Standard III, Component C
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IIIC. Technology Resources

Technology resources are used to support student learning programs and services and to improve institutional effectiveness. Technology planning is integrated with institutional planning.

Monterey Peninsula College is committed to providing students, faculty, and staff with stable, effective technology through a comprehensive process of planning, resource allocation, implementation, support, and evaluation. Technology needs are gathered and planning takes place through the Technology Plan process and through the Technology Committee, and is approved through the institutional Planning and Resource Allocation Process [IIIC.1]. The technology resources at Monterey Peninsula College are maintained by Information Technology (IT) personnel, Media Services (MS) personnel, and Campus Lab Technicians.

Information Technology is responsible for:
- network services,
- administrative systems,
- custom programming,
- server farm,
- desktop computing,
- website services,
- telephony services: VOIP (digital phone system) , analog phones & faxes, campus wide cell phones and all FCC radio licenses
- Student Records System,
- Faculty, staff and student technology training,
- help desk.

Media Services is responsible for:
- maintenance and support of classroom technology,
- Instructional Technology Lab and services,
- audio-visual services,
- faculty, staff and student technology training,
- iLearn@MPC (Moodle online course management system) support.

Campus lab technicians are responsible for the technology and laboratory resources in their academic area with additional support from IT and Media Services. They are also responsible to train students, faculty and staff in the use of the technology resources in their area of responsibility. Many of these services and their support personnel overlap and their efforts are coordinated during weekly meetings.

IIIC1. The institution assures that any technology support it provides is designed to meet the needs of learning, teaching, college-wide communications, research, and operational systems.

DESCRIPTION

The overall mission of campus technology resources is to support student learning and the instructional and administrative needs of faculty and staff.

Technology Resources Supporting Teaching and Student Learning:

The institution has supported student learning by funding additional "smart" classrooms for media-enhanced teaching and computer labs for student use as well as a large number of Library computers for student and community use, giving a total of approximately 1,000 student computers.

Instructor-student communications have been enhanced by providing all students with MPC e-mail and also website enhancements (MyMPC student portal and MySites) that promote interaction between students and their instructors. Every class section has an automatically generated ClassSite that serves as a communication center for that class. The Class Sites include assignment calendars, document libraries, discussion forums, announcements, and can include a homework drop-folder to encourage a paperless environment. [IIIC1.2] Microsoft Corporation in 2008 featured the MPC website in their California Brochure. [IIIC1.3]

The iLearn (Moodle) online course management system supports distance learning. The institution also supports electronic student services such as CCCApply, WebReg, online advising, online course catalog and schedule of classes, online Student Financial Aid Orientation, portal to the Financial Aid Management System, and installation of appropriate technology to support those students who qualify under the Americans with Disabilities Act (ADA). Campus servers and networks to support the above services have been routinely upgraded and backed-up. [IIIC1.4]

The Instructional Technology Lab serves faculty and staff for training, instructional design services, and for immediate help with instructional technology development or trouble-shooting.

The Audio/Visual (A/V) department offers equipment that can be set up in the classroom or on the campus mall or public rooms for events. Media Services and IT personnel are on call to respond quickly to and fix any technical problems in the classrooms.

Technology Resources Supporting College-Wide Communications:

Communications are enhanced for all students and staff with universal MPC e-mail, webmail, and digital (Voice Over IP) telephones. Emergency communications are enhanced by the Berbee InformaCast mass notification system for inside buildings, the emergency speaker system for outside, and the website emergency announcement for off-campus notification. General announcements, event notification, calendars, committee meeting sites, and documentation are located on the website for general campus communications for students and staff. Students can access the website for information on available technology resources and services.

Technology Resources Supporting Research and Institutional Effectiveness:
Additions to the website have created a structure for improvement in institutional effectiveness. An example is the Board Policy Review Process [IIIC1.5]. Workflow processes have been set up for increased efficiency. Committees now have the option of using committee sites to house documents and agendas and those documents can be checked out for editing by any committee member for a paperless environment.

A process has been developed for data mining to gather information needed for institutional research and planning. Any staff or faculty member, including the Institutional Researcher, has access to this information and the Office of Institutional Research is available for support and training.

