STANDARD IIIC RESOURCES

Technology Resources
Standard 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.

Committee Members

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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.

Descriptive Summary

Technology oversight and planning is a collaborative effort involving the College governance process and District support services. Shared governance in this area occurs through the Technology Advisory Committee (TAC) (IIIC.1: Strategic Planning Council Documents*). TAC’s purpose is to identify, discuss, and plan for potential and current technology. Committee work has included the development of an action plan for portal software, the creation of a data and telecommunication disaster recovery subcommittee, the development of technology surveys to assess faculty's technological capabilities and interests, as well as evaluation of new and emerging technologies (IIIC.2: Technology Advisory Committee Meeting Agendas and Minutes; IIIC.18: Technology Advisory Committee Documents). Technology planning is also supported through the College’s program review process, where academic departments consider technology requirements in relation to curriculum and instructional needs (IIIC.3: Program Review Committee Agendas and Minutes, IIIC.4: Program Review Committee Archives).

District technology planning is based on the District’s strategic plan; the District technology plan that was developed by the Technology Coordination Committee (TCC) and presented to and approved by the Board of Trustees in 2001 (IIIC.1, IIIC.5: Technology Coordinating Committee Technology Plan). The TCC is co-chaired by the associate vice chancellor, workforce development and educational services and the director of information systems (IS). The committee is comprised of representatives from the colleges and centers of the District and represents all the various constituent groups. Fresno City College is well represented by faculty and administrators from several divisions, counselors, and lead classified professionals from the technology support area.

* Second and subsequent references to evidence will only include the evidence number.

Computer technology is available to students throughout the campus. Except for the Old Administration Building (OAB), which came online in 2011, every building with student classrooms has at least one room with computers available to students sometime during the school day. There are over 2,000 student lab workstations on campus. All have College network access, which includes internet access (IIIC.6: Fresno City College Campus Technology Plans). With over 25,000 students on campus, that is a ratio of less than one computer per 10 students.

In order to increase student availability, the College has created some wireless access points (WAPs) on campus for students with their own laptop, notebook, notepad, or smart phone, and has plans to increase the number of WAPs until the entire campus is equipped with wireless access (IIIC.6; IIIC.23: BUS/TSS Lab Advisory Meeting Agendas and Minutes). Plans for virtual desktop units (a monitor, keyboard, and a thin client) will reduce the cost of providing computer access to students and improve the computer to student ratio.

Many of the program reviews submitted by instructional units over the past four years have included requests to convert at least some existing classroom facilities into “smart classrooms” (IIIC.4). “Smart classrooms” include controls, sound, a projector, and ways to hook up multiple types of equipment. Using several funding sources (lottery money, Perkins and other grants, and other sources), many of these requests have been funded. As a result, 95 classrooms of the 165 classrooms on campus are now equipped as “smart classrooms” (IIIC.6). In addition, the 19 classrooms in the Business Education building are equipped with a computer, sound equipment, a projection system mounted in the ceiling, and a monitor that also functions as a smart whiteboard (IIIC.7: Technology Support Services Documents).

The College embarked on a student email communication project in fall 2009. The College reviewed various email systems available to educational institutions and decided upon the Microsoft LIVE@EDU system. As of June 1, 2010, the District implemented student email accounts provided through the Microsoft LIVE@EDU program (IIIC.30: SCCCD and FCC Websites/pages). Student accounts are created auto-
matically and synchronized with Microsoft and the College student information system within 24 hours of a student submitting an enrollment application.

To date, there are 100,000 plus accounts in the system. The student email system is mandated for all students unless a student chooses to communicate only via postal mail. Approximately 5,000 students have opted out of communication with the District through email. The estimated cost savings from this program is approximately $90,000 annually (IIIC.8: Postage Expense Comparison from 2009 to 2010).

The District implements the Enterprise Resource Planning (ERP) system based upon the Datatel Colleague platform to perform District business (e.g., purchasing, payroll, personnel, student information system (SIS) related communication, class scheduling, student enrollments, etc.). Classified personnel are responsible for data input to the District computer systems. Key District reports, statistics, and fact sheets are accessible to support data-driven decision-making through the Fresno City College website (IIIC.30). At the campus-level, the institutional research, assessment, and planning office utilizes data retrieved from Datatel to create reports related to enrollment management, FTES, student success, as well as other ad hoc campus data and reporting requests. The institutional research webpage offers access to data request forms, program review data, research briefs, and reports (IIIC.30).

