Standard III.C. 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.

III.C.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.

Descriptive Summary

Technology is a critical and core component of Santa Ana College (SAC) and is essential to how the college supports student learning programs and services. One of the defining elements explicitly stated in SAC's mission statement is the use of technology to assist in meeting the needs of the college's diverse student population and community. In addition, technology is one of the six Vision Themes, all of which define the goals of the college (IA-1).

The district and colleges have two general purpose networks: one for instructional network services and one for administrative secured network services. Technology equipment housed in instructional computer labs, classrooms, and the library are part of the instructional network. Services such as purchasing, general ledger, and human resources, are part of the non-instructional administrative network. The administrative network is protected by standard firewall and security protocols. Procedures are in place to maintain security updates on servers and email services.

Santa Ana College utilizes technology in a variety of forms, both software and hardware, to support the needs of learning, teaching, college-wide communications, research, and operational services. Where possible, technology services have been put in place in order to enhance the operation and effectiveness of the institution. For example, faculty have use of the learning management system Blackboard for online and hybrid classes and WebAdvisor for maintaining course rosters and grading. Both the college's Academic Computing Center and Nealley Library have had their student desktop computers recently upgraded with new technology, and administrative offices are equipped with the necessary hardware and software to support day-to-day business needs.

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

Descriptive Summary

To better assist SAC in meeting its goal for effective and efficient use of technology in supporting the needs of all students, faculty, and staff, a key participatory governance committee has been established: SAC Technology Advisory Committee (SACTAC). Members of the committee include students, faculty, classified staff, and administrative staff (IB-17). As a participatory governance committee, SACTAC convenes monthly, and when and where necessary, reports and makes recommendations to the College Council.

SACTAC serves a number of important purposes:

- o Evaluates, prioritizes, and recommends various forms of technology that support all four major branches of the college: Academic Affairs, Student Services, Administrative Services, and the School of Continuing Education.
- o Where necessary, creates technologically-focused work groups and/or sub-committees as appropriate.
- o Develops, maintains, and evaluates the college's overall Technology Plan.
- o Serves as a connecting entity to the district's Technology Advisory Group and the SAC College Council

Teaching and Learning

With regard to serving the needs of student learning and teaching, SAC demonstrates this in a number of ways. For example, the Nealley Library provides resources, services, and facilities that support student learning and the mission of the college. Among these library resources are DVD's, CD's, and a variety of periodical databases providing students and staff with 24/7 remote access to over 18,000 full-text periodicals and 22,000 e-books (IIIC-1). In addition, the Nealley Library provides Internet access to all patrons at several public access workstations. Library online researching tools are available to all enrolled students via district provided wired or wireless access. Whether the students check out library laptops, bring their own devices (BYOD), or connect from home, researching of materials is optimally available.

The college's Learning Center (LC), located in Dunlap Hall (D-301), provides students and faculty an array of resources, including technological, that assist students in acquiring skills and developing strategies to promote their academic success (IIIC-2). All services are free to SAC students, and appointments are not necessary. (Please note: During renovation of Dunlap Hall commencing summer 2014, the LC will be located in the Johnson Center U-201.)

In the college's Academic Computing Center (ACC), an array of technological services and resources, hardware, and software, are made available free to all SAC students (IIC-14). The educational software available in ACC allows students who are not able to utilize special purpose labs to use the ACC during its operational hours. As with the LC, regardless of the area of study or discipline a student is enrolled in, ACC resources are available to all students.

Other examples of technology infused resources and computer labs include:

- o Admission and Records
- o Academic divisional labs
- o Employee (faculty, classified, manager) offices
- o Divisional Offices
- o Career/Job Resources Center
- o Counseling
- o Transfer Center
- o MESA
- o Modern Languages/Speech Lab
- o Math Center
- o Student Services

There are numerous other campus technological services and resources available to SAC enrolled students. The following are representative of these services and resources: Disabled Students Programs and Services (DSPS); Assistive Technology Center (ATC); Career and Job Resource Center (CJRC); the Success Center; the School of Continuing Education (SCE); and Distance Education (DE) Department (IIIC-3).

Academic divisions and their respective departments also offer to students and faculty specialized technology appropriate for their area of study. Examples include Accounting, Paralegal, Engineering, Global Business Entrepreneurship, Business Applications, Nursing, Kinesiology, Math, Modern Languages, Computer Science, Communications and Media Studies (IIIC-4).

