

## 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.**

### Descriptive Summary

It is the shared responsibility of the District Office of Information Technology (IT) and Berkeley City College (BCC) to provide technology resources that support student learning programs. The network, computer services, and information systems are centralized under the direction of the Associate Vice Chancellor of IT at the District Office. District IT staff support the districtwide network infrastructure, telecommunications system, computers, servers, and computers. The College manages its own network, adhering to standards recommended by District IT. The College's network coordinator and campus-based technicians support faculty and staff at the College.

In recent years there has been significant progress in the planning, support, and deployment of network bandwidth and availability, distance education, faculty and staff computing, and innovative teaching and learning design of classrooms. The [District Technology Committee](#) aligns College priorities with Strategic Goals. Technology planning is fully integrated into the District and College planning processes.

Technology resources are used throughout BCC to support and increase the effectiveness of student learning programs and services and the quality of services provided to students. The identification of technology needs is a collaborative process involving all college constituents. Faculty and staff, through their departments, identify technology needs and trends through their program reviews and annual program updates, as coordinated with the [College's Education Master Plan](#).

At BCC, the area of Technology Resources has grown tremendously since 2009. Not only has the infrastructure itself expanded, but the uses of technology in both instruction and student services have proliferated. Students' access to technology, on and off campus, has improved, instructional technology is becoming part of the typical classroom experience, and various service areas are using computers and online systems to improve record-keeping, communication, and many other essential functions. Professional development, including traditional trainings, off-campus and online classes, and collaborative projects through the College's [Teaching and Learning Center](#), have enabled instructors and others to effectively implement the tools available, and to assess and refine best practices and applications. Instructors routinely take advantage of smart classroom equipment and online tools such as Moodle and Turnitin to improve the delivery of content and enable more universal access and student-centered learning techniques. This remarkable transformation of the capacities of the classroom environment has required – and empowered – students, as well, to increase their use of technology.

At BCC, the sheer amount of equipment and uses of technology have proliferated over the last six years. When the district began using its Learning Management System, Moodle, in 2009, the original expectation was that 20-30 classes per college would be using it each semester, primarily online and hybrid classes. However, as instructors embraced the pedagogical enhancements offered by using an online platform in conjunction with face-to-face classes, and as students have come to expect this component of many of their classes, the scale has changed dramatically. In 2014, more than 2000 classes districtwide are using Moodle. This increase calls for a parallel increase in server space and monitoring, and both the College and the District work to embrace new technologies as they emerge. The shared governance system has adapted to accommodate increased complexity of planning and budgeting, including thorough evaluation of costs and positive impacts. Currently, the [BCC Technology Committee](#) meets once a month to review requests according to a rubric and make recommendations to the Roundtable for Planning and Budgeting. Another example of rapid change has been the transition of some processes used by administrative and classified staff from paper to computer technologies. The College Technology Committee and various other groups are actively working to improve processes, and the BCC Information Technology team is responsive and helpful in supporting faculty, staff, and administrators in their work.

### **Self Evaluation**

The College meets this Standard. Technology resources are widely used at BCC to support student learning programs and services and to improve institutional effectiveness. Technology planning is integrated with institutional planning through BCC committee structures and through the integration of technology planning within program reviews and annual program updates, as well as other planning documents.

### **Actionable Improvement Plan**

None.

### **III.C.1**

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

### **Descriptive Summary**

#### Overview of Current Technological Resources

Technology resources are used throughout the College to support and increase the effectiveness of student learning programs and services. In the 2014 Self Evaluation Survey, 84 percent of respondents, including faculty, staff, and administration, had positive

responses to the statement, “My program or service area has the technology to effectively accomplish the college’s goals.”

Technology resources that meet the needs of learning, teaching, collegewide communications, research, and operational systems include the following:

- Wireless access in the Library and common areas where students and faculty congregate, including the student lounge and the atrium, as well as classrooms – District and College IT teams are working on increasing capacity and security.
- Smart classrooms – Currently BCC is the only college in the District in which all classrooms are smart classrooms (at least Level 1 and Level 2, and one partially-equipped Level 3). Twenty-two smart classrooms have audio-visual control stations, each equipped with DVD, VHS, and CD players, as well as computers connected to the internet. Smart classrooms also include LCD projectors and document cameras, and three of the classrooms include interactive whiteboards.
- Five general-purpose computer labs equipped with both Apple Macintosh and Hewlett Packard PCs; two dedicated multimedia arts labs; an animation lab; and five mobile labs (carts with 30 laptops each and wireless technology) that can be brought to any classroom (with Chromebook check-out options to be added in Spring 2015)
- Two open computer labs, one in the main building and one in the Learning Resources Center in the South Campus Building
- New laptops or desktops every five years for full-time faculty and staff
- Moodle Learning Management System that is available to all instructors
- Voice over Internet Protocol (VOIP) telephones, internet access, email access, including connections to the Peralta information portal
- PeopleSoft, an information management system that allows students to have individual e-mail addresses and access to their personnel information and allows faculty to access their rosters and submit grades online
- PeopleSoft Business Intelligence software research tool (currently being implemented)
- District and College websites (including committee and faculty pages)
- Library computers equipped with adaptive technology

BCC is constantly installing new systems and looking for free or low-cost technological learning tools, for example Big Blue Bottom (replaced by Google Hang Out), and Mahara.

### Instructional Uses of Technology

The majority of BCC instructors use technology to support student learning in face-to-face classes as well as online and hybrid environments. In all platforms, technology is being used as a tool to personalize the learning experience, enhance learning, and use various modalities to increase access and engagement for all students.

Of the respondents to the 2014 Self Evaluation Survey, 89 percent of faculty responded positively that classroom technology meets their needs. Seventy-three percent of face-to-

face instructors use Moodle or other class websites, 77 percent use video, 52 percent use audio, and 35 percent use online forums (asynchronous discussions).

Various technologies enhance learning across the College. Document cameras (Samsung digital presenters) have been installed in all classrooms so that objects such as sculptures and anthropological artifacts or pages from books can be projected on classroom screens. Document cameras are used not only to supplement traditional lecture delivery but also to promote student-centered practices such as having representatives report written/visual information from small group activities. Instructors have participated in trainings on the use of this tool at Flex Days and [DART](#) workshop series through the Teaching and Learning Center, and 37 percent of instructors report using document cameras. Instructors also use many other commercial interactive platforms, including online tutorials such as Khan Academy, and textbooks with interactive online components from publishers such as Cengage, Compass, and Pearson. Instructors of English as a Second Language (ESL) use Voice Thread and Audacity to allow students in both face-to-face and hybrid courses to record and respond to audio files. The English/ESL Department offers several sections of a writing workshop course, which uses computer labs, along with focused coaching. Students in Spanish classes participate in language labs where they complete learning modules and receive individualized support. The Spanish Department has also developed an open [Spanish assessment tool on the College's Moodle site](#); counselors have access to review results with students in order to place them in the correct level. Thirty-eight percent of survey respondents across all disciplines use [Turnitin.com](#) to evaluate, organize, and monitor the academic integrity of student work. Finally, An Open Educational Resources Initiative is underway, under the auspices of the Library, to alleviate textbook costs for students and provide access to other types of materials, such as lectures, videos, and online tutorials.

### Technology for the Library

The Library has greatly expanded its uses of technology since 2009, both in the physical library facility and online. Some major developments are as follows:

- Innovative, the library's online catalog system and OCLC, a tool for processing books, are used by all four colleges and funded by the District.
- Remote authentication is available to access all databases BCC offers, as of Fall 2013, providing equal access to databases for remote users via Innovative, the online public access catalog shared by all four colleges in the District.
- Beginning Fall 2015, computers will be monitored using PC reservation system software provided by *Envisionware*, which will further promote equitable access to computers for current students.
- [LibGuides](#) are online research guides to the library's resources, developed for individual courses and programs by a College librarian.
- *LibChat*, a chat reference service, is available to students during the library's regular hours (8:30 a.m.-8:00 p.m. M-Th, 8:30 a.m.-4:00 p.m. F, and 10:00 a.m.-4:00 p.m. Sat)
- *LibAnswers* is a library e-mail service that allows students to e-mail their questions and receive their answers via e-mail.