The director of technology’s budget allocation is presented in the table below: (IIIC.7)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Director of Technology</td>
<td>% of College Budget</td>
<td>% of College Budget</td>
<td>% of College Budget</td>
</tr>
<tr>
<td>Salaries &amp; Benefits1</td>
<td>$1,667,367.00 2.59%</td>
<td>$1,720,573.00 2.58%</td>
<td>$1,593,490.00 2.39%</td>
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<tr>
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<td>$1,703,290.00 2.52%</td>
</tr>
</tbody>
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1. Object codes 91XXX, 92XXX, & 93XXX - Salaries & Benefits
2. Object code 94XXX - Supplies & Materials
3. Object Code 96XXX - Capital Outlay

Although the director of technology’s general fund budget has been reduced, there has been an effort to use alternative revenue sources. Funding for Blackboard has been shifted from general funds to lottery funds (IIIC.10: Fresno City College Decision Packages). Additional funding requirements have been supplemented through various grants and some purchases made through Perkins funds for vocational programs (IIIC.11: Grant Budget Reports). Lottery funding for software and equipment purchases has run between $350,000 and $500,000 per year (IIIC.10). Perkins funding is used to replace hardware in Business Education and Applied Technology. In 2010, Business Education spent almost $200,000 on computer replacement (IIIC.11).

Establishing accessible distance education learning environments is another major area of focus for the institution. In accordance with Section 508 of the U.S. Rehabilitation Act, the Distance Education Committee (DE) has been working to create processes and standards to assist faculty in meeting 508 compliance requirements. In spring 2010, the DE committee identified the need to perform a gap analysis to study 508 compliance (IIIC.12: Distance Education Committee Meeting Agendas and Minutes). The committee reviewed several standards and rubrics designed for distance education course evaluation. A draft rubric was created in spring 2010 for pilot review in fall 2010. Areas identified for review included accessibility, learner support, and implementation of instructional technology (IIIC.13: Distance Education Committee Documents).

In May 2010, the distance education coordinator presented to the DE committee the 508 Compliance
Transition Plan for Distance Education Courses (IIIC.12; IIIC.13). The plan outlines the need to identify and review currently active DE courses for 508 compliance. The plan also identifies the need to prioritize retrofitting materials, content, and design. The DE committee is currently working on a recommendation for implementing the 508 compliance plan.

Several faculty have made a concerted effort to establish 508 compliance. Faculty are currently utilizing tools such as Camtasia to perform closed captioning. Outside closed captioning vendors have also been made available through grant funding. Closed captioning of videos that are part of a class’s Blackboard web site is a very time-consuming activity. Technology solutions may reduce the time required. Researching and purchasing these technology solutions could make 508 compliance tasks more manageable. The DE committee has been discussing better ways to both monitor and support 508 compliance initiatives.

In spring 2010, the DE committee discussed the need to provide faculty with 508 compliance training and tutorials. The distance education coordinator has identified several online resources. Online resources include links to: Chancellor’s Office CCC Distance Education Access Guidelines for Students with Disabilities, Web Accessibility in Mind (WebAIM), and University of Wisconsin-Madison Web Accessibility 101 (IIIC.14: Distance Education Committee 508 Compliance, Online Resources).

Self Evaluation

The College is working toward meeting this standard. Technology planning has moved from reactive to proactive with the implementation of action plans and the TAC designated as a strategic planning advisory committee. As part of the mid-term report, recommendation 3.4, the visiting team recommended, “the College implement a technology plan that coordinates with the District technology plan, and is fully integrated with program review.” The Fresno City College 2009-2011 campus technology plan was updated in spring 2009 and submitted and reviewed by campus constituencies in spring 2010 (IIIC.6).

Funding remains an issue due to increasing technology demands from students and faculty. Increased levels of support for hardware replacement, software and hardware maintenance agreements, and technology support services personnel are necessary to meet the growing demand on campus technology support and expanding systems requirements.

In fall 2008, the DE committee set a goal to develop an administrative structure for distance education. The committee analyzed distance education administrative structures at other California community colleges and as developed an action plan as a result. The desired outcome is effective implementation of technology driven instruction at Fresno City College (IIIC.1: IIIC.13).

Planning Agenda

None.

IIIC.1a Technology services, professional support, facilities, hardware, and software are designed to enhance the operation and effectiveness of the institution.

