

**Monterey Peninsula College  
Institutional Self Study Report  
Standard IIIC: Technology Resources**

**Table of Contents**

<b>Section Numbers</b>	<b>Focus</b>	<b>Pages</b>
Standard IIIC	Introduction	2-3
Section 1	Meeting Needs	4-10
Section 1.a	Enhancing the College's Operation and Effectiveness	11-13
Section 1.b	Quality Training	14-16
Section 1.c	Planning, Acquiring, and Maintaining Technology	17-19
Section 1.d	Distribution and Utilization	20-22
Section 2	Integrated Planning and Evaluation	23-27
List of Contributors		28

**Monterey Peninsula College  
Institutional Self Study Report  
Standard III C: Technology Resources**

**Introduction**

**STANDARD III C**

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

***Description:***

Monterey Peninsula College is committed to providing students, faculty, and staff with stable, effective technology as a means of supporting student learning programs and services. To fulfill its commitment, the college ensures appropriate oversight of its technology resources and makes use of a comprehensive process of planning, resource allocation, implementation, support, and evaluation.

Three groups are responsible for overseeing MPC's technology resources: Information Technology (IT) personnel, Media Services (MS) personnel, and campus lab technicians.

**Information Technology** is responsible for:

- network services
- administrative systems
- custom programming
- server clusters in the Data Center
- desktop computing
- website services
- telephony services: VOIP (digital phone system) , analog phones and faxes, campuswide 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

- audiovisual 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 respective academic area with additional support from IT and Media Services. They are also responsible for training 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; their efforts are coordinated during weekly meetings.

Planning is critical to ensure that the college's technological needs are continuously met. Technology needs are considered in virtually all planning documents, including program reviews, the *Facilities Master Plan*, the *Educational Master Plan*, and the *Technology Plan*. Technology planning is integrated with institutional planning; the college's planning and resource allocation process [IIC.1.1] ensures that technology needs are understood, and measures are taken to acquire, upgrade, or replace technology as needs arise.

**Monterey Peninsula College  
Institutional Self Study Report  
Standard IIIC: Technology Resources**

**Meeting Needs**

**STANDARD IIIC**

**Section 1**

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.

**Supporting Teaching and Student Learning**

The institution has supported student learning by funding additional “smart” classrooms, computer labs for student use, and a large number of library computers for student and community use. Currently approximately 930 computers are available for student use. Smart classroom equipment includes one or more projectors and screens, a computer, a document camera, VHS and DVD players, network connection, and sometimes a microphone.

Instructor-student communications have been enhanced by providing all students with MPC email and 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 ClassSites include assignment calendars, document libraries, discussion forums, and announcements. They can also include a homework drop-folder to encourage a paperless environment [IIIC1.2]. MPC’s website enhancements are notable; Microsoft Corporation in 2008 featured the Monterey Peninsula College website in their California Brochure [IIIC1.3].

To support distance learning, the college makes use of the iLearn (Moodle) online course management system. 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 that support the above services have been routinely upgraded and backed-up [IIC1.4].

The Instructional Technology lab serves faculty and staff for training, instructional design services, and for immediate help with instructional technology development or troubleshooting.

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.

### **Supporting Collegewide Communications**

Communications are enhanced for all students and staff with universal MPC email, 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.

### **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 [IIC1.5]. 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. Each committee site is viewable by committee members and can be set to be viewable by all staff.

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. The Office of Institutional Research is also available for support and training.

### **Supporting Institutional Services**

Information Technology, 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 Monterey Peninsula College is an active member. Information Technology 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 and curriculum approval.

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

### **Supporting Operational Systems**

Operational systems have been improved with the building of the new Data Center, which occurred in April 2009. Other improvements include 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 audiovisual 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 (UPS) unit, a natural gas generator, new virtual switches, and a new alarm system.

All new and renovated classrooms, since bond funds became available, are being equipped with electronic equipment appropriate to the teaching needs at the Monterey campus, as well as at the Education Center at Marina and the Public Safety Training Center in Seaside. In 2008, the Lecture Forum had all of its projection and audio systems upgraded in each of the three lecture halls in 2008.