Technology Resources Supporting Institutional Services:
IT along with Lab Technicians supports a wide variety of software and hardware in support of institutional services. The primary supported software is the *California Community College Software Consortium (CCCSC,* sometimes referred to as the *Santa Rosa Student Records System*) of which MPC is an active member. IT personnel provide custom programming in *CCCSC* to meet institutional research and reporting needs and support the software and hardware. Related software includes *CCCApply*, *Web Reg*, and *ICVerify*. Other supported software includes *Class Climate* for surveys, *Voyager* library services software, and *CurricUNET* for course outlines.

During 2009-2010 the *Santa Rosa Student Records System* will be upgraded to a Windows environment and to-date, much of the programming has been completed and tested. Data collection has been improved with additional CCCSC reports now available and the new website surveys system.

Technology Resources Supporting Operational Systems:
Operational systems have been improved with the building of the new Data Center, April 2009, and the replacement of the underground fiber network to a GigaMan (DCP) high speed backbone, along with the expansion of the Voice Over IP (digital) telephone system, and the upgrading of various audio-visual and multimedia development services.

The new Data Center has two failsafe air conditioning (A/C) units, a fire-suppression gas system, a new uninterruptible power supply unit (UPS), a natural gas generator, new virtual switches, and a new alarm system.

All new classrooms, since bond funds became available, are being equipped with electronic equipment appropriate to the teaching need. The Lecture Forum has had all of its projection and audio systems upgraded in each of the three lecture halls in 2008.

Identification of Technology Needs:
Technology needs are identified through the Planning and Resource Allocation Process, Program Review, Technology Plan process, Technology Committee discussions, Distance Education Taskforce, Computer Proliferation Taskforce, weekly campus tech meetings, and through help desk and other communications. During fall semester a preliminary list of technology needs is consolidated, the list is refined and prioritized through discussions at various meetings of the

shared governance groups including Academic Affairs Advisory Group (AAAG), Administrative Services Advisory Group (ASAG), Student Services Advisory Group (SSAG), Associated Students of Monterey Peninsula College (ASMPC), campus tech meetings, Technology Committee meetings and informal discussions.

College Support of Technology:
The institution, over the past couple of years, has increasingly supported and funded the upgrading of technology resources. Technology needs are addressed in the Institutional goals [IIIC1.6], the Education Master Plan [IIIC.7] which recognizes the role of technology in teaching, Program Review and annual updates, and the Facilities Master Plan [IIIC.8] by addressing the need for an updated wiring infrastructure and Data Center. The Technology Plan [IIIC1.9], along with Program Review and annual updates brings the various initiatives together. Bond funds have been used to build a state-of-the-art technology infrastructure and almost all of the classrooms have appropriate technology resources for teaching. MPC is a CENIC (Corporation for Education Network Initiatives in California) network node and takes advantage of other select state-wide technology initiatives and funding, when appropriate, that are offered by the Chancellor's Technology Office and described in the California Community Colleges Technology III Plan of 2007-2010 [IIIC110].

MPC states in its 2007-2010 Goals that it is committed to maintain and improve district facilities that includes the goal to "provide a stable and secure technical environment for the entire institution" [IIIC1.11].

Funding Sources for Support of Technology:
- MPC general fund budgets
- MPC categorical funds
- MPC Technology Refreshment funds
- One-time MPC Action Plan funding
- Local bond and state funds for new construction and renovations
- Instructional Block Grant funds
- Governmental grants (Title III, Captioning, California Teleconnect Fund, Last Mile, Federal Stimulus-? [IIIC1.12])
- Other grants (Instructional Technology private grant)
- Other funds (Microsoft-California Government Entities Settlement [IIIC1.13], PG&E energy savings rebate program [IIIC1.14])

Evaluation of Technology Needs:
Technology initiatives are continuously evaluated through program review, discussion in weekly technology meetings and discussion and feed back in shared governance group meetings (AAAG, SSAG, ASAG, ASMPC, Academic Senate, Technology Committee, and College Council). Feedback from students, faculty, staff, and the public is generated by e-mail to *network support team*, *website support*, *telephone support*, *job control*, *iLearn help, A/V Support* and telephone calls. Occasionally, focus groups are used for in-depth evaluation such as evaluating student use of the website and MPC e-mail, its ease of use, features, and problems in May 2009. [IIIC1.15]

Replacement of old equipment is handled through the Technology Refreshment process.

