus to encourage staff to take full advantage of the training opportunities offered, reduce some of the technological anxiety people feel, and achieve a standard level of competency with campus technology
- 1.7 Create a centralized repository Web site for technology-related resources

Faculty and staff will increase their knowledge of current technology-enabled learning and apply new knowledge and skills in their role at the college. Outcome will be measured by faculty and student feedback on an annual MJC Technology Survey and compared to the baseline data from responses gathered in the fall 2010 Technology Survey.

Goal 2: Establish procedures for the evaluation, adoption and proper resourcing of campus technologies

Current Situation: The administrative structure for technology at the college consisted of a Dean of Library and Information Technology who oversaw a Director of Technology and Media Services until June, 2011. With the recent retirement of the Dean, Technology and Media Services currently reports to the YCCD Vice Chancellor of Technology. Replacement of the College Dean of Information Technology is on hold. Thirteen full-time classified staff technicians report directly to the Director. Procurement decisions are most often made at the division level, with no coordinating body ensuring technology purchases are consistent across campus and can be supported at the current staffing level. The Instructional Technology Committee (ITC) is a long-standing campus committee that meets monthly to discuss technology needs at the college. The ITC makes recommendations to ensure the whole of the campus community is appropriately represented in the development of technology rich environments. The ITC can identify gaps and make recommendations however no formal process has been established for divisions and programs to vet technology requests, or for the college to ensure current and new technologies are aligned with strategic priorities.

Objectives

- 2.1 Establish a Campus Technology Committee (CTC)
 - a. The current Instructional Technology Committee will evolve into the Campus Technology Committee, focused on all computing and other technology needs across campus, with a cross-section of college and district individuals who work with technology regularly
 - b. Plan, review, and recommend technology-related decisions campus-wide to include Distance Education, Learning Management System, classroom technology, desktop computing, video streaming and teleconference technology, mobile computing, administrative computing, and technical support and training
 - c. Prioritize technology resource allocations based on Program Review
 - d. The CTC may be called upon on an as-needed basis to assist the Grant Development Office in evaluating technology in order to assure technologies funded through grant monies align with campus technology needs and goals

- 2.2 Establish a timeline and process for regular technology needs assessments, evaluation and replacement, and introduction of new technologies.
 - a. Identify all current technologies that should have regular review

- b. Develop a campus technology review process
- c. Develop a “proof-of-concept” process for introducing new technologies on a small scale before adopting campus-wide
- d. Develop a timeline for replacing and introducing technology campus-wide

Goal 3: Develop and maintain minimum technology standards for hardware, software and support.

Current situation: Technology standards are not currently documented or widely known. Purchases and implementations are neither centralized nor coordinated. Minimum standards will improve the level of support, reduce costs, increase reliability and sustainability, increase/enhance access to remote students, simplify hardware and software procurement, and centralize the support of hardware, software, and other IT resources.

Objectives:

- 3.1 Develop minimum standards for campus technology
 - a. Level of support standards
 - 1. Identify approved list of equipment and software that can be fully supported by MJC’s Media and Technology services
 - 2. All other equipment/software/licenses/services will be partially/not supported
 - b. Identify specific amount/percentage of MJC Media and Technology Services (MTS) budget for staff development and schedule time on regular and as-needed basis
 - c. Hardware, software, and licensing standards will be created for:
 - 1. Hardware: desktops, laptops, printers, scanners, fax machines, AV equipment, cabling equipment, and other miscellaneous equipment
 - 2. Software: Operating systems, applications, licenses, tools, and other miscellaneous software
 - 3. Set minimum standards for end of life process of hardware, software, and other IT resources
 - d. Create standards for implementing and evaluating new technology at MJC
 - e. Formalize operational policy for resource use to include AV equipment, laptops, and IT personnel time
 - f. Create policy for new MTS rollouts that affect the majority of MJC students and employees