### **Identifying Technology Needs**

Technology needs are identified through the planning and resource allocation process, program review, technology plan process, Technology Committee discussions, Distance Education Task Force, Computer Proliferation Task Force, weekly campus technology meetings, and help desk and other communications. Every fall semester a preliminary list of technology needs is consolidated, refined, and prioritized through discussions at various meetings of the shared governance groups including the Academic Affairs Advisory Group (AAAG), Administrative Services Advisory Group (ASAG), Student Services Advisory Group (SSAG), Associated Students of Monterey Peninsula College (ASMPC), campus technology meetings, and Technology Committee meetings. Informal discussions play a role as well.

### **College Support of Technology**

Over the past couple of years, the institution has increasingly supported and funded the upgrading of technology resources. Technology needs are addressed in the college's institutional goals [IIIC1.6]; the *Educational 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* [IIC1.9], 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 when appropriate, takes advantage of other select statewide technology initiatives and funding that are offered by the Chancellor's Technology Office and described in the California Community Colleges Technology III Plan of 2007-2010 [IIC110].

Monterey Peninsula College states in its 2007-2010 goals that it is committed to maintaining and improving district facilities; one of the college's goals is to "provide a stable and secure technical environment for the entire institution" [IIC1.11].

### **Funding Sources for Support of Technology**

Monterey Peninsula College uses a number of funding sources to support technology. These sources include:

- general fund budgets
- categorical funds
- technology refreshment funds
- one-time 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 funds [IIC1.12])
- other grants (Instructional Technology private grant)
- other funds (Microsoft-California Government Entities Settlement [IIC1.13], PG&E energy savings rebate program [IIC1.14])

### **Evaluating Technology Needs**

Technology initiatives are continuously evaluated through program review, discussion in weekly technology meetings and discussion, and feedback in shared governance group meetings (Academic Affairs Advisory Group, Student Services Advisory Group, Administrative Services Advisory Group, Associated Students of Monterey Peninsula College, Academic Senate, Technology Committee, and College Council). Feedback from students, faculty, staff, and the public is generated by email to the network support team, website support, telephone support, job control, iLearn help, A/V support and telephone calls. Occasionally, such is the case in May 2009, focus groups are used for in-depth evaluation such as evaluating student use of the website and MPC email, its ease of use, features, and problems.[IIC1.15]

Replacement of old equipment is handled through the technology refreshment process.

For new or changed services and/or equipment, small issues such as replacing a part or re-installing software are handled quickly and routinely. New major requests are discussed and evaluated during face-to-face meetings of requestors and technical support personnel and processed through the action plan process 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 email 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 – Standard IIIC.1: MPC meets the standard.***

MPC’s technology support meets the needs of learning, teaching, collegewide communications, data research, and operational systems. Faculty, student, and collegewide needs are consistently monitored, and processes are in place to prioritize these needs and purchase new technology when warranted and fiscally possible.

In the 2008 Accreditation Faculty and Staff Survey, of those responding with an opinion, 84-85 percent agreed or somewhat agreed that software and network connections used to support student learning are adequate, 88 percent agreed or somewhat agreed that the technology at MPC enhances teaching and achievement of student learning, and 78 percent agreed or somewhat agreed that the college has adequate technology to meet its work needs. [IIIC1.16]

Students also feel that the computers to support learning are adequate. On the Noel-Levitz Student Satisfaction Inventory, students gave an overall rating of 5.75 (out of 7) to the item, “computer labs are adequate and accessible.” Furthermore, students gave an overall rating of 5.58 (out of 7) to the item, “the equipment in the lab facilities is kept up to date.”

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 the center provides an example of excellence in planning and implementation to meet present and future technology needs of the college.