- The Library maintains subscriptions to 40 electronic databases that provide access for students to a variety of research and reference materials online. A complete list of the library's databases can be found on the BCC Library website.
- Beginning in Fall 2015, the Library will be using *Research Ready* in its library course as well as a few other classes; this is a cloud-based instruction and assessment platform that teaches students the entire research process.
- The California Community College Library Consortium provides some of the library databases; these are available at all California Community College Libraries. Two databases, ARTSTOR and JSTOR, are funded by the Arts and Cultural Studies Department. The rest of the databases and *Research Ready* are funded by the District, which gives the library \$25,000 a year to spend on databases.
- One of the library databases is a dynamic electronic book collection geared toward community colleges, which is updated annually and provides remote access to over 100,000 books.
- The Library has a total of twelve computers for students to use for research, four computers for students to use for printing and catalog searching, one scanner for student use, one optic document magnifier, three televisions with DVD/VHS players, two photocopiers, and two print stations managed by GoPrint (the same printing card system as other Peralta colleges).
- The Library shares the use of room 126 with Assessment and Orientation; this is a computer lab with 35 computers and a teaching station that includes a document camera and projector for library-related instruction.
- A second security gate was installed to further open access to the Library by providing a second entryway.

#### Technology for Admissions and Records

Recently, the District and College have taken several steps to improve the online enrollment and records interface. For PASSPORT, a component of PeopleSoft, the District has created online training for BCC students – PASSPORT Help. This includes tutorials and screen shots on topics such as tips for using CCCApply, Login/Browser Issues, and Training Documentation. Also, most of the forms used in the Admissions and Records Office are posted online, particularly to be made available for students in distance education classes. Each college in the District has two counseling faculty representatives on the Counseling Functionality Team, which meets regularly at the District to address and prioritize issues related to PASSPORT.

#### Technology for Financial Aid

The [Financial Aid Website](#) is quite extensive. For 2014-15, the new financial aid PeopleSoft system is being implemented in different phases, which will continue until it is fully implemented.

With the new financial aid system, students are able to review their PASSPORT accounts for missing financial aid documentation and read their award letters in their accounts; they will no longer need to stand in line to learn about missing paperwork. All outstanding fees will be

subtracted from students' financial aid payments, and any remaining balance will be refunded afterwards. The system will electronically apply fee waivers to students' accounts if they are eligible. Staff members do not need to manually enter Board of Governors (BOG) fee waiver data in the system.

### Technology for Counseling

The [Counseling Department](#) has an extensive website. Students can contact the Department in person, by phone or by e-mail. It offers eCounseling during the fall and spring semesters, which allows students to review the basic FAQ questions and then submit intake forms to post any questions not answered on the FAQ site. eCounseling is in an e-mail format. The department is also exploring the option of using Skype for counseling services.

Students can use the general e-mail address, [counselingbcc@peralta.edu](mailto:counselingbcc@peralta.edu), to clear prerequisites or to get general questions answered, but counselors do not provide online personal counseling.

Pursuant to the Student Success and Support Program (SSSP), the Associate Vice Chancellor of Student Services at the District works with counselors to create temporary storage of all student educational plans (SEPs) in the "W" drive, so counselors at more than one college can view SEPs. The District is working closely with the IT department and the Counseling Department to update the academic advising module so that the SEPs will be available in PASSPORT and will be accessible for student viewing. The academic advising module will be implemented in Spring 2015. Funding for online Academic Advising and the online SEP was approved at the Board of Trustees meeting on April 8, 2014.

### Technology for Orientation

BCC has developed an online orientation. Counselors have completed the script, which was presented to the counseling faculty, Leadership Team and BCC Education Committee for feedback. The videotaping and production phase of the project is complete. The online orientation was tested in Fall 2014 and will be implemented in Spring 2015.

BCC is offering Counseling 200A (Orientation to College), and several counseling faculty are being trained to provide online instruction so that, in the future, Counseling 200A may be offered online or in hybrid format, as well as through face-to-face classroom instruction.

### Technology for Intake Assessment

The intake assessment schedule, which is used to determine students' initial placement in English, ESL, and mathematics classes, is posted online at the [Orientation and Assessment Website](#). Students have access to a link they may use to practice the English and Math Compass placement instruments before taking the placement assessments.

Currently, students must come to the main campus to take the tests for placement assessment. However, distance education students may take the placement assessment at any college and

send the results with placement recommendations to BCC counselors for multiple measures review of the recommendations.

Students also have the option to e-mail their test results (e.g. Advanced Placement test results), transcripts with course descriptions, or any supporting documents to clear pre-requisites.

The Spanish Department has created an online assessment for placement in Spanish courses. Students can access the [Spanish Advisory Placement Exam](#), along with instructions and login information, online. Counselors can access the placement test scores to clear the prerequisites, and the assessment coordinator can access the test scores and input them on PASSPORT.