- 3.2 Set standards for technology-enabled learning including:
- a. Bi-annual review of the college LMS (Learning Management System, which currently is Blackboard 9.0)
 - b. Video streaming solution to enhance remote education and access of resources for faculty and students for all classes including face-to-face classes
 - c. Single sign-on for students to simplify access of resources
 - d. Other emerging technologies that improve/enhance Distance Education and other technology-enabled learning
 - e. Develop a staffing plan to support Distance Education and other technology-enabled instruction

Goal 4: Fully incorporate funding for technology into the college budget, following the State Chancellor's IT Staffing Recommendations, and establish a budgetary framework for sustaining existing technology and integrating new technologies

Current Situation: For 8 to 10 years technology spending has been decentralized, operating primarily at a department or division level. The only exception has been the Dell lease plan, which was intended for centralized deployment of computers. However, it suffered for lack of coordinated planning and fiscal oversight. Currently there is no line item allocation for technology, support or training. No evaluation has been done in recent years for MTS equipment and staff or administrative time required to keep existing technology working; nor the necessary time required to implement new technologies recently adopted in new buildings and renovations currently in process.

Objectives:

- 4.1 Include a line-item in the college budget for MJC MTS services that is regularly reviewed and revised and considers the total cost of ownership
 - a. Establish an initial MJC MTS budget, including, but not limited to, the following:
 - Hardware
 - Software
 - Licensing and maintenance agreements
 - Staff training for technologies
 - Staff time for installing, training support staff, maintaining, upgrading and repairing all technologies
 - b. Develop realistic estimates of storage, transportation, workspace, staging areas, training and support for technology needs
- 4.2 Include a line-item in the college budget for replacement of end-of-life technologies and existing technologies that need maintenance and financing
- 4.3 Develop a regularly-reviewed list of leading-edge technologies including total cost of ownership, Research & Development, and pilot-project strategies
- 4.4 Complete proper analysis of the financial and human resources necessary to sustain existing and new technologies
- 4.5 Actively seek financial resources for technology to supplement the core MJC budget, including grants and donations

Goal 5: Become a leader in the California Community College System in providing all MJC students with adequate access to training, support and current learning technologies; and the necessary skills required in a technology-based society

Current Situation: According to the MJC 2010 Campus Technology Survey, only 80% of the students on campus use a computer in their personal lives. The percentage of students who use computers for their education is even lower (approximately 70%). The use of other educational technologies such as video streaming, lecture capture, interactive white boards, tablet PC's and web 2.0 tools is between 6% and 20%, according to the survey. Wireless access is available in most places on campus. Students also have access to four open computer labs on East Campus and one on West Campus. Nearly 65 program-specific labs are available to students who are enrolled in courses that reserve them. The college has four interactive white boards installed in classrooms. A few instructors have piloted classes with lecture capture and video streaming, but it is not used campus-wide. Most classrooms are equipped as "smart classrooms", with internet access, projectors and screens for classroom use. Central Services provides a "Help Desk" with technicians available to answer questions 40 hours per week. Presently, there is no consistent training structure for students who want to learn how to use current technology, and there is no 24/7 student support.

Objectives:

- 5.1 Evaluate, prioritize and address ongoing student learning technology needs (fall 2011 and annually thereafter), including the following areas:
 - a. Learning Management System
 - b. Classroom technology
 - c. Video streaming and teleconference technology
 - d. Campus computer labs
 - e. Mobile computing
 - f. Web 2.0 applications
- 5.2 Allocate resources (funding, personnel and facilities) for technology training and support for students
- 5.3 Design, deliver and assess technology training and support
- 5.4 Identify ways to provide student access to electronic learning resources that fit the varied lifestyles of a diverse student population
- 5.5 Develop a culture of technological competency in MJC's students, including providing training in the use of technologies required in most careers