An online survey was administered to students in fall 2013 (IIIC-5). From the 923 responses, 93 percent were from Santa Ana College. The surveys were administered at Santa Ana College's Nealley Library and Academic Computing Center and the School of Continuing Education Community Learning Center. One finding was that a large number of students access the college through their mobile devices. It was also evidenced that 29 percent of the students are using a desktop computer. Fifty-three percent of the students rate college technology facilities as "excellent." Comments recommending improvement include "faster computers" and more "access."

College-Wide Communications

With regard to college-wide communications, research, and operational systems, there are multiple avenues that SAC uses to meet these needs. Below is a brief table of some of the key technologies and/or committees that directly address these requirements (IIIC-6).

Application / Resource	Committee
Campus Wireless Network	SACTAC (Technology Advisory Committee)
Enterprise Resource Planning (Colleague)	WAG (Web Advisory Group)
Curriculum Development System (CurricUNet)	TAG (Technology Advisory Group)
VoIP Communication System (CallManager)	Budget and Planning Committee
Enterprise Management System (iGreenTree)	
Enterprise Web Content Management (SharePoint)	

The college provides a variety of technology services, professional support, facilities, hardware, and software designed to enhance the operation and effectiveness of the institution. District Information Technology (IT) staff provides technology services and professional support to the college (IIIC-7). Following is a table of District IT staff positions that directly support these two areas:

Position	Number of Staff in that Position
Director	1
Network Specialist II	1
Technical Specialist III	3
Technical Specialist II	3
Technical Specialist I	5
Electronic Computer Technician	1

When not physically located at SAC, faculty, staff, and students have access to the district's Help Desk. The Help Desk is available Monday through Friday from 7:30 a.m.

to 5:00 p.m. and can be reached either through email or by telephone. In addition, many of the academic programs/departments at the college have dedicated instructional assistants who provide support primarily to students and faculty (IIIC-8). For example, the Math Center, the Learning Center, and the Academic Computing Center each utilize instructional assistants specifically to assist students and faculty.

Hardware and software that enhance the operation and effectiveness of instruction are in place at the college. Each of the following areas and locations provide necessary hardware and software that support their areas of responsibility: President's Office; Administrative Services; Academic Affairs; Business Division; Digital Media Center (DMC); Fine and Performing Arts Division; Humanities and Social Sciences Division; Human Services and Technology Division; Kinesiology Division; Science, Mathematics and Health Sciences Division; Student Services; Student Affairs; and the School of Continuing Education Division (IIIC-9).

Many of these areas have hardware and software specific to the functions of that area or department. For example, Nursing, Accounting, Computer Science, Business Applications, among other academic programs utilize technology in delivery of program content. In total, SAC has over 2,000 computing hardware devices installed across campus, each with the particular software for their purpose (IIIC-10).

Self Evaluation

Santa Ana College meets this standard. The college provides technology that is designed to meet the needs of learning, teaching, college-wide communications, research, and operational systems. The technology services, professional support, facilities, hardware, and software deployed at SAC enhance the operational effectiveness of the institution. The college supports technology that both directly and indirectly relate to instruction. All offices have networked computers and printers. A district-provided Help Desk is available to assist faculty and staff with technology issues and problems. In addition to the main campus, there are multiple remote locations, such as the DMC and SCE, where students and faculty can access and utilize both hardware and software.

Actionable Improvement Plans

In order to optimize accessibility for students at the School of Continuing Education, an open-entry computer lab should be made available.

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

Descriptive Summary

The college provides quality training in the effective application of technology to faculty, staff, and students through a number of venues. First, in the week prior to the beginning of a regular fall and spring semester, the college provides selected workshops and activities that relate directly to the effective application of technology. This collection of workshops and activities are formally referred to as "Flex Week" (IIIC-11).

Flex Week planning takes place well before the beginning of a regular semester. Flex Week workshops and activities, while primarily focused on instruction and faculty, are available to all college staff. Particularly as related to instruction, technology focused Flex Week training often addresses such topics as distance education pedagogy, the

proper and effective use of software tools such as Turnitin, Blackboard, Camtasia, CC Confer, YouTube video captioning, and instructional applications such as word processing, mobile technology, and other internet-related resources (IIIC-12).

Beginning in 2011, the college instituted a New Faculty Institute (IIIC-13). As part of the New Faculty Institute, training is provided on use of campus email, WebAdvisor, Nealley Library services, student computer lab facilities such as the Academic Computing Center, Math Center, Learning Center, and other technology-related resources. Centennial Education Center has its own Flex Week and professional development coordinator and activities (IIIC-14).