### ***Evidence:***

IIIC.1	Planning and Resource Allocation Process	<a href="http://www.mpc.edu/collegecouncil/College Council Bylaws/MPC Planning Resource Allocation Process update 3-08 (2).pdf">http://www.mpc.edu/collegecouncil/College Council Bylaws/MPC Planning Resource Allocation Process update 3-08 (2).pdf</a>
IIIC1.1	MPC website	<a href="http://www.mpc.edu">http://www.mpc.edu</a>
IIIC1.2	Board Policy Review Process	<a href="http://www.mympc.mpc.edu">http://www.mympc.mpc.edu</a> (need exact link)
IIIC1.3	Microsoft Brochure 2007	<a href="http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/MicrosoftMPCArticle.pdf">http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/MicrosoftMPCArticle.pdf</a>
IIIC1.4	iLearn (Moodle) Course Management System	<a href="http://iLearn.mpc.edu">http://iLearn.mpc.edu</a>
IIIC1.5	Board Policy Revision Process	<a href="http://www.mpcfaculty.net/senate/BoardPolicy/BoardPolicyProcess.htm">http://www.mpcfaculty.net/senate/BoardPolicy/BoardPolicyProcess.htm</a>
IIIC1.6	Institutional Goals	
IIIC1.7	Education Master Plan	<a href="http://www.mpcfaculty.net/accreditation/ProgramReview/MPC Educational Master Plan 2003.pdf">http://www.mpcfaculty.net/accreditation/ProgramReview/MPC Educational Master Plan 2003.pdf</a>
IIIC1.8	Facilities Master Plan	<a href="http://www.mpc.edu/mpcbond/Documents/MPCOctoberPMP.pdf">http://www.mpc.edu/mpcbond/Documents/MPCOctoberPMP.pdf</a>
IIIC1.9	Technology Plan	<to be completed summer 2009> <a href="http://mympc.mpc.edu/Committees/Accreditation/default.aspx?RootFolder=%2fCommittees%2fAccreditation%2fSelf%20study%20Drafts%2fStandard%20IIIC&amp;FolderCTID=&amp;View=%7bFEF58AE9%2d5646%2d4BAA%2dAA33%2dCFAA67F6A435%7d">http://mympc.mpc.edu/Committees/Accreditation/default.aspx?RootFolder=%2fCommittees%2fAccreditation%2fSelf%20study%20Drafts%2fStandard%20IIIC&amp;FolderCTID=&amp;View=%7bFEF58AE9%2d5646%2d4BAA%2dAA33%2dCFAA67F6A435%7d</a>
IIIC1.10	CCCCO Technology III Plan of 2007-2010	<a href="http://www.itsp.ca.gov/">http://www.itsp.ca.gov/</a>
IIIC1.11	MPC 2007-2010 Goals	<a href="http://www.mpc.edu/collegecouncil/College%20Council%20Bylaws/Institutional%20Goals%202007-10.pdf">http://www.mpc.edu/collegecouncil/College%20Council%20Bylaws/Institutional%20Goals%202007-10.pdf</a>
IIIC1.12	Federal Stimulus Proposals	<a href="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%20-%20alert%20system%20(3-31).pdf</a> <a href="http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/IT%20stimulus%20proposal-wireless%20(3-31).pdf">http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/IT%20stimulus%20proposal-wireless%20(3-31).pdf</a>
IIIC1.13	Microsoft-California Government Entities Settlement	<a href="http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/Microsoft%20MPC%20Overcharge%20Settlement.pdf">http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/Microsoft%20MPC%20Overcharge%20Settlement.pdf</a>
IIIC1.14	PG&E Energy Savings Rebate	<a href="http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/PGE%20Energy%20Efficiency%20Incentive%20Application.pdf">http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/PGE%20Energy%20Efficiency%20Incentive%20Application.pdf</a>
IIIC1.15	Focus Group Notes 5/20/09	<Rosaleen is working on them now> <a href="http://mympc.mpc.edu/Committees/Accreditation/default.aspx">http://mympc.mpc.edu/Committees/Accreditation/default.aspx</a>

IIC1.1 MPC Staff Survey [ault.aspx](#) <Rosaleen is working on this now>  
6  
IIC1.1 Noel-Levitz Student <Rosaleen is working on this now>  
7 Satisfaction  
Inventory