Technology Plan Timeline - DRAFT

Goal 1: Ensure faculty and staff receive adequate training and professional development in order to assure successful implementation and utilization of technologies				
Objective	Activity	Person Responsible	Outcome Measure	Timeframe
1.1 Identify persons responsible for conducting technology training needs assessments and trainings for the following areas: a. Learning Management System b. Classroom technology c. Video streaming and teleconference technology d. Campus computer labs e. Mobile computing f. Web 2.0 applications	Develop survey for all faculty and staff at MJC and District asking who would be willing to conduct technology training sessions in areas listed at left Administer survey Collate results of survey; hold until training begins	CTC workgroup	Completed survey Results of survey List of individuals willing to train in future	Fall 2011
1.2 Allocate resources for technology training needs assessments, trainings, and professional development	Upon notification that funds are available, develop plan for their distribution	CTC workgroup	Budget for each area listed in objective 1.2	As money is available
1.3 Identify variables that cause staff to be reluctant to participate in available trainings	Develop questions to add to survey in objective 1.4 asking why some MJC staff do not participate in trainings Administer survey Collate results of survey; use information to plan training	CTC workgroup	Completed list of questions Results of survey List of reasons for non-participation	Fall 2011 Spring 2012 Spring 2012
1.4 Develop, administer, and evaluate technology training needs assessments	Develop survey to send to all faculty and staff at MJC; include questions developed in objective 1.3 above Administer survey Collate results of survey; use information to plan training	CTC workgroup	Completed survey Results of survey Ranked list of training needs identified by faculty and staff	Fall 2011 Spring 2012 Spring 2012

1.5 Design, deliver, and assess technology trainings	Create outline for each training	Trainers	Outline of each training	Fall 2012 and ongoing
	Possibly create materials for use by attendees Create evaluation tool	Trainers May have already	Training material made available to attendees Approved evaluation tool	
	Administer evaluation tool after each training	Trainer	Completed evaluation tools	Fall 2012 and ongoing, as trainings are conducted
	Review evaluations	Trainer/CTC workgroup	List of ideas for improving future trainings; retain this information on new staff development Web site	
1.6 Develop a culture of technological competency on MJC's campus to encourage staff to take full advantage of the training opportunities offered, reduce some of the technological anxiety people feel, and achieve a standard level of competency with campus technology				2013 and ongoing
1.7 Create a centralized repository Web site for technology-related resources	Build on existing work of Help Desk (x7800) and Title V employees; build out a new staff development Web site	CTC workgroup in conjunction with SRAC	Existence of up-to-date Web site	Fall 2012 and ongoing

Goal 2. Establish procedures for the evaluation, adoption and proper resourcing of campus technologies					
Objective	Activity	Person Responsible	Outcome Measure	Timeframe	
2.1 Establish a Campus Technology Committee (CTC) a. The current Instructional Technology Committee will evolve into the Campus Technology Committee with a cross-section of college and district individuals who work with technology regularly	Identify members to sit on newly created CTC	ITC	Approved committee created with membership list and committee charge (See Appendix A for committee charge)	Fall 2011	
	b. Plan, review and recommend technology-related decisions campus-wide to include Distance Education, Learning Management System, classroom technology, desktop computing, video streaming and teleconference technology, mobile computing, administrative computing, and technical support and training	Develop a timeline to investigate each identified technology	CTC workgroup	Timeline is created	Fall 2011
		Establish criteria to assess benefits and challenges of each technology	CTC workgroup	Criteria rubric established	
		Develop criteria for total cost of ownership	CTC workgroup	TCO criteria developed	
	c. Prioritize technology resource allocations based on Program Review	Review technology-related needs identified in Program Review	CTC	Campus Program Review documents are read and assessed	Fall 2011
Establish a "Ranking and Criteria" process to be used in prioritizing technologies identified in Program Review		CTC	Written criteria and procedures for prioritizing campus technologies through Program Review	Fall 2011	
d. Assist Grants & Resource Development Office in evaluating technology where needed, in order to assure technologies funded through grant monies align with campus technology needs and goals	Meet to discuss and review grant opportunities as needed	MJC Grants Office & Technology Task Force	Recommendations for technology budget and acquisition in grants	Ongoing	