Distance Education

As a college-wide service available to students and faculty from all academic disciplines, Distance Education has been reorganized under the Office of Academic Affairs. The Distance Education Coordinator reports directly to the Vice President of Academic Affairs.

During a regular semester (fall and spring) the college's Distance Education department provides technology training opportunities to faculty that address such topics as Webcams and Microphone Headsets; Wacom Table; Camtasia Studio 8; Camtasia Relay; Adobe Acrobat 10 Pro; Adobe Photoshop Elements 7.0; Articulate Storyline; Dragon Naturally Speaking; and Lynda.com (IIIC-15). Distance Education also provides assistance to faculty and students on a "drop in" basis. Workshops at Centennial Education Center (CEC), the main campus of SCE, include helping students access WebAdvisor accounts, BYOD (Bring Your Own Device), and Open Source Resources.

A survey, conducted by the RSCCD Research Department prior to the beginning of the fall 2012 semester, found that 41 percent of faculty respondents desired more training on integrating new technologies into classroom instruction (IB-5).

On an ad hoc basis, technology training is also provided to campus staff, particularly administrators and classified staff, on such technology tools as Datatel, CurricUNET, iGreentree, Enrollment Management, and other areas that directly impact departmental and divisional efficiency and effectiveness (III-16).

Commencing the 2012 academic year, the college made Business Seminars available to classified staff at no cost. These seminars are provided by the academic Business Division's Public Service Institute (PSI). Seminars cover a range of topics including Microsoft Access, Excel, Word, as well as Adobe Photoshop and Adobe Acrobat. The seminars are typically either eight or sixteen hours in length, and so can be accomplished in a relatively short period of time (IIIC-17).

Students have various types of technology training made available to them from several locations on the main campus including the Math Center, DSPS Center, Nealley Library, and the Learning Center (IIIC-18). Student technology training is also available at the college's SCE (IIIC-19).

Self Evaluation

Santa Ana College meets this standard. Technology training for faculty, staff, and students is an ongoing activity at SAC and at SCE. The college is working on formalizing

more training opportunities, including the use of technology, particularly for faculty and students. The administrator who oversees the Academic Computing Center is in active dialogue with the faculty coordinator of the Academic Computing Center regarding technology workshops that focus on students. This type of workshop was provided in previous years when the college's budget was more robust.

Actionable Improvement Plans

The college will continue to discuss, pursue, and implement a more formalized training program for faculty, students, and staff. In addition, the Academic Computing Center will once again offer students optional training classes that focus on various technology skills at no cost to the student.

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

Descriptive Summary

In the past, the acquisition, maintenance, and upgrades/replacement of technology equipment and infrastructure were the responsibility of the district's Information Technology Services (ITS) department and SAC. Presently, SAC and its sister college, Santiago Canyon College (SCC), are each actualizing a new budget allocation model that places much of the responsibility for technology equipment and infrastructure upgrades and maintenance at each of the campuses rather than at the district. This process is now operative and functioning as intended at SAC. Network and administrative systems support and maintenance will remain the responsibility of district ITS. Support for all SAC technology computers and peripherals in offices and classrooms will also remain the responsibility of district ITS (IIIC-20).

Media equipment is updated and replaced as funds allow. The college's Media Services department maintains an updated inventory of all equipment placed in mediated classrooms (IIIC-21). Classroom and office technology are also updated and replaced as funds allow. Divisions and departments, as part of their planning and budget process, utilize Resource Allocation Requests (RAR's) to identify needed technology for their respective areas (IIIA-158). Such technology requests are then evaluated and prioritized by SACTAC.

Over the last several years, the college has depended to a large extent on external funding and grants to cover the cost of maintaining and replacing technology including hardware, software, and peripherals. For example, the Business, Fine and Performing Arts, and Human Services and Technology divisions all have areas that have extensively utilized federally funded Career and Technical Education grants for program development (IIIC-22).

The district has two board-approved Administrative Regulations (AR's) that directly relate to technology. AR 7000 applies to information resource use (IIIC-23). The following areas are addressed in AR 7000: rights and privileges for accessing information resources; responsibilities as to how information resources are used; accounts and passwords; confidentiality; copyright; and violation of use of information resources. AR 7001 addresses district and college standardization of hardware and software (IIIC-24).