### Technology for Tutoring

BCC is currently piloting online tutoring services through the use of Google Hangouts for tutoring in writing. In addition, the Spanish Department has created the online [Spanish tutoring services](#) for students taking Spanish 1A, 1B and 2A.

ESL does not provide online tutoring, but faculty have created [online resources for English Learners](#) who need additional support with language learning, whether or not they are enrolled in ESL classes. The English Department is also building a website for students in English classes to help them develop skills in reading, writing, and information literacy.

The Mathematics department has provided [online resources to support students with math anxiety](#).

To support students who are taking online classes, BCC provides [Moodle help](#), with instructions on how to access Moodle online classes.

### Assistive Technology

To accommodate BCC students with disabilities for the purpose of providing equal access to physical spaces, information, and electronic technology, a variety of adaptive equipment and software is located at computer stations throughout the College, including the BCC library and labs. These stations are marked, “For PSSD/DSPS only.” These workstations are equipped with adjustable chairs, ergonomic keyboards, Kensington track balls, and motorized adjustable desks to allow for wheelchair access and to accommodate those with physical limitations. CCTV’s, optical scanners, 12-inch monitors, and a Braille embosser are available for students with low vision or blind students. Parrot monaural headsets are provided for BCC students who use voice recognition software.

A variety of assistive technology software is distributed throughout BCC’s computer labs and, in some cases, distributed to students for use at home. The list below provides a description of currently available software and, in each case, the particular disability with which it is most often associated:

- ZoomText – Screen enlargement software that magnifies text and images on a PC and has some screen reading capability. Students with low vision use this accommodation.
- JAWS for Windows– Screen reading software that provides a non-visual interface to a Windows® computer by way of text-to-speech and refreshable Braille. Students with low or no vision will use a screen reader.
- Kurzweil 3000-Firefly – Text-to-speech literacy software that highlights electronic or scanned material while it is being read. This software facilitates English language learners and students with Dyslexia, Dysgraphia and other learning disabilities to succeed at reading, studying and comprehension. The web-based component provides remote reading functionality and access to the student’s document library from a home computer.
- Dragon Naturally Speaking – Voice recognition software that enables students to dictate commands and prose to a PC. Students with physical limitations and learning differences may benefit from this software.
- Openbook – Optical Character Recognition (OCR) software that enables blind students to scan and convert printed material to spoken text.
- Duxbury Braille Translator – Braille translation software that allows various document types to be converted to Braille files which can then be sent to an embosser or provided as electronic files that may be viewed on a student’s portable Braille notetaker.

Please refer to the [Assistive Technology Website](#) for more information.

PSSD/DSPS is in the process of restructuring lab space specifically designed for students requiring assistive technology in an area conducive to students with disabilities. Part of the restructuring includes the provision of workstations that are set up for students to produce their own alternate formats.

As previously mentioned, computer stations with adaptive software and adjustable desks are provided throughout campus. Upon request, assistive technology can be placed in additional classrooms to accommodate a specific need. The following is a list of locations at the main campus where assistive technology can be found:

- Assessment Center, Room 126 – Jaws, ZoomText and an adjustable desk.
- Career Center, Room 243 – Jaws and ZoomText and adjustable desk.
- Library – Jaws, ZoomText and Kurzweil 3000 with a CCTV & adjustable desk.
- Adaptive Technology Lab, Room 262 – Jaws, ZoomText, Kurzweil 3000, OpenBook, Dragon Naturally Speaking, and Duxbury Translator with all adjustable desks, CCTVs, 21-inch monitors, Braille embosser, Perkins Brailers.
- Homework Lab, Room 324 – Jaws, ZoomText, and Dragon Naturally Speaking with adjustable desk.
- CIS Lab and Writing Lab Rooms 313 & 323 – Jaws, ZoomText and Dragon Naturally Speaking with adjustable desk.

The following equipment, which allows for access to the technology listed above, is available for loan or use on the main campus each semester:

- Tactile Graphic Drawing Kit – available for use at the main campus.
- Perkins Brailers, conventional Braille writers that may be useful in math and science and where literary Braille is helpful for a blind student, and a Braille embosser.
- Digital playback units

### Needs Assessment

BCC uses a systematic, broad-based, data-informed approach to identifying technological needs for teaching, learning, communications, research, and operations. Technological needs assessment and planning are integral parts of the annual planning cycle. Relevant shared governance committees identify needs through the following channels:

- BCC Technology plan (multi-year)
- BCC Technology Committee (see BCC website for description of committee purpose, membership, minutes, agenda, rubric)
- Program reviews and annual program updates
- SLO and SAO assessment results (program and course level)

BCC uses program reviews and annual program updates to identify and prioritize technology needs.