Descriptive Summary

The Technology Support Services (TSS) Department is comprised of 16 professionals with various technical skills ranging from desktop support to high-end server administration and computer programming. TSS provides support for over 850 full-time faculty and staff workstations, 2,000 student lab workstations, and 60 servers (25 physical and 35 virtual). They also provide support and administration for the campus wireless network that is used in classrooms and public student areas, as well as offices and meeting spaces.

Technology request forms (TRF) and the TSS help desk track day-to-day support requests. Work orders are entered into a database program called Track-it and assigned to technicians based upon the division or administrative area making the request. TSS has responded to 4,889 work orders in 2008, 6,681 in 2009, and 7,107 in 2010 (IIIC.7). Technology request forms are required for all technology purchases on campus. The TRF process was instituted six years ago in order maintain technology standards on campus so
that technology resources could be maintained and supported by the campus technology staff (IIIC.7). It has also assisted in streamlining the ordering process and reducing costs by combining technology orders when possible.

The campus network backbone is a hybrid 24 single-mode, 12 multi-mode fiber optic cable design in a star topology centered in the main cross-connect located in the Media Center. Each building has a cross-connect on every floor (IIIC.29: LAN/WAN Configurations and Drawings). With few exceptions, all network wiring on each floor terminates in the cross-connect on that floor. The first floor cross-connect feeds the other floors with fiber optic cable. All copper wiring in the network is Category 6 wiring, which allows for gigabit speed to the desktop.

The campus selected Cisco equipment for the network infrastructure. There are two 6509 chassis-based switches used for the network’s core and approximately 130 distribution / access-layer switches on campus. The switches are set in a redundant fashion so that a network failure on one core will not result in a campus wide network failure. In 2006, Measure E bond funds were used to add an emergency generator and an uninterrupted power supply (UPS) for the main cross-connect (IIIC.9: Measure E Website). This resulted in a 100 percent uptime for the campus main cross-connect.

Campus network cross-connects use a Cisco distribution switch to down-level access switches. The distribution switch acts as a distribution or access switch depending on system needs. The access layer switches are getting old and most will be replaced over the next five years with funds coming from a Title V Grant (IIIC.16: Title V Grant). All but a few switches will be at the end of life and end of support by 2015.

Large uninterrupted power supplies (UPS) units are used in the cross-connects to provide additional up time for the network switches. This is important as the campus moves to Voice over Internet Protocol (VoIP) in the near future. The campus recently purchased monitoring modules for the UPS units to allow notification of a UPS failure or battery cell loss. The network monitoring solution allows TSS to be proactive in the maintenance and support of the campus network (IIIC.15: Orion Network Performance Monitor). Most of the UPSs in the cross-connects need to have the batteries refreshed. This will be addressed through future decision package requests from TSS.

The College recently applied for and received a new Title V grant. One of the aspects of that grant will be the implementation of a virtual desktop infrastructure (VDI) and application virtualization. This will provide students who have limited computer resources at home to be able to use a web browser and have access to software they typically couldn’t afford. The College will encourage students to access these technologies in hopes of increasing student success. The grant also provides for a new technology position; a systems technical resource analyst. The main function of this position will be to manage and maintain the campus virtual infrastructure. The position will be institutionalized after the grant ends (IIIC.16).

As the campus works towards embracing VDI for students, TSS will also consider virtualizing staff and faculty desktops. Some of the intended consequences of moving towards desktop virtualization technology will be a higher level of security for data (it never leaves the data farm) and the freeing up of staff to meet other demands. Rather than spending hours to re-image a computer lab, upgrade desktop operating systems, or install office suite applications, staff can spend time working on new images that will change for the end user by simply logging off and then logging back on to a computer resource or terminal client. What used to take considerable time could be done much quicker and efficiently. The time saved can be spent on other TSS projects.

Major upgrades have taken place in the main computing center. A virtual server environment is being upgraded and expanded in anticipation of future growth. A new storage area network (SAN) and new host servers (Dell R910s) for the virtual environment have been purchased and implemented. The campus has been involved in virtualization technologies for approximately four years. VDI installation will be an expansion of those services and will create a more efficient and effective means of student support and it is anticipated that desktop virtualization will be extended to faculty and staff in the future.
The College contracts with the external vendor Blackboard for its primary course management software (IIIC.17: Contract with Blackboard). Blackboard provides 24/7 technical support for faculty and students for distance education (DE) courses. In addition, Blackboard is used by face-to-face (F2F) instructors who may wish to provide online access to primary course documents, such as syllabi, schedules, links, or other resources to assist students and enhance courses. Any faculty who wish to explore converting a current face to face class to a DE class must first obtain Curriculum Committee approval. In addition, faculty must have completed an approved online teaching program to teach DE classes. If faculty wish to design a new class as a DE class, then they must submit the DE request when submitting the rest of the course proposal to the Curriculum Committee. The responsible division dean and vice president of instruction must approve all DE course offerings (IIIC.13).

