STANDARD III

Resources

The institution effectively uses its human, physical, technology, and financial resources to achieve its broad educational purposes, including stated student learning outcomes, and to improve institutional effectiveness.

Standard III: Resources
The institution effectively uses its human, physical, technology, and financial resources to achieve its broad educational purposes, including stated student learning outcomes, and to improve institutional effectiveness. Accredited colleges in multi-college systems may be organized such that responsibility for resources, allocation of resources and planning rests with the system. In such cases, the system is responsible for meeting standards on behalf of the accredited colleges.

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.

Descriptive Summary
The college has made great strides in supporting and encouraging the use of technology to fulfill its learning mission. The most important advances in technology on campus have been the centralization of technology services and a focused administrator for technology.

In 2007 the technology committee had found a voice on campus. Technology was institutionalized into the campus culture as a part of the Strategic Plan 1.0. In fulfillment of the Technology Master Plan of 2007-2010, the Campus Technology Services (CTS) Department was created in 2010. The Department has centralized campus technology support services, centralized copier/printing services, and implemented a five-year computer rotation for faculty, staff, classroom, and laboratory computers in order to maintain hardware and software currency. The department works in partnership with the Technology Committee. The Technology Committee and CTS developed the SBVC Technology Master Plan for 2010-2013 [Evidence] and SBVC Technology Master Plan 2013-2016 [Evidence].

The Technology Master Plan is reviewed and approved by College Council and informs the district technology plan. Technology remains an important part of the campus Strategic Initiatives. Initiatives from the Campus Technology Committee are integrated into campus planning processes. The Director of Campus Technology Services sits on College Council, TESS Executive Committee, District Technical Services Committee, and Web Standards Committee participating in the development of all campus and District technology planning documents. The Technology Committee is represented on the SBVC Planning Model and is linked directly with Needs Assessment and Prioritization.

Since the last accreditation the position for a Director of Campus Technology Services was developed and filled. This director is responsible for managing the CTS department and co-chairing the Technology Committee. The Director manages the departmental budget, technology equipment rotation budget, and the support and maintenance of campus technology. The Director supervises support staff, technology purchases, and computer rotation. This position has been the leading force in unifying the various technology resources across campus into a functional whole.

The last accreditation visit saw the campus poised for significant technology growth. The campus has utilized Title V, Measure M and P Bond issue, Perkins, HSI-Stem grant, HACU Walmart grant, instructional block grants, and campus and district funds to lay a solid foundation for leveraging technology across campus.

Technology is an integral part of the campus culture. Electronic forms of communication are heavily used. Hardware, software, and web resources are available across campus for learning activities. Registration and many advising services are available on the campus web site. All office and administrative functions are handled electronically. Course management systems and support for online instruction are all available and supported for both instructors and students. There are 24-hour help desk services for the entire campus.

E-mail and voicemail systems on campus are heavily used. Employees now use email to distribute flyers and announcements across campus [Evidence]. Many forms and documents are also available electronically and plans are in place to move all of the district information systems into one cohesive system that allows for electronic approval and documentation. In 2010 student email was moved to Google Mail after campus forums and surveys to students and faculty. The previous student email system was underutilized and oversubscribed. Now students can keep their email accounts indefinitely and the campus can maintain a lifelong connection to the students. In 2013, District Technology Services began to implement Microsoft's Office365 Cloud Service. This will allow employees to access email from the Web as if they were using Outlook on their desktop. It will also provide Sharepoint, Lync, and Skydrive services. Migration of email accounts began in the Spring of 2014 and will be completed in the Fall of this year.

Computer hardware is upgraded on a five-year rotation. Faculty, administrators, and staff have been issued a desktop or laptop computer to support their work and to promote effective communication with others on campus. Desktop computers are available to adjunct faculty in departmental and divisional work spaces. Employees in areas of food services, maintenance, grounds, custodial work, and childcare do not have personal computers assigned to them, but they do have access to computers when their job requires it. Campus computer labs and individual classroom computers are also upgraded every five years.