**Monterey Peninsula College  
Institutional Self Study Report  
Standard IIIC: Technology Resources**

**Enhancing the College's Operation and Effectiveness**

**STANDARD IIIC**

**Section 1.a**

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

**Comment [DB1]:** I don't see any reference to professional support or facilities in this section.

***Description:***

At Monterey Peninsula College, technology is designed and used to enhance the operation and effectiveness of the college. To ensure that all technological needs are understood and met whenever possible, MPC uses an inclusive planning and resource allocation process, as well as a technology refreshment plan. It also relies on collaboration with other colleges to enhance its distance education technology. The expertise of its professional support further ensures that the college's technology enhances the operation and effectiveness of the college.

**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 district shared governance constituencies, including the Technology Committee, the weekly technology support meetings, and IT meetings. These initiatives are then 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 technology in the classrooms and student labs. 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 joined this group. California State University Monterey Bay hosts the iLearn (Moodle) online course management server, and Gavilan and Monterey Peninsula College 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 among the participating colleges and universities and standardized for ease of support.

California State University Monterey Bay 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 email 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 statewide support and training. Since the Monterey Peninsula College contract with California State University Monterey Bay 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.

Monterey Peninsula College 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](http://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. Any major change in supported teaching options will go through the normal shared governance process prior to adoption.

### **Professional Support**

Technology resources are managed by numerous highly trained technicians as outlined in the *2009 Technology Plan* [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.

**Evaluation – Standard IIIC.1.a: MPC meets the standard.**

Monterey Peninsula College has established and followed effective plans and processes to ensure that its technology services, professional support, facilities, hardware, and software are designed to enhance the operation and effectiveness of the institution. The college’s planning and resource allocation process has allowed technological needs to be understood and met, and the *Technology Refreshment Plan* has addressed staff technological needs while ensuring that classrooms and computer labs are given top priority in receiving updated hardware and software.

Monterey Peninsula College also has a well-supported course management system for online learning that is stable and secure, and improvements are made on a regular basis.

Monterey Peninsula College’s professional support further enhances the college’s effectiveness. In a 2008 Accreditation Faculty and Staff Survey, of those responding with an opinion, 87 percent agreed or somewhat agreed that Information Technology personnel are knowledgeable and helpful and 82 percent 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 and for making a significant difference to the college.

**Evidence:**

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

**Monterey Peninsula College  
Institutional Self Study Report  
Standard IIIc: Technology Resources**

**Quality Training**

**STANDARD IIC  
Section 1.b**

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

*Description:*

MPC provides quality training to students and personnel. Given the ever-changing nature of technology, training is necessary on an ongoing basis. There are numerous ways the college assesses the need for technology training. The college evaluates the training offered to ensure the training is effective.

**Assessment of the Need for Technology Training**

Technology training needs are assessed 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 stop by the Instructional Technology lab or contact IT Network Support for immediate help. Unscheduled requests for training by email or telephone are handled quickly. Also, training materials are posted on the website (Techapedia) [IIIc.1] for all of the college's 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.

**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 email, the MPC website portal, and iLearn (Moodle) use for online classes. Students have a phone number and email address for help desk questions related to instructional software, primarily the iLearn course management system. General requests for student training are routed through the Associated Students of Monterey Peninsula College group to Instructional Technology.

New faculty and new adjunct faculty receive hands-on training on the use of Outlook email 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.

The primary technical training topics for staff are 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 include Gradebook, Forum Tool, Mail, Assignment Tool, Add Resource, Add Activity Function, Meeting Americans with Disability Act 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 training (sponsored by the California Community Colleges). 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, which is updated yearly or more often if needed.

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

### **Effectiveness of Training**

Feedback on the quality or scope of technical training comes in the form of email or face-to-face conversations, as MPC is a small college and most comments are directed to the Dean of Technology directly or through one of the constituency group meetings. When training is associated with flex day events, faculty and staff provide written feedback.