Blackboard is responsible for providing reliability, disaster recovery, privacy, and security (IIIC.17). The College does not yet have an overall disaster recovery plan; however, the TAC is working on the data and communication portions of a plan (IIIC.2; IIIC.18). As the coordination and implementation of Voice over Internet Protocol (VoIP) on campus continues, TSS is developing redundant systems for voice and data networks. TSS is also working in coordination with TAC and District IS to co-locate equipment in each other’s facilities to provide a disaster recovery solution. Coordinated purchases of the same hardware and software platforms including servers, storage area networks (SAN), and enterprise backup software have been done between the District and College to make disaster recovery activities more cohesive. Implementation of these resources should be completed in summer 2011.

Self Evaluation

The College meets the standard. The campus data center has recently received upgrades to the virtual environment (three new servers) and storage area network (SAN) and an upgrade from an HP MSA 1500 to an EMC CX-240. The data center is supported by an emergency generator and a full room Uninterrupted Power Supply (UPS) from APC. With the recent award of a Title V Grant, TSS will be looking at expanding virtualization offerings to include virtual desktop infrastructure (VDI) and application virtualization to provide additional resources for students working off campus (IIIC.16).

Technology plays a prominent role on campus and adequately meets the needs of the College. The TAC meets biweekly, develops technology action plans as needed, and submits these plans to the strategic planning council (IIIC.18).

Technologies that need updating include the wireless network system. The current system is approximately four years old and operates using older 802.11a b/g wireless standards. The College has not had the funds update the system to the new 802.11n standard which would improve connectivity for students, faculty, and staff. Furthermore, with the increased usage of the wireless system due to the tremendous growth in personal wireless devices, the campus needs to evaluate the current system to determine if it can be expanded to meet these demands. Funds to expand or replace the current system will need to be identified.

Planning Agenda

The Technology Advisory Committee and Technology Support Services will evaluate the wireless network system and make recommendations for upgrades/replacement in the next College technology plan.

IIIC.1b The institution provides quality training in the effective application of its information technology to students and personnel.

Descriptive Summary

Technology training for students, staff, and faculty is addressed at many levels. Students are trained in the College’s academic and occupational/vocational programs (IIIC.19: Fresno City College Catalogs). They also receive support and training through computer labs that are open for walk-in usage. The student computer lab in the Learning Resources Center is a high usage lab because it is open to all students. The computer lab located in the library is also open
for student use, and library personnel are available to answer questions and provide technical support. Students often receive further training from faculty, even in non-technology-based classes, on topics such as using classroom computers for internet research, navigating Blackboard, and preparing PowerPoint presentations. Short-term training for students is accomplished by teaching and lab assistants in open labs, by tutorial staff, or by Blackboard tutorials. Computer literacy is a graduation requirement for all students (IIIC.19).

Classified staff training is offered throughout the academic year. This is addressed primarily by classified professionals and the Classified Senate. Classified professionals’ primary training focuses on the Microsoft Office Suite although they do address other technology areas. Classified Senate offers training that is more specialized to the College’s processes, such as Datatel.

Classified professionals generate possible training topics based on feedback received from past training evaluations, as well as supporting newly implemented campus technology. This information is then gathered and presented to the Classified Professionals Steering Committee for review and a final decision. The training calendar is set a year in advance and training is scheduled for the third Thursday of each month. Classes are taught by faculty, staff and the director of technology. Adjustments are made depending upon classroom and/or instructor availability. Classified staff has first priority but faculty and administrators are also welcome (IIIC.20; Classified Professionals Technology Training; IIIC.30).

Classified Senate’s training schedule is established on a more informal basis. During the summer months, Classified Senate generates workshop ideas and identifies dates for the coming year. Classified Senate focuses mostly on what classified staff has requested in past workshop evaluations (IIIC.20). As with classified professionals’ training sessions, classified staff has priority in the workshops but faculty and administrators are welcome to attend.