New campus buildings have been designed to maximize technology. As new buildings are designed, the Campus Technology Services works with campus master planners, including architects and technology consultants to design more advanced technology standards for classrooms in the future. This will ensure that buildings will have the infrastructure necessary to accommodate future instructional technology needs. Classrooms in all new buildings have been equipped with smart classroom technology, consisting of computers (or connections for computers), network connectivity, LCD projectors, document cameras, and DVD/VHS media players. Smart classrooms have also been installed in existing buildings. The recent renovation of the Business Building featured six modern Computer Labs. Mobile technology resources are available in many departments. Several departments have rolling carts with laptop computers that can be utilized in learning activities. Campus Technology Services also offers a mobile iPad lab that can be moved from classroom to classroom

Student applications for admission to college, campus orientation and class registration have been moved online. Admission is completed using the California Community College online resource, CCCAppl which was implemented in 2009. Student registration was moved from the Campus Central platform to WebAdvisor in 2010. WebAdvisor contains the SBVC Catalog and the class schedule with real time updates. The student enrollment, maintenance of student rosters, grades, and adding and dropping students are done electronically using WebAdvisor. In 2013 the campus deployed a waitlist system to allow students a "place in line" up until the first day of class. Additionally, the waitlist allows the college to capture students that may have been

lost when a class is over enrolled and students did not show on the first day. Faculty can easily take students in a priority order from the waitlist. Students are able to review their Financial Aid documents and view Financial Aid award letters on WebAdvisor. Campus Technology Services and District Computing Service support administrative functions using WebAdvisor. The campus uses SARS·TRAK a student self-serve check-in/check-out system for measuring students' use of SBVC's face to face and online services including counseling, use of the writing lab, and tutoring.

In 2009, the campus hired Mind Over Media to develop and assist in deploying a new campus website. It was launched in 2010. The site has been a huge improvement for the entire campus community. The site won an award from Community College Public Relations Organization (CCCPRO) for the largest before and after marketing change in April of 2011. Submissions for this award came from all California Community Colleges.

The campus actively uses a course management system to facilitate instruction both for on campus classes as well as online courses. Blackboard, the chosen CMS at Valley College, is capable of synchronous and asynchronous support of learning. Blackboard is very useful in supporting distance education initiatives. Distance education is available at Valley College in DE modalities including hybrid, and interactive television courses (ITV). Since the spring of 2007, it has been possible to obtain an associate's degree through online and hybrid courses at SBVC. This is a considerable achievement, since the first online course was offered in 1996. At present, *160* online and hybrid courses are offered. Campus Technology Services supports DE by maintaining equipment for IT . In addition to Blackboard, DE students have online access to the writing lab, tutoring and counseling. Library services to DE students include online full-text access to magazine articles, journal articles and e-books that support the college curriculum. Students have 24/7 access to an academic librarian to assist with research needs using the library's Chat Reference service.

SBVC has a unique history in the development of online learning. As such, the "management structure" is also unique. There is no distinct director or dean of Distance Education at SBVC. The District has an Associate Vice Chancellor of Technology and Educational Support Services. That position provides the support for the infrastructure for online learning. That is, internet connectivity, learning management systems, and software licenses are handled at the District level. Furthermore, the Instructional Technology Support Specialists, also district positions, provide extensive professional development and software support at both SBVC and Crafton Hills College. There are two campus Blackboard network administrators at San Bernardino Valley College (the administrative and faculty co-chairs of the Online Programs Committee) to assist with software related issues and training. Management support at the campus level is in the office of the Vice President of Instruction. Managerial oversight and clerical support services are provided through that office. The Technology Committee and the Online Program Committee both provide the collegial support for the management and staff. The faculty and administrative co-chairs of the Online Program Committee are key in communicating to the Vice President of Instruction, and the Academic Senate, concerns and issues regarding online learning. And the Coordinator of Professional and Organizational Development provides for extensive training opportunities for faculty interested in teaching online.

All members of the college community have immediate access to help with technology challenges and problems. The District has centralized Help Desk services, offered 24/7 and contracted through Blackboard, to support faculty staff and students with Blackboard, WebAdvisor, email and other technological needs. Access to online services has improved.

Webadvisor and email logins now are now linked so students and employees do not have to remember multiple usernames and passwords. Plans are in place to unify logins of as many web services as possible. Information services for administrating the college are handled through Datatel, Educational Information Systems, and Financial 2000. These support the work of management and staff.

The campus uses technological means to assess campus climate, attitudes, effectiveness, and the use of services. The preferred method used to capture information is electronic survey—it is quick and responsive with more readily available analysis. Electronic surveys are also used for voting. As a result, SBVC has a rich survey environment where it uses the data for improvement. SNAP software has been used since the Fall of 2008 for all manager evaluations, campus climate surveys and other surveys as needed. Other software, like Nvivo, is used by the Research, Planning and Institutional Effectiveness Department in order to provide text analysis of qualitative information. eLumen, purchased in 2007, will help to monitor, store, and more effectively communicate SLO assessments and improvement.