**Evaluation – Standard IIC.1.b: MPC meets the standard.**

MPC provides many training opportunities to its staff and students. Training is available online, in small group settings, and one-on-one. There are also numerous class-related opportunities for training. The MPC partnerships with CSUMB and @One have extended the college’s training options. Training gets both kudos and complaints; MPC has learned that as needed one-on-one training is most effective, since training must often be adapted to learners’ technological knowledge. All on-campus training requests are met. In a 2008 Accreditation Faculty and Staff Survey, of those responding with an opinion, 73 percent agreed or somewhat agreed that MPC provides quality training in the use of technology to employees and students.

**Evidence:**

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

**Monterey Peninsula College  
Institutional Self Study Report  
Standard III C: Technology Resources**

**Planning, Acquiring, and Maintaining Technology**

**STANDARD IIC  
Section 1.c**

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

**DESCRIPTION**

MPC systematically plans for, acquires, upgrades, and/or replaces its technology infrastructure and equipment. It also has processes for maintaining its infrastructure and equipment.

**Planning For and Acquiring or Upgrading Technology**

MPC recognizes the central role technology plays in a college environment. Thus, technology is always a part of the planning process. Each year, the college completes a planning and resource allocation cycle [IIC.1.c.1]. The college reviews its mission and institutional goals and establishes new component goals. Programs and areas complete updated program reviews and action plans, which are reviewed by their respective divisions. Action plan items are prioritized by divisions and then forwarded to the appropriate advisory group for further review and prioritization. All lists reviewed and prioritized by advisory groups are then forwarded to the College Council, which recommends to the Superintendent/President items to be acquired if the budget allows. Often these items relate to technology.

The college has been able to use other means to provide for its technical infrastructure, as well. A local Proposition 39 facility bond, Measure I [IIC.1.c.2], passed in 2002. The \$145 million provided through this bond has allowed the college to improve its technology infrastructure and equipment; infrastructure was replaced, and a new Data Center was built through the use of bond and state matching funds.

**Maintaining the College's Technical Infrastructure and Equipment**

Various managers and technicians provide oversight of the college's technical infrastructure to ensure all technological elements are maintained. One manager, two programmers, and a support technician oversee the CCCSC Student Records System. Three Media Services personnel support and maintain classroom technology equipment. 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**

The college's new Data Center has state-of-the art equipment such as fire suppression gas, paired air cooling system, and clustered servers for redundancy of database systems. Virtual servers for some systems add additional reliability. The uninterruptible power supply unit and generator system provide limited but extended services during a power outage. The Data Center serves the Monterey campus as well as the Education Center at Marina and the Public Safety Training Center in Seaside, both located in the old Ft. Ord location. The two Ft. Ord sites are presently served by AT&T-T1 lines that are not always reliable; AT&T plans to upgrade data services when more construction takes place in the area.

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.3]

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, future funding for technology upgrades is questionable given the state of the California and national economy. MPC, however, currently has up-to-date equipment and is in a good position to manage with less funding for the next couple of years.

### ***Evaluation – Standard IIIC.1.c: MPC meets the standard.***

MPC systematically plans, acquires, maintains, and upgrades or replaces technology infrastructure and equipment to meet institutional needs. The college's technology plan and planning and resource allocation process, along with effective oversight and new Data Center, ensure that MPC's technology infrastructure and equipment support the college's needs. The new Data Center provides a stable working environment for students and staff with its upgraded systems for redundancy and security of systems, along with on-campus and remote back-up of data,.