<p>2.2 Establish a timeline and process for regular technology needs assessments, evaluation and replacement, and introduction of new technologies</p> <p>a. Identify all current technologies that should have regular review</p>	<p>Create a comprehensive list of current technologies across campus</p>	<p>Technology Services</p>	<p>List of all campus technologies</p>	<p>Fall 2011</p>
<p>b. Develop a campus technology review process</p>	<p>Create a calendar for technology review</p> <p>Use developed criteria in Objective 2.1 for review process</p> <p>Engage appropriate stakeholders as needed</p>	<p>CTC</p> <p>CTC</p> <p>Various</p>	<p>Calendar for technology review</p> <p>Written evaluation of assessed technologies</p> <p>Meeting minutes and decision justification</p>	<p>Spring 2012 and ongoing</p>
<p>c. Develop a “proof-of-concept” process for introducing new technologies on a small scale before adopting campus-wide</p>	<p>Develop a plan and a calendar for a step-by-step process that includes research, best practices, cost, purpose and implementation timeline</p>	<p>CTC workgroup and District IT</p>	<p>Written procedure</p>	<p>Spring 2012</p>
<p>d. Develop a timeline for replacing and introducing technology campus-wide</p>	<p>Develop a plan and a calendar for replacement and introduction of technology</p>	<p>CTC & Technology Services and District IT</p>	<p>Calendar for replacement and introduction of technology</p>	<p>Fall 2011</p>

Goal 3: Develop and maintain minimum technology standards for hardware, software and support.				
Objective	Activity	Person Responsible	Outcome Measure	Timeframe
<p>3.1 Develop minimum standards for campus technology</p> <p>a. Level of support standards:</p> <p>1. Identify approved list of equipment and software that can be fully supported by MJC's Media and Technology Services</p> <p>2. All other equipment/software/licenses/services will be partially/not supported</p>	<p>Create an inventory of hardware, software and licensing; evaluate which ones will be supported and which ones will be partially or not supported</p>	<p>Media and Technology Services</p>	<p>List of supported/not supported hardware, software and licenses</p>	<p>Spring 2011 to Dec 2012</p>
<p>b. Identify specific amount/percentage of MTS budget for staff development and schedule on regular and as-needed basis.</p>	<p>Establish 10% of IT staff workload as research and development for new projects</p>	<p>Director of Media and IT</p>	<p>New projects and technologies will be explored to help MJC keep up with technology advances</p>	<p>July 2011 and ongoing</p>
<p>c. Hardware, software, and licensing standards will be created for:</p> <p>1. Hardware: desktops, laptops, printers, scanners, fax machines, AV equipment, cabling equipment, and other miscellaneous equipment</p> <p>2. Software: Operating systems, applications, licenses, tools, and other miscellaneous software</p> <p>3. Set minimum standards for end of life process of hardware, software, and other IT resources</p>	<p>Use the inventory list created in part 3.1a to establish standards of hardware, software and licenses at MJC</p> <p>Evaluate technologies in inventory list to create end-of-life process for existing technologies.</p>	<p>Media, Technology Services and District IT</p>	<p>Written document describing standards to include lists of supported technologies</p> <p>Written document describing end-of-life process for existing technologies, including the replacement plan</p>	<p>Feb 2012 to June 2013</p>

d. Create standards for implementing and evaluating new technology at MJC.	Create a request form for purchasing and/or implementing new technology	MJC CTC, Media, Technology Services and District IT	The form is created, approved and published	Jan 2012 to Dec, 2012
e. Formalize operational policy for resource use to include AV equipment, laptops, and IT personnel time	Create policy for resource use including AV equipment, laptops, and IT personnel time	Media and Technology Services	Policy is created, approved and published	Jan 2012 to Dec, 2012
f. Create policy for new MTS rollouts that affect the majority of MJC students and employees	Create policy for new IT rollouts that affect most or all of the MJC campus	MJC CTC, Media, Technology Services and District IT	Policy is created, approved and published	Jan 2012 to June, 2013
3.2 Set standards for technology-enabled learning including: a. Bi-annual review of the college LMS (Learning Management System, which currently is Blackboard 9.0) b. Video streaming solution to enhance remote education and access of resources for faculty and students for all classes including face-to-face classes c. Single sign-on for students to simplify access of resources d. Other emerging technologies that improve/enhance Distance Education and other technology-enabled learning e. Develop a staffing plan to support Distance Education and other technology-enabled instruction	Work with all campus stakeholders, District and college IT departments to identify technology needs and capacity Create and publish written standards for all campus technology, including: LMS Video Streaming Single sign-on New technologies Distance Education Staffing	CTC; District IT; President's Cabinet	Standards are created, approved and published	Jan 2012 to June, 2013