While BCC has sufficient technology and technology support to meet the needs of learning, teaching, collegewide communications, research, and operational systems, the assessment mechanisms cited above have shown that the College is reaching the limits of its current wireless network capacity, resulting in slow performance at peak periods. Thus, plans are underway to improve wireless network quality of service. Additionally, the College needs to continually enhance and replace both hardware and software to meet the needs of its growing student population.

### **Self Evaluation**

The College meets this Standard. Technology support provided at BCC is designed to meet the teaching, learning, communications, and operational needs of the College. The College uses its planning processes to identify these needs. In the 2014 Self Evaluation Survey, 84 percent of respondents, including faculty, staff, and administration, had positive responses to the statement, “My program or service area has the technology to effectively accomplish the college’s goals.”

### **Actionable Improvement Plan**

While the College meets this Standard, BCC will enhance wireless internet access, as well as hardware and software, in order to meet growing enrollment and student 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**

##### District Services

The District network is robust, reliable, and scalable. All facets of the network are redundant. The District has recently moved from a Cisco network standard to various manufacturers who focus on one area. Fortinet is used for firewall appliances. A10 Networks is currently used for load balancing appliances. Arista is used for distribution core switches. Enterasys/Extreme is used for edge switches.

District IT has over 100 physical servers made by HP, Dell, and Compaq server manufacturers. District IT also utilizes virtualization technology through VMware, which rides on HP and Cisco UCS blade servers. Storage for the servers comes from HP SAN systems, EMC SAN systems, and Netapp SAN systems. To date, the District has implemented phase one of its virtualization project, which now focuses on HP blade servers and Netapp storage.

Internet access is provided through the Corporation for Education and Network Initiatives in California (CENIC), with Gigaman connections at the District Offices and at each of the colleges. CENIC's California Research and Education Network – Digital California (CalREN-DC) – provides high-quality network services for K-20 students and employees. As a CENIC Associate, the District must ensure that the user community complies with the CalREN Acceptable Use Policy (AUP). In order to ensure compliance, the PCCD Computer Use and Electronic Mail Guidelines incorporate the same terms specified by the CalREN AUP. E-mail for faculty and staff is provided by an MS Exchange Server. Student e-mail is provided by MS Office365.

District IT staff also support the administrative and voice network for the District. PeopleSoft runs on the administrative network. PeopleSoft is an Enterprise Resource Management application system that offers a suite of products designed to solve complex business problems. PeopleSoft typically offers its products to large corporations, government and educational institutions, and organizations.

In 2005 Peralta invested in and implemented the Financial Services Management suite in PeopleSoft, which consists of 27 modules, such as Purchasing, Asset Management, Accounts Receivables, General Ledger, Expenses, Accounts Payable, and Inventory tracking.

These modules support the finance and budgeting (commitment accounting) needs at the District, as well as Business Service Managers at the colleges. The Commitment Accounting module allows the colleges and District Office units to control their own budgeting process

module for human resources, which enables users to allocate salary and operational costs to different funding sources. It allows colleges and district units to control their procurements through the purchase requisition workflow process. The College accesses these modules using a web-based portal called Peralta Real-Time Online Management Technology (PROMT).

In 2005 Peralta also invested in and implemented the Human Capital Management suite in PeopleSoft, which consists of 16 modules, such as Payroll, Time and Labor, Human Resources, Talent Acquisition Manager, ePay, and Resume Processing. These centralized functions support the colleges and District by processing payments for all employees (e.g., faculty, staff, administrators, and student workers). The intake process of all employees is handled through the centralized district Human Resources (HR) Office. In addition, the HR module maintains position and employee data. Data that is stored and updated in this module relates to employee, position, compensation, and benefit information. The College accesses these modules using PROMT.

In 2005 Peralta invested in the Campus Solutions suite in PeopleSoft, formerly Campus Administration Suite, which consists of ten modules, including Gradebook, Student Administration, Campus Self Service, Community Access, and others. The District did not fully implement Campus Solutions until 2008. This suite of modules primarily benefits students by efficiently integrating admissions, registration, enrollments, grades, class schedules, and class rosters. Users access the system via a web-based Portal referred to as PASSPORT. The PASSPORT system serves as both a Student Administration tool used by staff to process and maintain student information and records and a Faculty Center and self-service Student Center for matriculation services.