***Evidence:***

IIC1.c. 1	MPC Planning and Resource Allocation Process	<a href="http://www.mpc.edu/collegecouncil/College Council Bylaws/MPC Planning Resource Allocation Process update 3-08 (2).pdf">http://www.mpc.edu/collegecouncil/College Council Bylaws/MPC Planning Resource Allocation Process update 3-08 (2).pdf</a>
IIC1.c. 2	Prop 39 Bond Measure I	<a href="http://mympc.mpc.edu/AdministrativeServices/Facilities/Documents/Bond%20Measure%201%20Ballot%20and%20Proposition.%20November%205.%202002.pdf">http://mympc.mpc.edu/AdministrativeServices/Facilities/Documents/Bond%20Measure%201%20Ballot%20and%20Proposition.%20November%205.%202002.pdf</a>
IIC1.c. 1	Technology Plan 2009	<to be completed summer 2009> <a href="http://mympc.mpc.edu/Committees/Accreditation/default.aspx?RootFolder=%2fCommittees%2fAccreditation%2fSelf%20study%20Drafts%2fStandard%20IIC&amp;FolderCTID=&amp;View=%7bFEF58AE9%2d5646%2d4BAA%2dAA33%2dCFAA67F6A435%7d">http://mympc.mpc.edu/Committees/Accreditation/default.aspx?RootFolder=%2fCommittees%2fAccreditation%2fSelf%20study%20Drafts%2fStandard%20IIC&amp;FolderCTID=&amp;View=%7bFEF58AE9%2d5646%2d4BAA%2dAA33%2dCFAA67F6A435%7d</a>

**Monterey Peninsula College  
Institutional Self Study Report  
Standard IIIC: Technology Resources**

**Distribution and Utilization**

**STANDARD IIIC  
Section 1.d**

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

*Description:*

**Decision-making Process for Use and Distribution of Technology Resources**

MPC follows an 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 members are encouraged to share networked printers rather than adding multiple 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**

One of MPC's **2007-2010** institutional goals [IIICd.3] is 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." Given the goal and mission, MPC has made its technology a priority. 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 become 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 college's 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**

Monterey Peninsula College 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 [IICd.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 – Standard IIC.1.d: MPC meets the standard.***

MPC's distribution and utilization of technology resources support the development, maintenance, and enhancement of its programs and services. The college ensures that technology resources are available at each of its sites, and that all technology needs are considered through the college's inclusive planning and resource allocation process. MPC is also aware of the needs of its distance learning program; eventual replacement of equipment has already been considered.

With extensive deployment of technology in nearly all classrooms and given that MPC has more than double the number of student computers (1,000) needed as judged by the California Community College Chancellor's Office Total Cost of Ownership (TCO) [IIC1d.5] minimum standard of one computer to every 20 FTES (8,300 FTES/20 = 415 computers), the technology resources are more than adequate to meet the needs of students.

### ***Evidence:***

IIC d.1	IT Action Plan 2009	<a href="http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIC/2009-10%20Action%20Plan%20-">http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIC/2009-10%20Action%20Plan%20-</a>
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		<a href="#">%20IT%20%20MS.pdf</a>
IIC d.2	Siemens Letter	<a href="http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIC/MPC%20IT%20Siemens%20Letter.pdf">http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIC/MPC%20IT%20Siemens%20Letter.pdf</a>
IIC d.3	MPC Goals	<a href="http://www.mpc.edu/collegecouncil/College%20Council%20Bylaws/Institutional%20Goals%202007-10.pdf">http://www.mpc.edu/collegecouncil/College%20Council%20Bylaws/Institutional%20Goals%202007-10.pdf</a>
IIC d.4	MPC Technology Plan	<to be completed summer 2009> <a href="http://mympc.mpc.edu/Committees/Accreditation/default.aspx?RootFolder=%2fCommittees%2fAccreditation%2fSelf%20study%20Drafts%2fStandard%20IIC&amp;FolderCTID=&amp;View=%7bFEF58AE9%2d5646%2d4BA A%2dAA33%2dCFAA67F6A435%7d">http://mympc.mpc.edu/Committees/Accreditation/default.aspx?RootFolder=%2fCommittees%2fAccreditation%2fSelf%20study%20Drafts%2fStandard%20IIC&amp;FolderCTID=&amp;View=%7bFEF58AE9%2d5646%2d4BA A%2dAA33%2dCFAA67F6A435%7d</a>
IIC d.5	CCCCO TCO Report	<a href="http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIC/TCO%20Guidance%20from%20SAC_Revised%20March%202008.pdf">http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIC/TCO%20Guidance%20from%20SAC_Revised%20March%202008.pdf</a>

**Monterey Peninsula College  
Institutional Self Study Report  
Standard IIIC: Technology Resources**

**Integrated Planning and Evaluation**

**STANDARD IIIC**

**Section 2**

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.