Technology support staff are usually trained by bringing outside industry professionals to campus. Technical training in the last five years included: SABO ticketing systems, SQL, Cisco, Exchange 2007, Windows Vista and Server 2003, Sophos Antivirus and email appliance, KACE, and Altiris imaging/deployment software. Technical support staff also attends offsite training by attending conferences and participating in intensive one-week training workshops.

The College had a coordinator of academic computing position that was recently reassigned due to budget constraints. The coordinator of academic computing organized an annual Summer Institute during the week following the end of the spring semester (IIIC.21: Faculty Technology Training). This training event was open to any District employee, with faculty, then staff from Fresno City College having priority for over-filled sessions. The sessions were determined by a faculty survey in the early spring. Sessions were either taught by volunteer faculty and staff or by professional trainers. Each session was evaluated. Funding was a combination of staff development and decision package funds. The Summer Institute was cancelled due to lack of funding in 2010.

Faculty are offered training classes on flex day at the beginning of each semester. Flex day training consists of a series of workshops that concentrate on the most critical software used by instructors, namely MicroGrade and Blackboard. Innovative technology sessions and distance learning special interest group meetings are also held. Past technology-related topics have included workshops on: ARTstor, Blackboard, CurricUNET, Epsilen, Micrograde Online, and Wimba (IIIC.21).

Faculty training is also available in the Teaching and Learning Center (TLC) training room from the distance education/information technology support technician (DEITST), the director of technology, and subject matter experts among the faculty and staff. Workshops are offered throughout the semester (IIIC.21; IIIC.27: Academic Senate’s Instructional Technology Committee Meeting Agendas and Minutes). Faculty can choose from a variety of classes, focusing primarily on MicroGrade, WebAdvisor, and Blackboard, but also including training for other instructional software. These classes are offered at various times throughout the semester. A calendar for each semester is available on the College website.
However, due to scheduling conflicts and a lack of dedicated staff for training there is often a low number of attendees.

In an effort to increase technology training opportunities, in spring 2011 TAC reviewed and compared three options of online, self-paced training software: Lynda.com, Atomic Learning, and Virtual Training Company (VCT) (IIIC.2; IIIC.18). TAC anticipates that more staff, faculty, and administrators will take advantage of a self-paced training option because of the convenience that online training provides, as well as the breadth of available course offerings.

The College’s distance education guidelines adopted by the Academic Senate stipulate that faculty will have appropriate training in the techniques of distance education instruction before teaching a distance education course (IIIC.13). Faculty who wish to teach online are encouraged to complete an online instructor training program such as the one offered by @ONE. Training topics provided by @ONE include: introduction to online teaching and learning, creating accessible online courses, course management training, building online community with social media, designing effective online assessments, and completion of an online practicum (IIIC.21). External programs such as @ONE have been extremely useful; however, the limited availability of training sections is a concern.

In 2008, the College developed and implemented a 9-unit Online Teacher Training Program (OTTP). The program consisted of eight courses, which covered an introduction to online teaching, beginning blackboard course design, accessibility for course materials, introduction to library services for online students, introduction to tutorial services for online students, introduction to student services for online students, online assessment, and using media for online delivery of materials (IIIC.28: Online Teacher Training Program). Curriculum was developed and approved by the Curriculum Committee as independent studies courses. All courses were delivered as distance education courses. The program was implemented as a cohort structure. Approximately fifty to sixty instructors completed the program. In 2009, the program was discontinued due to budget constraints. The Distance Education Committee recommended in their 2009-2010 year-end report submitted to the Strategic Planning Council that the OTTP be reinstated (IIIC.13).

Self Evaluation

The College meets this standard. Efforts are made by the majority of the campus community to remain informed of the latest technologies, to integrate them into institutional practices, and to communicate these practices through ongoing pre-announced training opportunities to all constituents. However, elimination of the coordinator of academic computing position and cancellation of the Summer Institute has impaired the ability to meet the training needs of the faculty.

The College had hoped to reinstate the Summer Institute in spring 2011 however, the coordination and implementation could not be accomplished in the time allowed given the director of technology’s other project priorities. The Summer Institute has been very popular amongst faculty in the previous years. Attendance for the previous years was 139 in 2007, 156 in 2008, and 162 in 2009 (IIIC.7).

Although no formal training is designed specifically for administrators, all training provided to faculty and staff are open to administrators. Additionally, enterprise level software training is available upon request from the District information systems support staff.

Planning Agenda

The College will provide online training for all staff, faculty, and administrators that can be accessed on or off campus.

IIIC.1c The institution systematically plans, acquires, maintains, and upgrades or replaces technology infrastructure and equipment to meet institutional needs.