Students, staff, faculty, and administration benefit from the rich technology resources available across campus for learning. The mission of the college is enhanced and broadened by the resources available to the learning process and support for the college community.

Financial Aid, Counseling, and Admissions and Records use Image Now software and high speed scanners to capture and digitize student forms and records.

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.

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
Decisions require assessment, planning and evaluation of outcomes. Decisions are made in a variety of time frames. The college must not only plan for future needs, but it must also have structures in place to respond to more urgent needs or opportunities. Technology needs are, integrated with the strategic plan, educational master plan and program review and all other campus plans into a workable campus-wide planning structure.

The Campus Technology committee and the CTS department work cooperatively to plan for long-term needs through the development of the Technology Master Plan [Evidence]. This document provides guidance for the use of technology across campus on a 3-year time frame. The development of this document requires current assessment of the state of the college technology resources and developing principles and objectives that will guide the implementation process for 3 years. Urgent needs that arise from students, faculty, and staff are evaluated based on the guiding principles of this document.

The College Council approves each Technology Master Plan (8.1) developed for the three-year cycles. The Master Plan includes the Technology Mission, Vision, Challenges and Opportunities, Goals and Strategies which are reviewed and updated with each successive

plan. Each plan addresses the question of how well the institution is meeting the technology needs of students, staff, faculty, and managers/administrators.

The 2013-2016 Technology Master Plan notes that SBVC is facing challenges in funding, competition, changing demographics, escalating constituent expectations, underprepared students, and a growing demand for access to online educational services. The Technology Committee identified six goals for success that are aligned with the District Planning Imperatives and the Campus Strategic Master Plan.

Goal 1. Provide exemplary technology resources and support while maintaining fiscal and environmental responsibility.
Goal 2. Support the Online Program Committee's Plans and Goals.
Goal 3. Encourage partnerships and promote awareness with businesses, other organizations, and the surrounding community.
Goal 4. Collaborate with the District on projects that are beneficial to all.
Goal 5. Work cooperatively through the Office of Professional Development to provide appropriate technology training.
Goal 6. Identify and meet accessibility standards set by Section 508.

Ongoing technology needs are assessed in a variety of ways to ensure that needs are met most efficiently. Faculty, staff, and students are surveyed. Technical support is available through a 24/7 "help desk." Information gathered about user problems are very helpful in directing resources to focus needs. Follow-up surveys are conducted after all requests for assistance have been completed. Technology needs often arise from closely listening to users and their concerns and problems. SARS is used to collect data on student use in multiple departments around campus.

Self-Evaluation
The institution meets the standard.

The Campus Climate surveys are conducted on a regular basis. These surveys are used to assess the perceptions of students, faculty, staff and managers of technology services on campus. The most recent surveys (2012-2013) show that seventy-nine percent of students are satisfied with campus technology, seventy-eight percent of classified staff and eighty-seven percent of faculty feel they have the appropriate technology to do their job and seventy-two percent of managers feel that computers, media and software on campus are sufficient for teaching and learning.

Identification of technology needs also arise from requests for technology from departments and services that are made through the program review needs assessment process. Programs can identify and request technology not addressed by the Technology Master Plan through Program Review. The Program Review committee collects technology requests during the Needs Assessment process. Program Review forwards these requests to the Campus Technology Committee for review. The Technology committee is made up of representatives from across the campus, and the district. Technology Committee then prioritizes these requests based on information sent from the program review process integrated with the principles in the Technology Master Plan. The Campus Technology Committee approves and prioritizes requests on a case-by-case basis. Minutes of the meetings of the Technology committee document the decisions made by the committee [Evidence]. The prioritized requests are

forwarded to the President's office and College Council for possible funding. College Council then prioritizes <u>all</u> needs requests and forwards those requests to the President for funding.