PASSPORT can be summed up by three different functions, as follows:

- Student Center – self-service portal that allows the student to add a class, drop a class, make a payment, search for classes, and view unofficial transcripts, and will include an academic advising module
- Faculty Center – self-service portal that allows faculty access via Web-VPN (remote access) to contact students, download class rosters to MS-Excel, enter grades and positive attendance, indicate an early alert, provide rollbook documentation, submit attendance rosters, submit census rosters, and view student contact information
- Student Records – self-service portal that allows the student administrator to search for course catalogues, search for classes, assign service indicators, activate students, view transfer credit, view transcript requests, update an academic calendar, update a student's program/plan, update the term/session, view grades, view term history, view class rosters, view instructor schedules, view online grade rosters, withdraw a student from a session, withdraw a student from a term, and view academic standing.

District IT plans to complete the implementation of the PeopleSoft Academic Advising module by Spring 2015. This module will consist of PeopleSoft Academic Advising and Student Educational Plan (SEP) modules. Because the District already owns these modules,

no additional cost is required. Implementation will be concluded by Spring 2015; this is a requirement for state mandated student success initiatives.

The Oracle Business Intelligence (BI) tool was implemented in 2008 to allow more visibility in the Student Administration module, promoting strategic and operational decisions, primarily at the college level. This innovative tool allows for data analysis. Now, the College has the ability to obtain information in order to make strategic decisions for anyone within the institutional population, including but not limited to faculty, staff, administrators, and students. This tool is necessary in order to allow faculty and staff the ability to access and manipulate information directly, at their own desktops, rather than having to funnel all requests through a central department.

Securing college-level data and providing backup and recovery are the responsibilities of the District IT Office. To maintain the reliability of services hosted by District IT, the Department of General Services has installed and maintains an emergency generator to provide backup electrical power to the District building for as long as necessary during a power outage.

The College is reaching the limits of its current wireless network capacity, which is resulting in slow performance at peak periods. Thus, plans are underway to improve wireless network quality of service. This project will be managed jointly by the College and District.

For curriculum, PCCD utilizes CurricUNET, a web-based service that automates the process of submitting course and program proposals via a Web browser. CurricUNET also provides access to course outlines, and an opportunity to review the student learning outcomes for each course. PCCD also utilizes Taskstream as a management system for student learning outcomes and assessment. During the 2015-16 academic year, the District will be implementing a move to integrate both systems into CurricUNET Meta so that all information related to courses, programs, program reviews, annual program updates, SLOs, and SLO assessment can be aggregated into one system.

BCC currently does not have a maintenance support contract for its telephones, which utilize the CISCO-VoIP system. The College relies on the existing CISCO-VoIP phone equipment stored at the District IT warehouse. The District IT warehouse has approximately ten CISCO-VoIP phones remaining in storage for distribution to BCC upon request. District IT is in the process of initiating a districtwide Telecommunication Project as a part of the IT Strategy that will include a cost efficient, reliable, and scalable voice telecommunication system to accommodate all four colleges and the District Office.

### Financial Aid and PeopleSoft

As of Fall 2014, PCCD Financial Aid Offices have transitioned from the legacy system (SAFE) to PeopleSoft. The new PeopleSoft Financial Aid module has automated many financial aid processes that previously required manual processing by staff. Although the new system features streamlined and automated processes, the Financial Aid Office is required by the Department of Education to collect physical documents from students who

were selected for verification, have a “C” comment flag, or must resolve conflicting information. These physical files are stored in a secure file room located in the College’s Financial Aid Office. BCC has adopted scanning/document imaging of all financial aid documents and stores them electronically in a shared drive. This drive is password-protected, and only financial aid users with appropriate security access can view student files.

### Distance Education

Distance Education (DE) platforms are processed, operated, and managed by the District Office of Educational Services. The District has been a local leader in the field of distance education, with an established track record of delivering high quality online courses and linked online student support services for more than five years. Today, all four Peralta colleges have a fully-developed distance education component. In Fall 2013, the District offered 193 online and hybrid classes, with 6,400 enrollments by 4,800 students, resulting in 740 FTES. The four colleges share a common Learning Management System, Moodle, which is hosted on an external server and fully integrated with Passport/PeopleSoft, Peralta’s enterprise software system, for easy registration and tracking of student enrollment and performance.