Goal 4: Fully incorporate funding for technology into the college budget, following the State Chancellor's IT staffing recommendations, and establish a budgetary framework for sustaining existing technology and integrating new technologies

Objective	Activity	Person Responsible	Outcome Measure	Timeframe
<p>4.1 Include a line-item in the college budget for MJC MTS services that is regularly reviewed and revised and considers the total cost of ownership</p>	<p>Itemize and prioritize annual campus technology and staffing costs</p>	<p>Media & Technology Services</p>	<p>College metric to evaluate technology needs and budget that follows the IT staffing recommendations of the State Chancellor's Office</p> <p>An initial budget for an annual IT costs (estimated at approximately \$1.7 million). It includes, but is not limited to, the following:</p> <ul style="list-style-type: none"> • Hardware • Software • Licensing & maintenance agreements • Staff training for technologies • Staff time for installing, training support staff, maintaining, upgrading and repairing all technologies (see Appendix B for preliminary budget estimate) <p>Realistic estimates of storage, transportation, workspace, staging areas, training and support for technology investments shall be made</p>	<p>Sep 2011 to June 2012</p>
<p>4.2 Include a line-item in the college budget for replacement of end-of-life technologies and existing technologies that need maintenance and financing</p>	<p>Conduct a cost-analysis of fundamental campus technologies to determine a baseline annual budget amount</p> <p>Recommend a beginning line-item amount based on cost-analysis with five-year increase to optimum funding level</p>	<p>Media & Technology Services</p> <p>CTC</p>	<p>Campus-wide annual technology cost estimate</p> <p>Technology line-item included in MJC annual budget</p>	<p>April 2012 to July 2012</p>

4.3 Develop a regularly-reviewed list of leading-edge technologies including total cost of ownership, Research & Development, and pilot-project strategies	Investigate and recommend Best Practices and new technologies for higher education Develop process for implementing pilot projects including roll-out, evaluation, communication, and scale-up or rejection	Technology Workgroup and CTC CTC Workgroup	Annual list of priorities for pursuit of funding Written process for pilot project implementation	Sep 2011 to Dec 2011
4.4 Complete proper analysis of the financial and human resources necessary to sustain existing and new technologies	Research technology staffing levels at “Best Practice” and peer colleges Identify gaps or surplus in current technologies and staffing levels	CTC Workgroup CTC	Recommended minimum staffing level for current technology needs List of gaps and surplus of technologies and staffing levels	Dec 2012 and ongoing
4.5 Actively seek financial resources for technology in addition to the core MJC budget, including grants and donations	Identify external funding sources for technology Include prioritized technologies in all grant development	Director, Grants & Resource Development	All appropriate grant proposals include capacity-building technology funding	Sept 2011 and ongoing

Goal 5: Become a leader in the California community College System in providing all MJC students with adequate access to training, support and current learning technologies and the necessary skills required in a technology-based society.				
Objective	Activity	Person Responsible	Outcome Measure	Timeframe
5.1 Evaluate, prioritize and address ongoing student learning technology needs, including the following areas: a. Learning Management System b. Classroom technology c. Video streaming and teleconference technology d. Campus computer labs e. Mobile computing f. Web 2.0 applications	Conduct and analyze annual campus technology survey	Technology Task Force	Annual update of technology needs from faculty, staff and students	Fall 2011 and annually thereafter
5.2 Allocate resources (funding, personnel and facilities) for technology training and support for students	Prioritize ideal services needed by students for IT training and support Identify necessary personnel and facility needs for student IT support, including budget amount	CTC, President's Cabinet, Planning & Budget Committee	Prioritized list of student IT services, necessary personnel, facilities and budget amount	Spring 2012 and ongoing
5.3 Design, deliver and assess technology training and support	Develop plan for assisting students with technology needs, based on available resources Deliver and assess student training and support	CTC, President's Cabinet, P&B Committee	Student IT training and support, including evaluation and refinement of services	Fall 2013 and ongoing
5.4 Identify ways to provide student access to electronic learning resources that fit the varied lifestyles of a diverse student population	Explore and identify cost-effective ways to provide computer access to students	IT, CTC Workgroup, District IT	Student access to electronic resources increased by 15%	Fall 2013 to Fall 2014
5.5 Develop a culture of technological competency in MJC's students, including providing training in the use of technologies required in most careers	Identify current industry technologies that faculty need to prepare students for ongoing education and the workforce	Division CTE committees, CTC	Prioritized list of desired industry technologies	Spring 2013 and ongoing