For new or changed services and/or equipment, small issues are handled quickly and routinely and new major requests are discussed and evaluated during face-to-face meetings of requestors and technical support personnel and processed through the Action Plan system for funding. Surveys are conducted for major planning and evaluating processes such as Program Review and the Technology Plan.

Effectiveness of Meeting Technology Needs:
Since the last accreditation report of 2003, 52 "smart" classrooms and/or computer labs have been added for a total of 82, nearly all classrooms now are multimedia capable. Student e-mail has been instituted with 32,000 accounts, iLearn has successfully replaced WebCT, and Web Registration has replaced telephone registration. The new SharePoint website is used for student learning, student services, communications, and for college business efficiencies such as meeting sites, forms, and surveys.

EVALUATION
MPC meets the standard because technology support meets the needs of learning, teaching, college-wide communications, data research, and operational systems.

In a 2008 campus survey, of those responding with an opinion, 84-85% agreed or somewhat agreed that software and network connections used to support student learning are adequate, 88% agreed or somewhat agreed that the technology at MPC enhances teaching and achievement of student learning, and 78% agreed or somewhat agreed that we have adequate technology to meet our work needs. As of this writing, CISCO Corporation, a vendor for Data Center equipment and software, is planning to feature MPC's new Data Center in its magazine because it set an example of excellence in planning and implementation to meet present and future needs of the College.

PLANNING
None.

IIIC.1	Planning and Resource Allocation Process	http://www.mpc.edu/collegecouncil/College Council Bylaws/MPC Planning_ Resource Allocation Process update 3-08 (2).pdf
IIIC1.1	MPC website	http://www.mpc.edu
IIIC1.2	Board Policy Review Process	http://www.mympc.mpc.edu (need exact link)
IIIC1.3	Microsoft Brochure 2007	http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/MicrosoftMPCArticle.pdf
IIIC1.4	iLearn (Moodle) Course Management System	http://iLearn.mpc.edu
IIIC1.5	Board Policy Revision Process	http://www.mpcfaculty.net/senate/BoardPolicy/BoardPolicyProcess.htm
IIIC1.6	Institutional Goals	
IIIC1.7	Education Master Plan	http://www.mpcfaculty.net/accreditation/ProgramReview/MPC Educational Master Plan 2003.pdf
IIIC1.8	Facilities Master Plan	http://www.mpc.edu/mpcbond/Documents/MPCOctoberPMP.pdf
IIIC1.9	Technology Plan	<to be completed summer 2009> http://mympc.mpc.edu/Committees/Accreditation/default.aspx?RootFolder=%2fCommittees%2fAccre

		ditation%2fSelf%20study%20Drafts%2fStandard%20IIIC&FolderCTID=&View=%7bFEF58AE9%2d5646%2d4BAA%2dAA33%2dCFAA67F6A435%7d
IIIC1.10	CCCCO Technology III Plan of 2007-2010	http://www.itsp.ca.gov/
IIIC1.11	MPC 2007-2010 Goals	http://www.mpc.edu/collegecouncil/College%20Council%20Bylaws/Institutional%20Goals%202007-10.pdf
IIIC1.12	Federal Stimulus Proposals	http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/IT%20stimulus%20proposal%20-%20alert%20system%20(3-31).pdf http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/IT%20stimulus%20proposal-wireless%20(3-31).pdf
IIIC1.13	Microsoft-California Government Entities Settlement	http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/Microsoft%20MPC%20Overcharge%20Settlement.pdf
IIIC1.14	PG&E Energy Savings Rebate	http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/PGE%20Energy%20Efficiency%20Incentive%20Application.pdf
IIIC1.15	Focus Group Notes 5/20/09	<Rosaleen is working on them now> http://mympc.mpc.edu/Committees/Accreditation/default.aspx

IIIC1a. Technology services, professional support, facilities, hardware, and software are designed to enhance the operation and effectiveness of the institution.

- How does the institution make decisions about technology services, facilities, hardware, and software?
- How well does technology accommodate the college's curricular commitments for distance learning programs and courses? Whether technology is provided directly by the institution or through contractual arrangements, are there provisions for reliability, disaster recovery, privacy, and security?