SACTAC

The college utilizes a participatory governance committee, Santa Ana College Technology Advisory Committee (SACTAC), as a means of conveying information regarding technology and its use and purpose to faculty, administrators, classified staff, and students. SACTAC has faculty and administrative co-chairs (IIIC-25). As a participatory governance committee, SACTAC makes recommendations that are reviewed and evaluated by College Council or the Planning and Budget Committee, depending on the nature of the recommendation (IIIC-26).

A subgroup of SACTAC, the Web Advisory Group (WAG), is tasked with establishing guidelines and standards for internet-related content and structure. The Web Advisory Group is the main liaison to the district's ITS web team. WAG coordinates efforts with the district's Public Affairs and Research departments to conceive, develop, implement, and deploy changes to the college's website. A similar role for this group occurs when any upgrades are made to the underlying technological platform supporting the site such as SharePoint. The administrative co-chair of SACTAC also participates as an active member of the WAG and the SharePoint group.

For planning and budget purposes, divisions and departments make use of a formal Resource Allocation Request for identifying needed technology, both hardware and software. Such requests for technology are then reviewed and prioritized by SACTAC. The prioritized technology requests are then presented to the Planning and Budget Committee for its evaluation and consideration (IIIC-27). The Planning and Budget Committee, and then President's Cabinet, are the final authority for funding approval.

Self Evaluation

Santa Ana College meets this standard. In the past, technology equipment and infrastructure were utilized, maintained, and upgraded on an as-needed or ad hoc process. Typically an instructional or administrative area would discover a need for a given technology resource and then pursue acquiring that resource on its own. Often these technology resources are obtained by use of external funding and/or through grants.

However, a newly-implemented planning and budget process that utilizes formal Resource Allocation Requests, which also includes technology, allows for prioritization and improved integration of technology campus-wide. This process better allows the college to more systematically plan, acquire, maintain, and upgrade or replace technology infrastructure and equipment to meet institutional needs.

In addition, the college is in the process of establishing a funding budget specifically for technology. However, it is likely that initially this budget will not be sufficient to cover all technology equipment and infrastructure needs for SAC and SCE. This, in turn, will require SAC and the SCE to continue pursuing external and grant funding.

All grants at the college are taken through a formal approval process. A grant request form must be completed (IIIC-28). Requests for authorization to apply for grants require the appropriate vice president's signature and are then reviewed by the President's Cabinet. After approval has been obtained, the Grant Request Form is then evaluated by College Council, where it must also be approved.

Technology resources acquired through grants and external funding should be coordinated with District IT staff ([IIIC-20](#)). A key issue with external and/or grant funding is that often the technology equipment and/or infrastructure acquired can only be used for a specific purpose or program. Another significant problem is that external and grant funding, by nature, is not self-sustaining.

However, college divisions and departments, through the Resource Allocation Request process, can identify and request the types of sustainable technology that is required by their programs and area. Resource Allocation Requests, if they involve technology, are then evaluated by SACTAC for prioritization and then presented to Planning and Budgeting for funding determination. In this manner, divisions and departments have a formalized process for planning and budgeting of technology that is anchored to specific program needs that must relate to institutional goals and objectives.

Actionable Improvement Plans

The college will continue its efforts to make all campus constituents aware of the formal Resource Allocation Request and its formal relationship to institutional planning and budgeting.

IIIC.1.d. The distribution and utilization of technology resources support the development, maintenance, and enhancement of its programs and services.

Descriptive Summary

Technology deployed at the college, SCE, and DMC is used to support the development, maintenance, and enhancement of programs and services. Instructional and administrative departments and programs review their technological resource and infrastructure needs on an annual basis as part of their regular planning and budgeting process ([IIIA-158](#)). As acquired, these technology resources are directly put to use in supporting instructional and administrative programs and services.

The college strives to maximize the use of its available technology. Where possible, as older technology is replaced, and if it is still viable, the replaced technology equipment is recycled and put to use in another area or program ([IIIC-29](#)). The college also tries to extend the life of existing technology equipment when feasible by providing regular maintenance.

Many of the college's academic departments and programs have specialized computer labs, equipment, and software specific to the needs of students, faculty, and programs ([IIIC-30](#)). Other areas that are effective in ensuring the distribution and utilization of technology include Nealley Library, Media Services, Educational Multimedia Services, Quick Copy Center, SCE, and DMC. These technology resources are available to faculty, staff, and students.