Descriptive Summary

Campus technology is guided by TAC’s vision statement and principles which were approved the College constituencies (IIIC.6). All campus constituencies are represented on TAC. The by-laws and operating
agreement were originally approved in fall 2007 and are reviewed annually (IIIC.18).

The TAC is responsible for developing the campus technology plan. The proposed plan is then presented to the campus for review and approval. Once approved the College operates under the plan (IIIC.6). In developing a technology plan, the TAC makes inquiries of the various constituent groups, as well as faculty and staff to determine their needs. In addition, any group with additional technology needs may request technology via the action planning process. The action plan is then submitted to the SPC with the TAC recommendations. Those action plans may be part of a program review, or may be submitted outside of the program review cycle (IIIC.1; IIIC.18).

For computer hardware, the current strategy is to utilize the guidelines established by the state chancellor’s office with modification for various levels of computer processing demand and average daily usage. Replacement will follow a three to five-year cycle with the highest demand/use machines being replaced every three years. Those not meeting the criteria would be on a four to five-year cycle, also depending on overall processing demand and usage (IIIC.6).

With the current budget issues, the computer replacement cycle through decision package requests has been temporarily suspended. Other funding sources may help to offset the decision package funds, but these sources have also been impacted by the budget crisis. TSS is exploring the use of virtualization technologies as a way of extending the hardware replacement lifecycle. Desktop virtualization can help reduce hardware replacement of PCs with thin-client terminals, which cost one-third the price of a PC and use one-fourth the power.

TSS has recommended through program review that a line-item budget for technology expenditures be established for the purpose of better tracking technology purchases (IIIC.18).

Assessments are conducted periodically to determine how well technology needs are being met. The results of these surveys are considered for campus wide technology. For example, at the end of the 2009-2010 fiscal year, the Strategic Planning Council allocated remaining College funds to technology needs. The campus purchased 300 desktop computers for staff and faculty and upgraded the campus storage area network and virtual server hosts. These needs were at the top of the priority list in the TSS program review and the campus technology plan (IIIC.6, 7).

Fresno City College is represented on the State Center Community College District Technology Coordination Committee (TCC). The TCC is composed of constituents from the Colleges, Centers, and District. This group facilitates communication and coordination of technology efforts throughout the District.

**Self Evaluation**

The College meets this standard. This planning method is about five years old and not everyone is aware of all procedures. Much of the general campus wide technology is implemented because of needs identified at a higher level and then implemented. This is done without involvement in the planning process. As time goes on the process will become a natural part of the campus culture.

The infrastructure has not been included in the planning and budget process. There is not a plan to allocate funds to upgrade pieces of the infrastructure as they wear out or become obsolete. The College has a policy for replacing the computers in offices, labs, and classrooms; however, there is not a policy for replacing the network equipment that supports all the computers. Network infrastructure components such as servers, routers, switches, etc. must be replaced periodically, and they are often expensive items.

**Planning Agenda**

The College will include a recommendation for technology infrastructure replacement as part of the next technology plan.
IIIC.1d The distribution and utilization of technology resources support the development, maintenance, and enhancement of its programs and services.

Descriptive Summary

The distribution and utilization of technology resources is determined by several sources: the TAC, documented needs in program reviews and in action plans submitted to the Fresno City College Strategic Planning Council (SPC) (IIIC.1; IIIC.2; IIIC.4; IIIC.18).

The TAC develops, writes, evaluates, and updates the Fresno City College campus technology plan (IIIC.6). Additionally, the TAC evaluates, reviews, and advises in planning for acquisition, maintenance, and use of current and future technology throughout the College. The committee submits policy recommendations that are strategic in nature to the SPC, operational in scope to the College president, and acts as an advisory board to the TCC. In addition, the committee also recommends training activities that assist College staff with technology use (IIIC.18).

When a program submits a program review, requests for additional technology with justification are included. When the program review is accepted by the Fresno City College Program Review Committee, technology requests are forwarded through the Strategic Planning Support Team (SPST) to the TAC. The TAC recommendations are then forwarded to the SPC for action. The chair of the TAC is also a member of the Program Review Committee (IIIC.1; Program Review Committee Documents).

Technology requests that occur outside the program review cycle are accommodated through the submission of an action plan. Action plans are submitted through the SPST to the TAC. The TAC forwards their recommendations to the SPC for action resulting in a technology priority list maintained by the TAC (IIIC.6; IIIC.18). When the Budget Committee releases funds to the TAC, purchases are made according to the priority list.