DESCRIPTION
Decision-Making for Technology Resources Deployment:
Because the integration of technology planning with campus planning is critical to achieving campus technology goals, major technology initiatives are typically initiated within various campus shared governance constituencies, including the Technology Committee, the weekly Technology Support meetings and IT meetings, and processed through the Planning and Resource Allocation Process. This process takes place yearly or as funding is available.

A good example of the result of this process is the Technology Refreshment Plan [IIIC.1a.1] and Policy [IIIC.1a.2]. Funds are allocated most years to update the technology in the classrooms and student labs and the computers that are removed are then refurbished and cascaded to faculty and staff. All constituencies on campus have input into the plan in order to place new technology where it is most needed to support learning. This ensures that students have access to the highest level of technology, as funding is available.

Distance Learning Technology:
In 2007, Monterey Peninsula College entered into a formal agreement with California State University Monterey Bay (CSUMB) and Gavilan College as part of the Higher Education Learning Partnership (H.E.L.P.) Consortium to cooperate on distance learning technology, training, and support. The partnership also established an informal collaboration with De Anza College, San Francisco State University and Humboldt State University. Other colleges and universities have since participated with this group. CSUMB hosts the iLearn (Moodle) online course management server and Gavilan and MPC each pay $10,870 each year to cover the cost, including technical support and training sessions for faculty and technical staff. Updates to

Moodle software versions are coordinated amongst the participating colleges and universities and standardized for ease of support.

CSUMB provides the same strict measures for back-up and disaster recovery that they apply to all of their servers. Security and privacy for iLearn (Moodle) is as strict as for MPC network access and uses the same method of authentication. Students have the same login for iLearn as for their MPC e-mail and their MySite and ClassSites. The Electronic Mail (Board) Policy [IIICa.3] has been updated to include students in the narrative since students now have access to this service. Students and staff also must affirm that they adhere to the Internet/Network Use (Board) Policy [IIICs.4] each time they log into the network.

Students and faculty have access to iLearnHelp for all support questions which can then be answered by MPC or CSUMB support staff. MPC has relayed information on Moodle technology to the Chancellor's Technology Office in order to foster state-wide support and training. Since our contract with CSUMB does not have a cap on enrollment, MPC is able to offer any faculty access to iLearn for course enrichment, hybrid courses, and fully online courses.

MPC has participated in the Captioning Grant from the California Community Colleges Chancellor's Office (CCCCO) in order to ensure that online videos are captioned and audio files are translated into text.

It should be noted that ClassSites on the www.mpc.edu website offer many of the same services as iLearn and will continue to be improved to the extent that moving all online and hybrid courses to the MPC website may become an option in the future.

EVALUATION
MPC meets the standard because funding has been sufficient over the last few years for campus technology to adequately meet the primary educational needs for students' and instructors' use of technology and its support. Staff needs are generally adequately met by cascading used computers from refurbished student labs to staff desktops, with deployment being prioritized by the age and condition of the present staff computer. Also, MPC has a well-supported course management system for online learning that is stable and secure, and improvements are made on a regular basis.

PLANNING
None.

IIIC1a.1	Technology Refreshment Plan 2008	http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/Technology%20Refreshment%20Summary%20Plan%202008.pdf
IIIC1a.2	Technology Refreshment Policy	http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/Classroom%20Equipment%20Refreshment%20Guidelines%2012-11-08.pdf
IIIC1a.3	Electronic Mail Board Policy	http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/MPCElectronicMailPolicy-updated%202007.pdf
IIIC1a.4	Network/Internet Use Board Policy	http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/Network-Internet%20Technology%20Use%20Policy.pdf

IIIC1b. The institution provides quality training in the effective application of its information technology to students and personnel.

DESCRIPTION

Assessment of the Need for Technology Training:

Technology training needs are accessed in a variety of ways, primarily as a result of new software or requests from faculty and staff. Technology training is offered to staff on an ongoing basis when new versions of desktop applications are introduced. Formal workshops are offered for standard desktop applications as well as for the distance learning course management system, and for website features. Staff or departments may arrange individualized training at any time and may drop-in to the Instructional Technology Lab or contact IT Network Support for immediate help. Unscheduled requests for training, by e-mail or telephone, are handled quickly. Also, training materials are posted on the website (Techapedia) [IIICb.1] for all of our standard applications and are updated as needed.