In offices, full-time faculty, administrators, and classified staff have access to essential technology equipment and infrastructure to adequately perform their jobs and support their responsibilities. In some instances, the equipment or software available may not be as current or as upgraded as desired by the user.

Another means of ensuring the effective distribution of technology services is by remote access ([IIIC-31](#)). Faculty and staff have remote access capability to email and telephone

service. Many credit faculty and students have remote access to instructional materials by means of Blackboard, the college's learning management system that provides internet-based access for authorized users.

Self Evaluation

Santa Ana College meets this standard. The distribution and utilization of technology resources is adequate to meet the needs of most departments and programs, both instructional and administrative. Faculty, staff, and students have access to various forms of technology onsite at the main campus, the SCE, and the DMC. A range of technology resources is also available to faculty, staff, and students by remote access.

Actionable Improvement Plans

The college is working on developing pathways between credit and non-credit (SCE) programs. In order to assimilate students, Blackboard should be available to non-credit students. The college is actively working on that at this time.

III.C.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

College Operational Systems

At the time of its last accreditation Self Evaluation, SAC had centralized many of its technology services and programs. These technology services and programs were housed in what was called the Information and Learning Resources (ILR) Division. The ILR Division was managed by an Associate Dean (IIIC-32). Key areas that reported to the Associate Dean included Nealley Library; Media Services; Educational Multimedia Services; Academic Computing Center; Quick Copy Center; and Distance Education. Another primary responsibility of the Associate Dean of the ILR Division was to manage and coordinate college-wide technology planning. The associate dean co-chaired SACTAC and also represented SAC administration at the District's Technology Advisory Group as well as the Teaching Learning Committee, which is responsible for reviewing academic program review documents.

However, due to severe statewide budget cuts to the California community college system, the position of the Associate Dean for the ILR was eliminated, as were other positions. As of today, the various technology programs and services that had been centralized are now distributed to various other administrators at the college (IIIC-33). For example, the Nealley Library reports to the academic Interim Dean of Fine and Performing Arts. The Academic Computing Center reports to the academic Dean of Business, as does Educational Multimedia Services. Media Services reports to the Associate Dean of Fire Technology. In addition, as a result of reorganization, Distance Education now reports directly to the Vice President of Academic Affairs.

As a result of this decentralization, over time the ability of SAC to effectively integrate technology planning with institutional planning has been negatively impacted. Currently instructional and administrative divisions, departments, and programs have no centralized

service area for coordinating, managing, planning, and evaluating the integration of technology in college-wide planning. The remaining body that provides some degree of centralized coordination is SACTAC. The degree of coordination and representation that SACTAC can provide, however, is limited. SACTAC meets only two hours once a month during the fall and spring semesters, and as is often the case with committees, there is changing membership from year to year.

While District ITS assists SAC in implementing and maintaining its technology and infrastructure, ITS is not responsible for coordinating and evaluating the various technology services and programs run by the college.

Self Evaluation

Santa Ana College meets this standard. It has been noted that integrating technology planning with institutional planning has become a significant challenge to SAC and the SCE. Primarily this challenge has resulted from the decentralization of many of the technology programs and services that were once under one administrative manager. An additional result of this decentralization is that is has become difficult for SAC to systematically assess the effective use of its technology resources college-wide as regards evaluation and improvement of services.

Since there is no longer at SAC a centralized manager, service, or area of report that cohesively coordinates and evaluates these many requests, SACTAC, as a participatory governance committee, has made two recommendations to SAC's College Council: first, that the various technology services and programs be centralized again; second, that the college reestablish the position, or one very similar to it, of a Dean of Information and Learning Resources (IIIC-26).

While this is the case, however, the college meets this standard. Significant steps have been taken to improve campus-wide technology planning. Instructional and administrative divisions, departments, and programs have a formal planning and budgeting process into which they incorporate technology needs requests. With the newly implemented Planning and Budget model, divisions and departments can specify technological needs via their Resource Allocation Requests. Such requests are required to relate to and be anchored to institutional goals and objectives. These requests are then evaluated and prioritized by SACTAC. SACTAC's prioritized requests are then presented to the college's Planning and Budget Committee for funding determination.

Actionable Improvement Plans

SAC will evaluate and determine how to improve college-wide technology planning so it is effectively integrated with institutional planning and can be utilized as a basis for institutional improvement. SACTAC will serve as the primary committee mechanism for implementing this actionable improvement plan.

The college will consider reestablishing a position similar to that of the Associate Dean of Information and Learning Resources.