See the Strategic Planning Model for a graphical representation of this process.
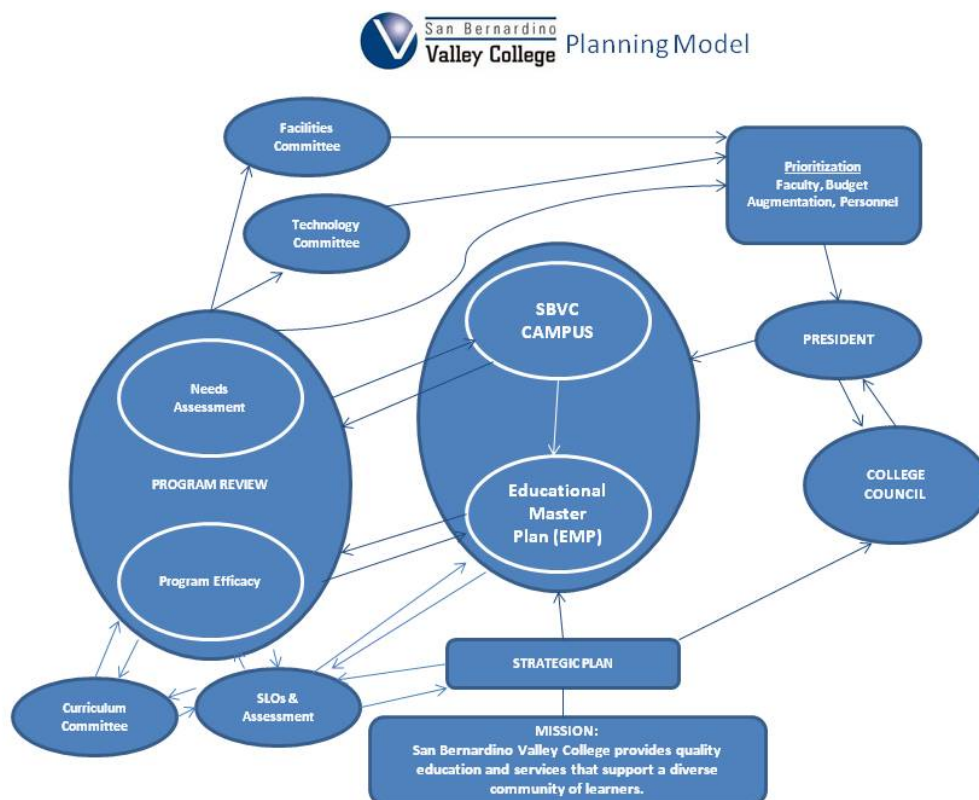
Programs and members of the campus community are typically the best judge of technology needs to enhance their services. Committees or areas with specific and/or emerging technology needs will work with Campus Technology Services and the Technology Committee to evaluate available hardware and software for purchase. The Accreditation and SLO Committee approved software for the storing and reporting of SLOs. Administrative and Student Services worked with CTS and Technology Committee on the purchase of Call Center software and online student orientation software. The purchase requests were taken to College Council for approval. The Technology Committee chair and the Program Review Chair and members of the ad-hoc Budget committee sit on College Council and have equal input into the purchase of technology to fulfill urgent and emerging needs.

Campus Technology Services (CTS) themselves are subject to Program Review. They complete a program efficacy study every three years and participate in the needs assessment process. The Campus Technology Committee established measureable objectives for the Technology Plan in the Fall 2013 to internally evaluate Campus Technology Services and Technology Committee's effectiveness in meeting campus technology needs.

Attendance at various educational technology seminars, at times, results in the exposure of the campus to new technological resources brought back by the attending faculty. The exposure to this type of state-of-the-art technology is made available through the Professional Development Committee. It provides funding for conference attendance. This allows for faculty and staff to bring back ideas on how to improve technology and learning at SBVC.

Technology is funded throughout the campus through a variety of means. CTS has some discretionary budget. Departments have discretional budget. The Director of CTS manages the rotation budget from district with oversight provided by the Executive Director of Technology and Education Support Services. Bond, categorical, and grant funds are leveraged as allowed.

Centralization of technology services has allowed the college to purchase hardware in larger quantities, thus lowering the price. The installation of copier/printers in major offices has lowered the cost of printing. In the past there has been an issue with the campus being able to support technologies purchased by grants and categorical programs. This has been addressed at the campus and district by requiring all technology purchases to receive approval of the director of technology services.

The acquisition of additional computers and/or software can be addressed by individual departments during the needs assessment portion of program review. Program review evaluates the needs of programs and services and then forwards all technology-related needs to the Technology Committee. The Technology Committee prioritizes the needs and forwards them on to College Council. Those needs are then reviewed and prioritized according to how they fit within the Technology Master Plan. The Technology Committee is responsible for creation and updating of the Technology Master Plan as defined under the committee charge.

Decision making for technology standards and procedures take place through collaboration between campus, district technology services and the shared governance process. Campus Technology Services and Technology and Educational Support Services (TESS) work together with Campus and District technology committees to provide hardware and software to support campus facilities, services and instruction.