The Instructional Technology staff is equipped to handle requests for non-standard, academic software training needs with some lead time. New faculty and new adjunct faculty receive hands-on training on the use of Outlook e-mail and voicemail, as well as MySites and ClassSites as used for instruction or communications with students on the MPC website. All faculty and staff can attend FLEX Day workshops [IIICb.2] in technical training, the specific type of training as requested by the Academic Senate. Any MPC employee can take business skills or other training courses at the college as an enrolled student at the going fee or for audit at no cost. Additional training is provided by @One, the training arm of the California Community Colleges Chancellor's Office IT Center, [IIICb.3] with some limited staff development funds to cover registration. MPC has participated in the Ambassador program with the Chancellor's Office technology initiatives to allow training of staff to keep updated on new technology services from the Chancellor's Office and the training to support them.

Technology Training for Students and Staff:

Student technology training is handled in a variety of ways: through class orientations, training documents on the website (Techapedia), teacher instruction, handouts at registration, open sessions in the Library, and open sessions during special events such as Lobos Days. The primary technical training topics are MPC student e-mail, the MPC website portal, and iLearn (Moodle) use for online classes. Students have a phone number and e-mail address for help desk questions related to instructional software, primarily the iLearn course management system. Demonstrating "Information Competency" is required to graduate from MPC. General requests for student training can be routed through the ASMPC group to Instructional Technology for implementation.

The primary technical training topics for staff are for the MPC SharePoint website (numerous topics), Microsoft Office (Word, Excel, PowerPoint, and Microsoft Outlook), Archiving Email,

Data Back-up, Data Retrieval for the CCCSC Student Records System, Working with Digital Images and Video, and Teaching with Clickers. [IIICb.4] Training is also offered for distance learning instructors using iLearn, topics such as Gradebook, Forum Tool, Mail, Assignment Tool, Add Resource, Add Activity Function, Meeting ADA Requirements, Student Authentication, Creating and Editing Media, Online Teaching Methods and Course Design. Often the iLearn training is in partnership with California State Monterey Bay (CSUMB). Training instructional handouts are located on the MPC website in the Techapedia for reference at any time.

Faculty and staff are also encouraged to take CCC@One (sponsored by the California Community Colleges) training. MPC hosted the Northern California @One Summer Workshop in June 2008. Fifteen scholarships were available to MPC staff for the workshop. Media Services also encourages and pays for distance learning instructors to take the @One online workshops for teaching online. In addition, MPC has an extensive distance learning handbook [IIICb.5] for faculty that is updated yearly or more often if needed.

Technical staff receives most of their training from recognized technology training vendors specific to MPC needs and also from the California Community College Chancellor's Office for state-wide technical initiatives.

Effectiveness of Training:
Feedback on the quality or scope of technical training comes in the form of e-mail or face-to-face conversations, as we are a small college and most comments are directed to the Dean of Technology directly or through one of the constituency group meetings.

EVALUATION
MPC meets the standard because of its primarily informal, as-needed training, as MPC is a small college and that method works best for us. The MPC partnerships with CSUMB and @One have extended our training options. Training gets both kudos and complaints and we have learned that "as needed one-on-one training" is most effective. All on-campus training requests are met. In a 2008 campus survey, of those responding with an opinion, 73% agreed or somewhat agreed that MPC provides quality training in the use of technology to employees and students.

PLANNING
None.

IIICb.1	Techapedia	http://mympc.mpc.edu/Techapedia/Wiki%20Pages/Home.aspx
IIICb.2	FLEX Training Agenda	http://www.mpcfaculty.net/accreditation/Evidence.htm http://www.mpcfaculty.net/senate/FlexDayInfo.htm
IIICb.3	@One	http://www.cccone.org
IIICb.4	Ongoing training	http://mympc.mpc.edu/AdministrativeServices/StaffTechTraining/Shared%20Documents/Technology%20training.aspx?PageView=Shared
IIICb.5	Distance Learning Handbook	http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/Distance%20Learning%20at%20MPC-Handbook%202008.pdf

IIIC1c. The institution systematically plans, acquires, maintains, and upgrades or replaces technology infrastructure and equipment to meet institutional needs.