The District’s Distance Education (DE) program is overseen by the Vice Chancellor of Educational Services and supported by four DE coordinators, one per college, and a District DE coordinator, a full-time Moodle/web programmer, and a part-time help-desk/troubleshooting support person. There is also a District Distance Education Committee consisting of the faculty members from each college serving as distance education coordinators for their colleges, along with a faculty lead (District DE coordinator), supported by release time. This team provides basic technical support to faculty teaching online courses and pedagogical advice in the area of DE, and the District’s IT Help Desk assists online students.

Peralta’s decision to use Moodle for its own district level programs was based on an in-depth comparison of LMS vendors, conducted by IT staff and the Distance Education Coordinator from Berkeley City College in 2007. After reviewing the merits of various vendors, such as Blackboard, Angel (absorbed by Blackboard in 2009), and others, the group recommended Moodle due to low start-up costs and the fact that it allowed for maximum institutional control and flexibility – an important consideration as Peralta ramped up its distance education program from one college to four colleges, each with its own online learning needs and agenda.

Moodle’s architecture also allows for a certain amount of adaptability, in terms of adjusting to Next Generation LMS and other technological innovations that may emerge in the near future. Its adaptability, low start-up costs, and lack of fees for individual add-on features (a source of expense with other LMS options) make it an ideal investment as a large-scale system for those who want to minimize cost while maximizing impact. By using Moodle, the District can respond immediately to the increased demand for online courses and the limited infrastructure and budgetary challenges of its individual colleges. At the same time, it can develop an interim system with minimal investment, positioning it to take advantage of

new technologies as they emerge. Peralta currently uses an external hosting company for its LMS installation. The LMS provides a standardized system and interface for users while at the same time accommodating individual needs at the four colleges.

District Distance Education classes are accessible to students with disabilities, as required by federal law. The LMS installation is developed in accordance with Section 508, the federally mandated accessibility code for educational institutions. The District is working with a Design Consultant, Jennifer Burke, who is an expert in accessibility design. The College has also established college-based alternative media services through its PSSD/DSPS Program, and has hired an Alternative Media Specialist, who can work with the DE instructors to make sure that online offerings are accessible.

The existing PCCD Distance Education website is a WordPress site, which can be integrated with the functionality of Moodle. WordPress is the platform that is being used to create the website and could easily be used to enhance a Moodle-based LMS with blogging technology. Instructors can also use these technologies to create their own web pages in order to promote their classes, list resources, and connect with current and prospective students.

In addition to the District Education website, District IT also maintains two locally developed technology tracking shadow systems. One is for Staff Development – software to monitor, maintain, and track staff development flex hours. The other is for EZPass – software to manage and maintain the AC Transit bus passes for students.

### **Self Evaluation**

The College meets this Standard. The District and College design technology services, professional support, facilities, hardware, and software to enhance the operation and effectiveness of the College. Thus, in the 2014 Self Evaluation Survey, 85 percent of respondents, including faculty, staff, and administration, had positive responses to the statement, “My program or service area has the technology to effectively accomplish the college’s goals.”

### **Actionable Improvement Plan**

None.

### **III.C.1.b**

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

### **Descriptive Summary**

Berkeley City College provides varied and robust professional development in use of technology for faculty and staff. In addition to offering individual workshops on designated

professional days and throughout the year, the College provides opportunities for sustained collaborative projects through the [Teaching and Learning Center](#), including Focused Inquiry Groups (FIGs), Action Plan Projects for Learning Excellence (APPLEs), and Discuss-Apply-Reflect Tools Workshops (DARTs).

Multiple workshops and projects in the last few years have focused substantially on increasing faculty and staff capacity to use technological innovations in service of student engagement, access, and success. Student services and administrative personnel have learned how to use software and automated systems to more efficiently and accurately help students with enrollment, counseling, and financial aid. Instructional faculty have in ever growing numbers learned to use smart classroom equipment, course management systems including Moodle and Turnitin, student response systems such as Socrative, applications to personalize the online environment such as Voice Thread, and most recently Kurzweil 3000, a program designed for students with disabilities that has proven transformative for a wide variety of learners. Currently, groups are beginning projects investigating the uses of Google Classroom, the application of Kurzweil 3000 to the Reading Apprenticeship model, and the digitizing of common portfolio assessments. Many of these workshops focus on ways to teach students to use relevant technology.