Several levels of planning are aligned to ensure that the technology needs for SBVC's distance education courses are met. At the District level, there is a District Technology Plan. That plan includes the needs for "Distributed Education" at both SBVC and Crafton Hills College. The District Distributed Educational Coordinating Council (DECC) has input into the District Technology Plan. The DECC is comprised of representatives from the respective committees of the two colleges charged with oversight of distance education. So the colleges are represented at the district level to ensure that the technology is in place for distance education.

Since the decision for a Learning Management System is a District decision, the college is represented at the District Distributed Education Coordinating Council (DECC). The faculty co-chair and the administrative co-chair of the college's Online Program Committee are standing members of the DECC. The technology solutions appropriate for SBVC's distance education program have to be compatible with the solutions appropriate for Crafton Hills College. The DECC is the place where the needs of both campuses are considered.

At Valley College, the Technology Committee and Online Program Committee are the voices for the technology needs for distance educations classes. The Technology Committee has developed and periodically revises its Technology Plan. As a part of this Technology Plan, the Online Programs Committee aligns its Online Learning Plan so that all the needs for distance education courses, including the technology need, are addressed.

When a need is identified, the need is addressed at the appropriate level. The District oversees the contract for Blackboard services. The Technology Committee can commit monies for refreshing computers on campus that students use to take online courses. And the Online Program Committee can contribute to the Program Review Process on behalf of individual divisions or departments.

Each of the plans mentioned above includes an element of evaluation. For example, the Online Learning Program annually evaluates the technology needs of online and hybrid classes. In addition, the regularly scheduled meetings of the Technology Committee, the Online Program Committee, and the District's Distributed Education Coordinating Council provide occasions to evaluate whether the programs are progressing smoothly or there are need to be addressed. All campus and district shared governance committees have webpages dedicated for posting agendas, minutes, and documents for public, campus, and committee use.

Blackboard is the Learning Management System used by most of the distance education classes and it is used to supplement many traditional (face-to-face) courses. There are some departments that use discipline-specific software, such as the Real Estate Department, but the vast majority of online and hybrid classes use Blackboard as the Learning Management System. The licenses for Blackboard are funded at the District level. While the district did provide and support the hardware for the Blackboard software, a decision was made to move this off-site and have the Blackboard company handle the support and maintenance of our Blackboard resources. That means that the hardware as well as the software is the responsibility of Blackboard. As a part of that contract, Blackboard is guaranteed to be available 99.9% of the time. Prior to this arrangement, the Blackboard system was offline for unacceptable periods of time. There have been very limited downtime issues [Evidence] since the contract with Blackboard was implemented. Blackboard creates redundancy in their servers and so has provisions for data recovery. The system is password protected to ensure privacy and security of both faculty and students. The college has an enormous commitment to online instruction. Almost 20% of FTES is generated in online courses. The college and district now have in place reliable, secure, and available resources to support distance education at Valley College.

Actionable Improvement Plan
- move all of the district information systems into one cohesive system that allows for electronic approval and documentation
- unify logins of as many web services as possible

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

Descriptive Summary
SBVC assesses the need for information technology training for students and personnel in a variety of ways. Technology changes are one trigger for new training. SBVC Campus Technology Services and the Campus Technology Committee track the addition of new hardware and software being used on campus by students and personnel and significant software upgrades that would require additional training. The Coordinator of Professional and Organizational Development sits on this committee so that needs for training can be identified with the adoption of new equipment or software. Some specific examples of technology triggering training are:

- When the campus hired Mind Over Media to design and develop a new website in 2011-2012 multiple trainings were provided for administrators, faculty, and staff.
- The campus migrated from Campus Central to WebAdvisor for student registration and services in 2011. The campus provided training aides for students using sample registration screens and links to instructional video. The training aides were sent via student email and links to the training aides were on the campus website and in WebAdvisor. Similar materials and handout were prepared when the campus migrated to Gmail for student e-mail accounts.
- Blackboard (and its upgrades) require regular, ongoing training. This is offered via our Professional and Organizational Development program, and through the district via online webinars and tutorials.

Other methods used to identify training needs are Twitter and Facebook comments, Campus Climate surveys, the professional development survey and analysis of help desk tickets.

At the conclusion of each professional development activity sponsored by the campus Professional Development Office, there is an evaluation provided to each participant. These evaluations are collected and used to determine whether the activity met the needs of the participants. There is an open ended question on these evaluations asking for ideas for future professional development activities. In addition, the Online Program Committee's Online Learning Plan includes the responsibility to evaluate the effectiveness of all the training provided to faculty, staff and students regarding the distance education offerings of the campus.