DESCRIPTION

Provision for Management, Maintenance, and Operations of Technical Infrastructure:
Technology resources are managed by numerous highly trained technicians as outlined in the 2009 Technology Plan (as of this writing) [IIIC1c.1] and supervised by the Dean of Technology who reports to the Vice President of Administrative Services. The operation and maintenance of the primary technology infrastructure, Data Center, telephones, website and network services, are handled by the three network engineers and two IT support technicians. The third Network Engineer has been added to the technical staff since the previous accreditation review.

The CCCSC Student Records System is overseen by one manager, with two programmers and a support technician. Classroom technology equipment is supported and maintained by three Media Services personnel. Campus lab technicians are responsible for the technology resources in their area of responsibility. All engineers and campus technicians are well-trained and highly competent. Technology Committee members also oversee technology staffing and may make recommendations for adding additional staff through the Planning and Resource Allocation Process. The Dean of Technology coordinates the efforts of the various technicians.

System Reliability and Back-up:
Through technology refreshment, one-time funding, and bond funds, the College has a new Data Center with state-of-the art equipment such as fire suppression gas, redundant air cooling systems, and clustered servers for redundancy of database systems. Virtual servers for some systems add additional reliability. The UPS and generator system provide limited but extended services during a power outage. Microsoft Volume Shadow copy provides short term recovery for user files. Microsoft Data Protection Manager provides weekly recovery from backup to disk, and monthly recovery from tape. All systems and applications are backed up by Data Protection Manager. Files stored in staff PC's Documents folders are re-directed to a network server and backed-up nightly. The CCCSC Student Records System, housed on a legacy HP 3000 is protected by a parallel system located in the Bay area. Some older software cannot be mirrored but it is backed-up regularly and will eventually be replaced as newer replacements are available. [IIICc.1]

The Technology Plan serves as a basis for long-term technology planning. The Technology Refreshment Plan for equipment replacement is in place and has had regular funding for the past few years. As of this writing, funding for technology upgrades is questionable given the state of the California and national economy. MPC, however, presently has up-to-date equipment and is in a good position to manage with less funding for the next couple of years.

EVALUATION

MPC meets the standard. In a 2008 campus survey, of those responding with an opinion, 87% agreed or somewhat agreed that Information Technology personnel are knowledgeable and helpful and 82% agreed or somewhat agreed that Media Services personnel are knowledgeable

and helpful. In addition, during 2008-2009, three IT personnel were honored by MPC for their contributions for exceptional service to the College and for making a significant difference to the College.

The new Data Center with its upgraded systems for redundancy and security of systems, along with on-campus and remote back-up of data, provides a stable working environment for students and staff.

PLANNING
None

IIICc.1	Technology Plan 2009	<to be completed summer 2009> http://mympc.mpc.edu/Committees/Accreditation/default.aspx?RootFolder=%2fCommittees%2fAccreditation%2fSelf%20study%20Drafts%2fStandard%20IIIC&FolderCTID=&View=%7bFEF58AE9%2d5646%2d4BAA%2dAA33%2dCFAA67F6A435%7d

IIIC1d. The distribution and utilization of technology resources support the development, maintenance, and enhancement of its programs and services.

- How does the institution make decisions about use and distribution of its technology resources?
- What provisions has the institution made to assure a robust and secure technical infrastructure, providing maximum reliability for students and faculty?
- What policies or procedures does the institution have in place to keep the infrastructure reasonably up-to-date?
- Does the institution give sufficient consideration to equipment selected for distance programs? How effectively is technology distributed and used?

DESCRIPTION
Decision-making Process for Use and Distribution of Technology Resources:
MPC follows the Action Plan [IIICd.1] process along with the Technology Refreshment Plan, a review of Institutional goals, and Program Review to distribute new technology resources. The planning for this follows the Planning and Resource Allocation Process. The Seaside and Marina MPC sites are an integral part of the planning process.