***Description:***

As previously indicated, MPC's technology planning is integrated with institutional planning. The college also systematically assesses its use of technology resources and uses the results of evaluation as the basis for improvement.

**Decision-making Based on Institutional Needs and Plans for Improvement**

Technology planning follows institutional planning for facilities, administrative services, student services, and academic programs, and is guided by the MPC planning and resource allocation process and institutional goals. Information Technology 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 *Educational Master Plan* [IIIC2.2], and the *Long-Term Financial Plan* [IIIC2.3].

Each year the college completes a planning and resource allocation cycle, which is described in its entirety in Standard IB's introduction.

Short-term and sometimes long-term technology needs and requests, then, follow this process. Long-term technology needs are also considered in the *Technology Refreshment Plan* [IIIC2.4]. This plan establishes a process in which student-related technology is replaced first; if the technology is still adequate it is cascaded to staff, replacing even older technology. Timely replacements are made when possible through the planning and resource allocation process. At times they are replaced through Instructional Equipment Grant funds or through other grants and funds described in Section 1 of this Standard.

Monterey Peninsula College not only bases its technology decisions on the results of program review, action plans, and the planning and resource allocation process; it bases

its decisions on continuous dialogue. Technology experts confer during their weekly meetings, and technology users share needs in various committee meetings. One committee that impacts the college and its technology is the Facilities Committee. The Facilities Committee, comprised of faculty and staff representing various programs and services, engage in dialogue to ensure that all facilities meet minimum standards and are equipped to meet institutional needs. 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.

### **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 than three years old, and most projectors and other smart classroom equipment are 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 – Standard IIIC.2: MPC meets the standard.**

Technology planning at MPC is integrated with institutional planning. The college systematically assesses the effective use of technology resources and uses the results of evaluation as the basis for improvement. Program review and the planning and resource allocation process help to ensure that the college’s technology needs are sufficiently met.

In a 2008 Accreditation Faculty and Staff Survey, of those responding with an opinion 78 percent agreed that technology planning is part of the campus planning process, and 73 percent agreed that MPC has adequate technology resources. Also in the 2008 survey, of those responding with an opinion, 82 percent 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 percent agreed or somewhat agreed that instructional equipment was adequate and of those responding with an opinion, 79 percent agreed or somewhat agreed that their computer was adequate.

**Evidence:**

Deleted: ;

III	Facilities	<a href="http://www.mpc.edu/mpcbond/Documents/MPCOctoberPMP.pdf">http://www.mpc.edu/mpcbond/Documents/MPCOctoberPMP.pdf</a>
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C2.1	Master Plan	
III C2.2	Education Master Plan	<a href="http://www.mpcfaculty.net/accreditation/ProgramReview/MPC%20Educational%20Master%20Plan%202003.pdf">http://www.mpcfaculty.net/accreditation/ProgramReview/MPC Educational Master Plan 2003.pdf</a>
III C2.3	MPC Long Term Financial Plan 2008	<a href="http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/LongTermFinancialPlan.pdf">http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/LongTermFinancialPlan.pdf</a>
III C2.4	Technology Refreshment Chart	<a href="http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/Technology%20Refreshment%20Chart-2008-09.pdf">http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/Technology%20Refreshment%20Chart-2008-09.pdf</a>
III C2.5	Computer Inventory	<a href="http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/Computer-Inventory%205-2009.pdf">http://mympc.mpc.edu/Committees/Accreditation/Self%20study%20Drafts/Standard%20IIIC/Computer-Inventory%205-2009.pdf</a>

**Monterey Peninsula College  
Institutional Self Study Report  
Standard IIIC: Technology Resources**

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