Formative measures of the process and structure are included in the work plan above.

Two summative outcomes of the MJC Technology Plan will be measured annually:

- 1) Faculty and staff will demonstrate increased knowledge of current technology-enabled learning in their roles at the college. Outcome will be measured by:
 - a. Faculty, staff and student responses regarding classroom and institutional technology competency on the annual MJC Technology Survey. Responses will be compared to baseline data from responses gathered in the fall 2010 Technology Survey.

- 2) Students will demonstrate increased knowledge and skill in technologies used in the classroom, at home and in the workplace. Outcome will be measured by:
 - a. Responses regarding individual use competencies in the annual MJC Technology Survey. Responses will be compared to the baseline established in the fall 2010 survey.

YCCD Technology Goal Crosswalk

YCCD Technology Goals	Central Services	MJC Technology Goals	Columbia College Technology Goals
<p>1. Provide secure access and high availability to district resources, on demand</p> <p>2. Develop a replacement and maintenance cycle</p> <p>3. Evaluate and integrate emerging technology appropriately</p>	<p>Goal 3: <u>Campus Climate</u> – Provide a reliable, efficient, friendly and easily-accessible environment for IT</p> <p>Goal 5: <u>Technology</u> – Align human & financial resources to provide state-of-the-art technology and support to meet prioritized technological needs of the District.</p> <p>Goal 6: <u>Community Leadership</u> – Provide effective leadership for selecting, applying & managing critical IT services.</p>	<p>Goal 3: <u>Standards</u> - Develop and maintain minimum technology standards for hardware, software and support</p>	<p>Goal 7: <u>Support CC Master Plan and California Community College Tech III</u> - Include initiatives from both plans to ensure local, district and system-wide endeavors are implemented, modified or refined utilizing all potential resources and result in long-range strategic vision.</p>
<p>4. Establish funding source (budget line item) to indicate that funding support is ongoing and planned</p>	<p>Goal 10: <u>Fiscal Resources</u> – Optimize resources through innovative & prudent fiscal management by providing cost-effective, stable, technology solutions</p>	<p>Goal 4: <u>Funding</u> - Fully incorporate technology funding into the college budget, including sustaining existing technology and the integration of new technologies</p>	<p>Goal 6: <u>Establish base funding levels for technology to ensure efficient management of resources resulting in higher return on investment, safety and security</u> – Establishing annual, recurring funding for all operational technology needs will contribute to the lowering of the overall cost of technology and must be coupled with formal review of all technology expenditures; a special focus must be placed on securing information systems against all threats to institutional continuity and to ensure student privacy and data security.</p> <p>Goal 3: <u>Increase opportunities for collaboration and strategic partnerships</u> – Seeking grant opportunities, corporate and private partnerships where prudent without impeding institutional or program integrity will enable lower operational costs, stronger program support and allow for enhanced opportunities for more students.</p>