Formal student technology training is provided through classes in the Computer Science Department and the Computer Information Technology Department which offer classes that range from keyboarding to programing. Faculty teaching distance education courses often have the first meeting on campus to demonstrate the use of Blackboard. There is an "orientation to online learning" available via the campus website to teach students how to navigate Blackboard, and to develop strategies to be successful online students. The Library offers a series of half hour workshops open to anyone on a variety of topics such as how to search the Internet, how to evaluate Internet sources and Advanced Online Searching. Alternatively, faculty can schedule training with faculty librarians for their entire class in a 32 seat classroom used for library instruction. The DSPS office trains students on specialized software used in the DSPS Computer Lab and on computers across campus.

Informally, students learn technology in the classroom and through interaction with staff on campus. Students' need for technology training is often assessed and brief instruction given at the point of need. The Library Computer Lab is staffed by two Library Computer Technicians who provide on the spot instruction for student using hardware, software and the Internet in the computer lab as well as assisting students with photocopiers. Library faculty teach students how to access online resources. The help desk is available for students who are having difficulty with the campus registration system. The Student Success Center provides workshops and tutoring on a variety of computer-based classes.

The campus uses instructional handouts to inform students on technology. These materials are distributed at the library and at the two information booths on campus. Information and instructions about new technology are provided on the website and via e-mail. Handouts have

been available detailing where to find technical support, using the print stations, wireless printing, and using student e-mail.

Self-Evaluation
The institution meets the standard. Employees from across the district can receive training on Microsoft Office Suite, Sitecore, Blackboard, Adobe, CurricuNET, Datatel, Financial 2000, SARS and other district and campus programs. The Campus Technology Services and Campus Technology Committee collaborate with Professional Development to sponsor a number of training sessions each semester for campus personnel. Training takes place in workshops during the course of the year or on days set aside for professional development such as in-service days, flex days and classified employee week. Specific examples of technology training are:

- Sessions on Sitecore and Blackboard during the April 2012, September 2013, and April 2014 flex days
- Open CurricUNET Lab during the April 2012 and September 2013 flex days
- New faculty training program each semester
- Spring 2014 Classified Connections Week during the 2014 Spring Break

Employees are also served at the point of need via the Helpdesk or one-on-one with Campus Technology Services staff.

The quality and effectiveness of professional development training on campus is evaluated by surveys completed by attendees after workshops. Student and faculty surveys on library workshops and instructions are gathered and used to assess library SLOs. Questions on the campus climate surveys of students, staff, faculty and administrators address technology training. In 2013 70% of faculty agreed that campus technology support was adequate. Campus Technology Services evaluate services, support and training through program review processes.

There are three levels of support for training for faculty. The District's office of Distributed Education includes a technical support staff person. A part of that person's job description is to provide training and professional development for faculty at the college. In addition to the district support, the college has an office of Professional and Organizational Development. That office provides training opportunities for staff, including licenses to Lynda.com and access to the archives of the @One project at the staff level. A relatively recent opportunity has come about by a regional professional development organization for distance education serving the Inland Empire and Desert regions near Palm Springs.

For students, there is a "Learn to Learn Online" self-paced Blackboard shell available. In addition, the technical support person from the District also provides on-campus training for students interested in the distance education modality. For faculty, there is an "Online Teaching Prep" shell in Blackboard. And of course the Office of Professional and Organizational Development provides regular and frequent opportunities for training.

Actionable Improvement Plan
Expand training opportunities through the opening of the new training facility in the CTS area

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

Descriptive Summary

Since the last accreditation significant progress has been made with technology services on the campus which were previously decentralized. Divisions and departments had to fend for themselves to acquire necessary technologies. Administration and staff were dependent on a third party district contractor for services. Technology needs were processed through program review like other requests. Faculty and staff computers were typically supplied only when a senior administrator deemed that there were sufficient funds to purchase a new set of faculty computers. Since then, services, resources, purchasing and equipment acquisition have been centralized with planning and upgrades as regular events.

Previously, the number of technology support staff were limited and dedicated to a single division that had demonstrated tech needs. The Science, Art, Business, and the Library and Learning Resources departments each had their own technology support staff. The remainder of the campus was left to beg for support from these divisions or district personnel. District technology services (primarily a contracted vendor) supported the staff but not the faculty. All support was localized to these few divisions. Acquisition of equipment was through program review and/or through department who had control of departmental technology budgets to fund the purchases.