For technology that is funded outside the general budget (one time grants or on-going grants such as Perkins Funds), the requesting organization submits a technology request form detailing their request. TSS personnel evaluate the request and make a recommendation. This prevents organizations from purchasing several different platforms, which places an undue burden on support infrastructure.

Self Evaluation

The College meets the standard. District and College administration have stated strong support for technology integration. The planning process is effective, although relatively new to the College. Needs are being identified and justified. The current budget situation has resulted in postponing purchase of lower priority items. When money is available, technology has been given high priority.

Planning Agenda

None.

IIIC.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.

Descriptive Summary

The College has integrated technology planning into the campus planning process. Since the last accreditation the campus has made significant progress toward institutionalizing a planning process through the SPC and the advisory committees (i.e.: Technology Advisory Committee, Distance Education Committee, Facilities Committee, Budget Advisory Committee, etc.). The committees have provided vehicles from which campus issues can be raised and resolved through the action planning process (IIIC.1).

The director of technology support services has operational responsibilities for all campus technology. All requests for technology purchases must be approved by the director and be accompanied by a technology request form (TRF) and a requisition before a purchase order will be created (IIIC.6; IIIC.7). This process assures that technology is not implemented
that cannot be supported or maintained by the technology department. Changes in the use of technology or the implementation of new technologies must be identified and supported in curriculum review and program review for the various departments and divisions, both administrative and academic (IIIC.4).

The director of technology chairs the TAC. He is also the director of technology support services (TSS) on campus. The director reports directly to the College president and is a member of numerous campus planning subcommittees: the Budget Advisory Committee, President’s Advisory Council, Distance Education Committee, plus others (IIIC.7). His membership on these various campus-planning committees provides a level of continuity for campus technology.

As part of the mid-term report, recommendation 3.4, the visiting team recommended, “the College implement a technology plan that … is fully integrated with program review.” The campus has fully integrated technology planning within the program review process; the coordination with the District technology plan has been more difficult.

The director of technology is a member of the Program Review Committee and as such, provides feedback on technology to academic and administrative programs going through the program review process. TSS also went through the program review process in 2009 (IIIC.7). A complete report was presented including a survey done related to the services provided by the TSS. Additional surveys have been conducted on campus, which reflect current technology uses and future technology needs (IIIC.7; IIIC.18). Survey data, program review results and action plans have all been used when determining funding priorities for technology. In 2010, these data sources were used to purchase over a million dollars in technology upgrades for the campus (IIIC.1; IIIC.2; IIIC.24; Strategic Planning Council Meeting Agendas and Minutes; IIIC.25).

The formalized coordinated effort between the District and the College is still a work in progress. The District wide technology committee – the TCC – is chaired by the associate vice chancellor, workforce development and educational services. A permanent person has not filled this position in many years and as such, there has not been a strong advocate at the District level for technology planning.

Recently, the District hired the College Brain Trust, a group of community college professionals to assess the District’s current organizational structure and to make recommendations to address issues (IIIC.26: College Brain Trust Recommendations). One of the deficiencies identified was the lack of a cabinet level position to be responsible for District information systems and technology. With the vacancies in the vice chancellor, finance and administration and the associate vice chancellor, workforce development and educational services, the District has an opportunity to address the organizational structure and to move forward in alleviating the lack of strategic planning as it relates to technology.

**Self Evaluation**

The College is working towards meeting this standard.

The College has successfully incorporated survey data, program review results and action plans into technology planning. By the director of technology having a voice on every major planning sub-committee of the SPC and the incorporation of processes and procedures for the campus to follow, resources allocated for technology are spent in an efficient and effective manner. Due to District budgetary constraints and the fiscal crisis, the expansion in the growth and implementation of newer technologies on campus will present challenges.

The mid-term report also recommended “…the College implement a technology plan that coordinates with the District technology plan….” This has been somewhat problematic from a campus/district office implementation perspective. As the planning and coordination processes are cyclical in nature, it is not clear whether District planning directs the College planning or the College planning directs the District planning. As the various constituents from the District, Colleges, and Centers meet and coordinate their efforts, the plans for each area evolves, issues are resolved, and progress is made. However, there is not a clear overarching plan that is developed, implemented, completed, and evaluated based on
the combined needs of the Colleges, Centers, and District. This is due mainly to the turnover in the associate vice chancellor, workforce development and educational services, who chairs the TCC. District wide strategic technology planning has been remiss at best due to the infrequency of TCC meetings and the lack of District coordinated planning. Meetings that have been called have been held on an infrequent basis, which has resulted in a lack of strategic, coordinated planning between the District and the campuses. Planning that has taken place between the campuses and the District has been done on a more informal basis. To a certain extent, this has been successful but is not sustainable.