The college has also instituted an energy-savings plan that limits the deployment of excessive technology, particularly printers and computers, in order to save energy costs. Staff is encouraged to share networked printers rather than adding additional single-person printers to the inventory. The College has deployed an automatic evening shut-down process to save additional energy. Also, some of the servers in the Data Center are being virtualized, allowing for more than one virtual server on one physical server, to save energy and the purchase of hardware. [IIIC1d.2]

Robust, Secure, and Reliable Technical Infrastructure:
MPC states in its Institutional 2007-2010 Goals [IIICd.3] the goal to "provide a stable and secure technical environment for the entire institution." In addition, the MPC Mission statement includes the phrase, "providing excellence in instructional programs, facilities, and services to support the goals of students." Funding over the past few years has met the primary need of replacing old equipment.

Policies and Procedures for Updating Technology:
Technology Refreshment funding, along with one-time and bond funds, have been deployed to bring technology resources to their present high state of reliability. Continued support to update resources will come through the refreshment funding and action plan processes as funds are available. Program Review and the Technology Plan are in place to actively review staffing and technical systems in order to direct available funding to needed resource improvements.

Consideration for Equipment Selection for Distance Learning:
The equipment used for the distance learning program is managed by CSUMB with eventual replacement funded by the local iLearn (Moodle) consortium. The decision to use CSUMB as the host was based on their more extensive resources to manage the server and provide local technical support for the system. MPC can add an unlimited number of online courses as well as hybrid courses to the system with only the addition of appropriate storage space. Use of this course management service has increased each year, particularly for faculty teaching hybrid courses.

Effectiveness of Technology Use and Distribution:
MPC has extensive technology resources distributed evenly across the Monterey Campus and the satellite classrooms in Marina and Seaside. The approximately 1,000 student computers and 450 staff computers, 82 smart classrooms and computer labs, and other instructional technology resources [IIICd.4] are evenly distributed with smart classrooms and computer labs located at the Marina and Seaside sites. The new fiber network is deployed only on the Monterey Campus at present, but as permanent buildings are added to the Marina and Seaside sites, those sites will eventually be connected to the AT&T OptiMan network as well.

EVALUATION
MPC meets the standard. With this extensive deployment of technology in nearly all classrooms and given that MPC has more than double the number of student computers (1,000) as judged by the California Community College Chancellor's Office Total Cost of Ownership (TCO) [IIIC1d.5] minimum standard of 1 computer to every 20 FTES (8300 FTES/20 = 415 computers), the technology resources are more than adequate to meet the needs of students.

PLANNING
None.

IIICd.1	IT Action Plan 2009	http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/2009-10%20Action%20Plan%20-%20IT%20%20MS.pdf
IIICd.2	Siemens Letter	http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/MPC%20IT%20Siemens%20Letter.pdf
IIICd.3	MPC Goals	http://www.mpc.edu/collegecouncil/College%20Council%20Bylaws/Institutional%20Goals%202007-10.pdf
IIICd.4	MPC Technology Plan	<to be completed summer 2009> http://mympc.mpc.edu/Committees/Accreditation/default.aspx?RootFolder=%2fCommittees%2fAccreditation%2fSelf%20study%20Drafts%2fStandard%20IIIC&FolderCTID=&View=%7bFEF58AE9%2d5646%2d4BAA%2dAA33%2dCFAA67F6A435%7d
IIICd.5	CCCCO TCO Report	http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/TCO%20Guidance%20from%20SAC_Revised%20March%202008.pdf

IIIC2. Technology planning is integrated with institutional planning. The institution systematically

assesses the effective use of technology resources and uses the results of evaluation as the basis for improvement.

- How does the institution ensure that facilities decisions emanate from institutional needs and plans for improvement?
- What evidence is there that the institution bases its technology decisions on the results of evaluation of program and service needs?
- How does the institution determine that technology needs in program and service areas are met effectively?
- How does the institution prioritize needs when making decisions about technology purchases? How effectively are those needs met?

DESCRIPTION
Decision-making Based on Institutional Needs and Plans for Improvement:
Technology planning follows institutional planning for facilities, administrative, student services and academic programs, and is guided by the MPC Planning and Resource Allocation process and institutional goals. IT participation in the shared governance process, which includes, facilities renovation, construction plans, Program Review and the Action Plan process, provides the information needed to formulate yearly formal or informal technology plans that are brought to technology staff for refinement, then brought through the planning process to align with the Facilities Master Plan [IIIC2.1], the Education Master Plan [IIIC2.2], and the Long-Term Financial Plan [IIIC2.3].