YCCD Technology Goal Crosswalk

<p>5. Provide continuous support and training for technology staff as well as end users</p>	<p>Goal 4: <u>Quality Staff</u> – Attract and retain the dedicated IT professionals needed to maintain a high-quality IT infrastructure</p>	<p>Goal 1: <u>Faculty/Staff Support</u> - Ensure faculty and staff receive adequate training and professional development in order to assure successful implementation and utilization of technologies</p>	<p>Goal 5: <u>Recruit, retain, and reward a diverse quality workforce.</u> Enhancing and expanding our workforce to service both internal and external needs by recruiting, retaining and rewarding quality individuals of diverse backgrounds will serve to strengthen Columbia’s vibrant collaborative education environment.</p>
<p>6. Support educational technology</p>	<p>Goal 1: <u>Student Success</u> - Provide a technology environment that promotes & supports superior learning experiences for all students</p> <p>Goal 2: <u>Educational Programs and Services</u> – Provide exemplary IT services which support all educational programs.</p>	<p>Goal 5: <u>Student Success</u> - Become a leader in the California Community College System in providing students with adequate access to training, support and current learning technologies and skills required in a technology-based society</p>	<p>Goal 1: <u>Educational opportunities for students</u> – Utilize technology to reach new & existing populations through a variety of programs with special emphasis on the creation of a distance education program to service students locally and regionally.</p>
<p>7. Develop test and development environments to assure quality control</p>	<p>Goal 7: <u>Partnerships</u> – Partner with students, staff & faculty to enhance an effective learning/teaching environment through technology.</p>	<p>Goal 2: <u>Campus IT Processes</u> - Establish procedures for the evaluation, adoption and proper resourcing of campus technologies</p>	<p>Goal 2: <u>Enhance diverse delivery opportunities and create engaging learning environments</u> – Promote influential learning opportunities and quality instruction through the use of innovative technology closing the service gap in face-to-face offerings vs. satellite programs, blended or hybrid courses in the pursuit of excellent student support.</p>
<p>8. Support and find technology solutions that work across the district</p>	<p>Goal 8: <u>Institutional Effectiveness</u> – Use participatory environment to create an effective institution</p>		
<p>9. Leverage network resources and services to meet current and future technology information needs</p>	<p>Goal 9: <u>Facilities</u> – Actively participate in facilities planning and development</p>		<p>Goal 4: <u>Strengthen Columbia College’s institutional identity in the local community, state, and nation.</u> Refinement of current programs and introduction of new offerings in support of the local community, state and national trends will result in opportunities for increased FTE count and enhanced recognition as a vital supportive educational institution.</p>

Technology Sustainability

When evaluating the sustainability of technology, several issues should be considered:

- Technology changes rapidly, as often as every 12 to 18 months. Hardware, software, support, and service may not be available or need costly and frequent updates to remain secure and operational.
- Current trends must be evaluated for long-term effectiveness, support and affordability.
- Human Resources needed to maintain and support technology must be included in technology strategies.
- Technology is an element in institutional and educational strategies, but it is not the entire solution. Instructional styles, student and employee skills and needs, infrastructure impact, and cost should be analyzed as part of an overall technology plan.

Resources

A strong technology strategy requires both colleges as well as Central Services to allocate resources to maintaining and updating current technology, including fundamental desktop hardware and software. Resources should also be identified to investigate, pilot and implement emerging technologies, particularly those that show long-term viability.

External funding, including federal and state grants as well as private foundations are an excellent way to fund technology-enabled initiatives, particularly start-up costs. Modesto Junior College currently includes new technologies in all grant budget requests. It is projected that as much as \$200,000 to \$700,000 per year could be obtained through external funding.

Future Goals

A short list of emerging technologies and support needs currently providing successful outcomes on college campuses has been identified for further investigation and potential funding:

- Single Sign-on
- Virtual Desktop Infrastructure (VDI)
- Enhanced faculty and student training and support
- Mobile Computing
- Web 2.0 applications
- Video Streaming and teleconference technology

Appendix A

College Technology Committee Charge and Membership

College Technology Committee (CTC)

The current Instructional Technology Committee (ITC) will change into the College Technology Committee, with a broader focus on all campus technologies: administrative, instructional, student support, desktop, mobile computing, and other technologies.