District information technology is primarily tasked with maintaining the computer system (Datatel) that runs the student information system (SIS), as well as payroll, personnel, and purchasing systems. The current Datatel version is based on an older database platform. Future technologies (i.e.: web portals, single sign-on capabilities, customized application development, etc.) are severely limited by such an antiquated system. It is imperative that the District assess and implement a plan to move from the current version of Datatel to a more modern, SQL based version of the software. Until that happens, the District and campuses will be limited in implementing more progressive technology solutions. This will be a major issue for the TCC in the future.

**Planning Agenda**

The College will work with and support the District in updating the 2001 District Technology Plan into a fully integrated District wide technology model.
## Evidence for Standard IIIC

<table>
<thead>
<tr>
<th>IIIC.1</th>
<th>Strategic Planning Council Documents</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIIC.2</td>
<td>Technology Advisory Committee Meeting Agendas and Minutes</td>
</tr>
<tr>
<td>IIIC.3</td>
<td>Program Review Committee Agendas and Minutes</td>
</tr>
<tr>
<td>IIIC.4</td>
<td>Program Review Committee Archives</td>
</tr>
<tr>
<td>IIIC.5</td>
<td>Technology Coordinating Committee Technology Plan</td>
</tr>
<tr>
<td>IIIC.6</td>
<td>Fresno City College Campus Technology Plans</td>
</tr>
<tr>
<td>IIIC.7</td>
<td>Technology Support Services Documents</td>
</tr>
<tr>
<td>IIIC.8</td>
<td>Postage Expense Comparison from 2009 to 2010</td>
</tr>
<tr>
<td>IIIC.9</td>
<td>Measure E Web Site</td>
</tr>
<tr>
<td>IIIC.10</td>
<td>Fresno City College Decision Packages</td>
</tr>
<tr>
<td>IIIC.11</td>
<td>Grant Budget Reports</td>
</tr>
<tr>
<td>IIIC.12</td>
<td>Distance Education Committee Meeting Agendas and Minutes</td>
</tr>
<tr>
<td>IIIC.13</td>
<td>Distance Education Committee Documents</td>
</tr>
<tr>
<td>IIIC.14</td>
<td>Distance Education Committee 508 Compliance, Online Resources</td>
</tr>
<tr>
<td>IIIC.15</td>
<td>Orion Network Performance Monitor</td>
</tr>
<tr>
<td>IIIC.16</td>
<td>Title V Grant</td>
</tr>
<tr>
<td>IIIC.17</td>
<td>Contract with Blackboard</td>
</tr>
<tr>
<td>IIIC.18</td>
<td>Technology Advisory Committee Documents</td>
</tr>
<tr>
<td>IIIC.19</td>
<td>Fresno City College Catalogs</td>
</tr>
<tr>
<td>IIIC.20</td>
<td>Classified Professionals Technology Training</td>
</tr>
<tr>
<td>IIIC.21</td>
<td>Faculty Technology Training</td>
</tr>
<tr>
<td>IIIC.22</td>
<td>Program Review Committee Documents</td>
</tr>
<tr>
<td>IIIC.23</td>
<td>BUS/TSS Lab Advisory Meeting Agendas and Minutes</td>
</tr>
<tr>
<td>IIIC.24</td>
<td>Strategic Planning Council Meeting Agendas and Minutes</td>
</tr>
<tr>
<td>IIIC.25</td>
<td>President’s Advisory Council Meeting Agendas and Minutes</td>
</tr>
<tr>
<td>IIIC.26</td>
<td>College Brain Trust Recommendations</td>
</tr>
<tr>
<td>IIIC.27</td>
<td>Academic Senate’s Instructional Technology Committee Meeting Agendas and Minutes</td>
</tr>
<tr>
<td>IIIC.28</td>
<td>Online Teacher Training Program</td>
</tr>
<tr>
<td>IIIC.29</td>
<td>LAN/WAN Configurations and Drawings</td>
</tr>
<tr>
<td>IIIC.30</td>
<td>SCCCD and FCC Websites/pages</td>
</tr>
</tbody>
</table>