In 2010, Campus Technology Services (CTS) was created with the goal of centralizing the purchasing and support of technology resources for the whole campus. A Director was hired and the technology support staff from divisions across the campus, were moved to the new department, centralizing their services and making them available to the entire campus. One IT member from the district and the two staff members from Audio Visual Services were reassigned to CTS. This created a department with one manager and seven staff members to support all of the technology on the Campus. Campus Technology Services systematically acquires, maintains, and upgrades infrastructure and equipment equitably for faculty, staff and administrators. Additionally, it has oversight of all technology purchases.

Technology Services at the District was also reorganized in 2010. This reorganization included the dissolution of a long standing support contract with Sungard (previously Collegis). All of these changes came about after an evaluation of our IT systems conducted by PlanNet [Evidence]. Technology and Education Support Services (TESS) group was created. This provided a central group to review, prioritize, and collaborate on technology needs for the district as a whole. The following groups were created: TESS Executive Committee, TESS Managers, TESS User Group, TESS Web Standards, TESS Technical, and TESS Administrative Apps. These groups work to develop the district technology plan, create policies, procedures, and facilitate inter-district relations around technology.

In 2010 technology directors at the District, SBVC and CHC contracted with P2S Engineering to establish district wide standards for technology infrastructure. These standards include building cabling, data closet specifications, data termination, and classroom technology. These standards are upgraded regularly in district consultation with the CHC and SBVC campuses through the TESS committees. CTS at Valley College implements these upgrades and maintains the standards throughout the campus.

In 2013 Middle College High School moved to their new campus across the street from SBVC. In the process they vacated seven portable buildings. The campus purchased those portables and CTS moved into five of the portables in the late fall of 2013. This is the final step in creating a cohesive department. Previously, the staff in CTS were spread throughout the campus this did not facilitate coordination and team building. Since moving into the new location the Director of CTS has seen a noticeable increase in technology staff interaction and problem solving.

The original campus website was developed without much thought about organization or design. The technology plan referenced this fact and goals were developed to hire a designer to develop and maintain the website. A Title V grant proposal was written with one of its goals focused on hiring a web developer. The grant was acquired but the developer was never hired. After many discussions on campus, the decision was made to use those funds to hire a contractor to develop a complete new website. Mind Over Media won the contract and took the campus through the complete design and development process. Guidance through the process was coordinated by the Campus Director of Marketing, the District Web Developer, and the Campus Director of Technology Services. The goal was to build a new website that was easy to navigate, and maintain and was updateable by the individual departments, staff and faculty on the campus. Training was conducted and the site went live with great fanfare and praise from the campus community. The website is now kept up to date by both the web developer at the district and all the various entities at the campus that have content on the website.

Student email was moved to Gmail in 2011. This was done after meetings with students, faculty and staff. Moving the email offsite provided several advantages.
- Savings from elimination of servers and their ongoing licensing and maintenance.
- More services to students.
- The ability for students to keep their email addresses indefinitely.
- Finally the ability to use those emails to reach out to students long after they graduate.

Wifi network services were deployed on campus starting in 2005 as part of the Title V grant. Not long after the system was deployed it was outdated and overwhelmed by traffic as students, faculty, and staff brought their own mobile devices to the campus. From 2011 to 2014 Campus Technology services used rotation and infrastructure funds to update the wifi system to the latest standards.

District Technology Services has always managed the email services for the campus and district as a whole. In 2012 the opportunity came available to move to Office 365, which included email hosting along with other value added services. Through collegial consultation discussions and planning within the district and campus technology services the decision was made to move to Office 365. This has been an ongoing process to move email services to Microsoft servers. Slated to be complete in Spring of 2013. Many of the same advantages that were realized by moving student email to Gmail are expected to come to fruition by this move to Office365.

Self-Evaluation
The institution meets the standard. Starting with the fiscal year 2011-2012, the district, in consultation with both colleges, established a five year pilot plan to provide an annual budget to facilitate for the rotational replacement of computers and instructional technology for classrooms. San Bernardino Valley College receives $577,741 annually to replace a segment of the computers on campus and to upgrade and maintain instruction technology in the classrooms

and offices. Since the establishment of the budget all computers have been updated within the five year rotation.