Evidence that the Institution Bases Technology Decisions on Results of Program and Service Needs:
The communication and decision-making process described in previous sections is the means by which yearly and long-term technology plans are proposed and approved. The final detailed plan that includes funding sources follows the same path of approval and that may include compromises, agreed to by all parties, if sufficient funding is not available in any one year. The Technology Refreshment Plan is a yearly example of that process. [IIIC2.4]

Other evidence can be found in Program Review, the Academic Master Plan, and the Facilities Master Plan. For example, the Facilities Committee is comprised of faculty and staff representing every constituent group, who engage in dialogue about institutional quality and improvement and make decisions that include technology deployment based on input from the committee members. For every new or remodeled facility, extensive technology plans are developed. These plans respond directly to program needs of disciplines that will be housed in the buildings.

All planning documents address technology needs as applicable. The well established, collaborative processes in place to construct these documents ensure effective dialogue, evaluation, and planning for technology improvements as needed.

Evidence of Meeting Technology Needs in Program and Service Areas:
The various surveys, focus group discussions, campus meetings, and planning processes described in this document provide specific evidence of meeting technology needs and evidence of additional needs not yet met. MPC has met most requests for smart classrooms, up-to-date

computer labs, administrative technology, and campus infrastructure, the existence of which serves as evidence that most needs are met.

Institutional Prioritization of Needs:
The process for decision-making related to technology deployment and the feedback as to the effectiveness of technology planning and deployment takes place at the Technology Committee meetings, ASAG, AAAG, SSAG, ASMPC, College Council, the weekly Campus Technicians meeting, and to some extent, various Facilities and Bond meetings as well as e-mail and phone calls from faculty, staff, and students. This cumulative information is used as the basis for improvement.

Given variable funding for technology, not all needs can be met in any given year so the preliminary technology purchase and deployment plan (Technology Refreshment) is brought to and discussed in the various shared governance groups and revised as necessary before requesting approval from College Council. Extensive planning for technology is part of the facilities renovation and new construction planning process. Faculty groups meet with the construction team and IT to design smart classrooms and student computer labs to meet academic program needs.

Effectiveness of Meeting Needs:
Because of adequate funding over the last few years, most technology needs for academic and student services programs are met to the satisfaction of faculty and staff, but not during any one year. Computers are first deployed in student labs as defined by the Technology Refreshment Plan. Most student computers are not more that 3 years old, most projectors and other smart classroom equipment is reasonably new and in good condition. [IIIC2.5] Since student lab computers are cascaded down to staff desktops, there is generally a steady supply to be able to make replacements as needed.

EVALUATION
MPC meets the standard because technology resources support student learning programs and services as well as improve institutional effectiveness. Also technology planning is integrated with institutional planning.

In a 2008 campus survey, of those responding with an opinion 78% agreed that technology planning is part of the campus planning process, and 73% agreed that MPC has adequate technology resources. Also in the 2008 campus survey, of those responding with an opinion, 82% agreed or somewhat agreed that faculty are sufficiently involved in the selection of educational equipment.

For comparison, in the accreditation survey of 2003, of those responding with an opinion, 42% agreed or somewhat agreed that instructional equipment was adequate and of those responding with an opinion, 79% agreed or somewhat agreed that their computer was adequate.

PLANNING
None

| IIIC2. | Facilities Master | http://www.mpc.edu/mpcbond/Documents/MPCOctoberPMP.pdf |

1	Plan	
IIIC2.2	Education Master Plan	http://www.mpcfaculty.net/accreditation/ProgramReview/MPC Educational Master Plan 2003.pdf
IIIC2.3	MPC Long Term Financial Plan 2008	http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/LongTermFinancialPlan.pdf
IIIC2.4	Technology Refreshment Chart	http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/Technology%20Refreshment%20Chart-2008-09.pdf
IIIC2.5	Computer Inventory	http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/Computer-Inventory%205-2009.pdf