Charter:

The College Technology Committee makes recommendations to the College President and communicates to the campus regarding the direction and evaluation of technology-related decisions campus-wide, including:

- Faculty, staff and student training and support
- The prioritization of technology resource allocations based on Program Review
- Minimum standards for campus technology
- Initiatives contributing to a campus-wide culture of innovative learning enhanced by technology

During the annual cycle of campus resource allocation decisions based on Program Review, the CTC will serve as an administrative council to review, prioritize and recommend unit requests pertaining to technologies and/or personnel that provide technology support.

Meetings:

Twice monthly during academic year and as needed

Membership:

Administrative oversight: VP of Administrative Services
College administrators, Academic Senate and Classified Staff Advisory Council (CSAC) appointees; one representative from each campus unit; college and district individuals who work regularly with technology

Terms: Academic Senate, CSAC and College Unit appointees will serve a term of two years on the CTC. Administrators with direct oversight of college technology initiatives will be permanent committee members.

Appendix B

Preliminary budget excluding HR costs

<u>Item</u>	<u>Cost</u>	<u>Current funding source</u>	<u>Comments</u>
Annual computer replacement	\$ 1,000,000	Modesto Junior College	Replacement cost for one third of computers (current inventory of computers on East and West campuses is approximately 2500, one third of 2500 @ \$1200 = \$1 million), three year cycle.
DE/Blackboard	\$ 120,000	Measure E	
Ongoing IT staff training	\$ 50,000	TBD	
Security cameras	\$ 50,000	TBD	
AV equipment replacement	\$ 100,000	Modesto Junior College	Classroom equipment, such as video projectors, document cameras, etc.
Miscellaneous	\$ 100,000	TBD	Misc. equipment and services such smartboards, vmware licenses, trackit license, etc.
Cabling, etc.	\$ 50,000	TBD	
Website upgrade	\$ 111,000	Modesto Junior College	Based on the upgrade done in 2009-2010
Research and development	\$ 100,000	TBD	Explore and test new technologies needed for enabling/enhancing instruction
Total equipment, software, licensing, and training costs	\$ 1,681,000		

Appendix C

Glossary of Terms

Bandwidth: The capacity of a network or data connection to transmit data.

Distance Education: Teaching methods and technologies that deliver instruction, often on an individual basis, to students who are not physically present in a traditional educational setting such as a classroom. Students and teachers are typically separated by time and/or distance.

IT: Information Technology -- the acquisition, processing, storage and dissemination of vocal, pictorial, textual and numerical information through a combination of computing and telecommunications. At YCCD, this term is differentiated by “District IT”, describing the functions of the office at Central Services and “College IT”, describing the functions of the Media and Technology Services department at MJC.

LMS/CMS: Learning Management System/Course Management System – a software application for the administration, documentation, tracking, and reporting of training programs, classroom and online events (*Blackboard*)

MJC Computer Labs:

Open Labs: Labs open during regular business hours (or extended hours) to all MJC students with no restrictions

Specialized Labs: labs open only to specific program students (Magic Lab, Math Drop in Lab)

Closed Labs (“By Appointment”): (Writing Center)

Semi-Open Labs: closed during specific class times and open to students during other hours (Library Research Lab)

MTS: Media and Technology Services (MJC)

Technology-enabled learning: technologies that enhance learning in a physical classroom, online, in hybrid classes, or other innovative methods such as video conferencing.

Mobile Computing: Smart Phones, iPads, iPods, and other handheld electronic devices that can access the internet.

Single Sign-On: (SSO) Allows access to multiple, related but independent software systems with a single logon.

Server: A network arrangement between two stand-alone computers. The server (with greater capacity) provides resources (such as data management), and allows clients (such as desk-top computers) to share information with each other.

Thin Client: Multiple computers (“clients”) share programming and processing power through a central server, reducing the computing power need at individual locations. Thin Clients replace regular desktop CPUs.

Virtual Desktop Infrastructure (VDI): Software programs and operations are housed on a server. Desktops become more of a “viewer”, accessing programs and data from remote servers.

Web 2.0 tools: Ways of creating, collaborating, editing, and sharing user-generated content online. Many are developed by users and emphasize ease of use. Many Web 2.0 tools are free. Called “2.0” because they are interactive rather than only providing information – users contribute content to Websites, blogs or other digital sites.