Also in 2011 the campus, CHC, and district were facing dire budgetary constraints. Through campus and district discussions the decision was made to centralize copier and printing support and services. A contract was entered into with Konica-Minolta to provide copiers for each department and printer maintenance and supplies. The contract is managed by the director of campus technology services. After the first year CTS evaluated the cost versus benefit of paying Konica Minolta for printer support and maintenance and the decision was made to not renew the printer contract. The copier contract remains in effect. Now all printer cartridges are purchased by CTS and departments are invoiced for the cartridges. Maintenance and replacement of printers is through the CTS budget. This has reduced toner waste and stock piling of supplies.
In the fiscal year 2012-2013 approximately 1 million dollars was dedicated to upgrading its aging network infrastructure to the latest switching gear from Extreme Networks. This allows for 10 gigabit connections between buildings. SBVC was the first community college in California to install a 10 gigabit Internet connection in 2012.

District Technology Services maintains and backs up the core infrastructure. This includes the Student information system, email, storage area networks, SARS, campus and district websites, firewalls and data redundancy between storage at SBVC, District, and CHC locations. Backup uninterruptible power systems and generators are installed and maintained in each of the data centers.

Actionable Improvement Plan
None

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

Descriptive Summary
The Campus Strategic Master Plan and the Campus Technology plan take into consideration the needs of all programs and services throughout the campus. Goals and objectives of the Campus Technology Plan are written with campus needs in mind. All systems have been designed with hardware and software security in mind. SSL security has been implemented on all student and employee information systems. Policies exist and are enforced for password requirements.

Distributed education courses contribute a large portion of our curriculum. The district as a whole takes DE very seriously. Blackboard is treated as a core system, with the appropriate storage and backup supplied by Blackboard.

The SBCCD Mission specifically addresses preparing student to work in a technological society.

> *"The mission of the San Bernardino Community College District (SBCCD) is to promote the discovery and application of knowledge, the acquisition of skills, and the development of intellect and character in a manner that prepares students to contribute effectively and ethically as citizens of a rapidly changing and increasingly technological world"*

The District Information Technology Plan 2010-2013 and the current District Technology Plan [Evidence] aligns with the campus, and district goals to support, develop and maintain technology.

Self-Evaluation
The institution meets the standard. Campus Technology Services participates in program review evaluation and needs assessment and has developed measureable SAOs. The TESS and Campus Technology personnel and committees regularly evaluates current systems and takes appropriate measures to deploy new or replace existing systems as needed.

Actionable Improvement Plan
None

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
The Technology Committee is a collegial consultation committee responsible for creating and implementing the Technology Plan. The College Council is responsible for creating and managing the Educational Master Plan and Strategic Planning. The technology committee chair sits on the College Council and ensures that technology is integrated into all campus planning and processes. The CTS works with the Technology Committee, which is composed of all constituent groups to develop the technology plan. There is a strong relationship between the Technology Master Plan to other key planning documents, processes, the campus mission, and the Strategic Master Plan. The SBVC Planning Model demonstrates the Technology Committee directly connects to Program Review Needs Assessment processes and prioritization of campus technology needs. In 2013-2014 as the Strategic Master Plan was being developed the Technology Committee worked with the Office of Research, Planning and Institutional Development to identify how the Campus Technology Plan aligns with the Strategic Plan. The technology planning objectives were developed so that they aligned with both plans. The Technology Plan is approved by College Council [Evidence: College Council Minutes].

The CTS department is evaluated by Program Review and has created SAO's and an EMP one page summary. The TESS committee participates in the District's program review processes. The Research department recently developed one-page summaries for each program and department. Annually each program/department is provided data specific to their area. They update this document with area goals and statistics. This document is linked to the Educational Master Plan and Program Review.

Self-Evaluation
The institution meets the standard. CTS and Professional Development assess their areas by collecting feedback on training sessions offered and solicit additional ideas for training. CTS tracks service requests, looking for commonalities that could be better addressed by group training. Technology services and Central Help Desk are included in the Campus Climate Survey that is sent to Students, Faculty, Staff and Administration. The Library Computer Lab uses a 'One-Minute Survey' to solicit feedback from students. All survey results and feedback are reviewed by their departments; the data is used in Program Review and measurement of SLOs.

The Director and staff of campus technology services evaluate existing computer systems and replace them as part of the rotation plan. Departments and personnel submit technology requests as part of their needs assessment process and those requests travel through the prioritization process laid out by the campus. The campus technology committee is always looking for new ways to improve technology on the campus and collaborating with the District TESS committee to develop and evaluate and mobile app for the campus. Needs are met as funds become available.

Actionable Improvement Plan
- Continue to look for ways to improve campus technology
- Implement mobile application selected by District.

Evidence—Technology Resources