In addition to the range of formal projects and trainings, many staff and faculty mentor one another individually. For example, the College's Web Developer holds daily office hours to support faculty in the use of Moodle. Using a course management system to support classroom teaching has become common for most of the face-to-face classes, with 73 percent of instructors responding that they use Moodle or another class webpage in their classes without an online component.

Evaluation and continuous improvement of these activities takes place through surveys at the end of each workshop and project. In addition, the Teaching and Learning Center (TLC) collaborative projects are closely connected to the work of the Planning for Institutional Effectiveness Committee (PIE), formerly the Assessment Committee. Learning Outcomes Assessments indicate areas for improvement, as well as examples of excellence that can be applied more broadly. FIGs offer opportunities to investigate solutions to problems that arise, APPLEs implement action plans from learning outcomes assessments or FIGs, and DARTs support instructors in applying specific effective practices, which often include new uses of technology. The fact that the TLC works in tandem with PIE ensures that professional development activities for technology are relevant to institutional goals and focused on needs identified by assessment.

Additionally, the District provides two training events for District IT staff per year, provided by Oracle World and the Higher Educations User Group (HEUG). The District sends five staff members to each training, rotating them so that they do not all attend the same conference each year, and also takes advantage of the knowledge transfer and training from the consultants who complete upgrades, which is a part of the contract in a train-the-trainer approach.

The District has a Help Desk to respond to technical needs within the colleges and District. Footprints Helpdesk software is the issue resolution tracking system implemented at the District Office to provide a method of addressing immediate and long-range technical support needs. The District procedures with regard to Help Desk ticket (request for help) response times and ticket information are as follows:

- Ticket responses will occur no later than four hours after a ticket has been opened.
- Tickets must be resolved no later than three business days after a ticket has been opened.
- When the issue is resolved, a detailed explanation of what was done to resolve the issue and close the ticket is developed.
- Help Desk runs a daily report that will flag tickets that are overdue.
- Only Help Desk staff members create tickets; end users must e-mail or call the Help Desk with their requests.

Students, faculty, staff, and administrators have access to technical support from the PCCD Help Desk, staffed by experienced IT professionals. The Help Desk is working on adding an open source platform that will allow for customer interaction by phone, by e-mail, or by chat function. This Helpdesk ticket system is now the industry standard for customer service helplines, whereby the customer is issued a number for each case, for future reference. The Help Desk is hosted through a separate external vendor-hosted server.

Moodle training opportunities for DE instructors in the District include workshops on districtwide professional development days, online videos and manuals, and a certificate program in using Moodle for online teaching. Professional development training for faculty and staff is available both online, on the Distance Education web page, and through Merritt College's Online Education Certificate Program.

### **Self Evaluation**

The College meets this Standard. Using a variety of methods, BCC and the District provide quality training in the effective application of information technology.

### **Actionable Improvement Plan**

None.

### **III.C.1.c**

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

## **Descriptive Summary**

As regular evaluations of infrastructure and existing equipment (faculty and staff computers, smart classroom peripherals, printers, scanners, projectors, audio-visual equipment, wi-fi portals, cameras, and other equipment) are conducted, this process leads to subsequent recommendations for the replacement of outdated equipment or upgrade to newer technologies.

Through program review and annual program review updates and the shared governance process, BCC faculty, staff, and administrators determine and prioritize lists of equipment and technology needs. These prioritized lists come to the College Technology Committee, which applies a rubric to each of the requests and considers them in light of the College Technology Plan in order to develop a collegewide, prioritized list of technology needs, which it forwards to the College Roundtable for Planning and Budgeting and College President, before sending the final list to the District Technology Committee. This process allows all relevant college personnel to provide input and advocate for resources necessary to improve student learning and student support.

Once lists are prioritized, the College Technology Committee collaborates with District IT for recommendations on standard equipment. These recommendations include consideration of long-term maintenance and repair costs.

Technology planning at the College is coordinated with District technology planning. College requests for new technology resources are channeled through the districtwide shared governance process of the Planning and Budgeting Integration Model (PBIM). Prioritized college lists are forwarded to the District Technology Committee (a committee of the PBIM) for dialogue and recommendation to the District Planning and Budgeting Council before going to the Chancellor. This planning and budgeting process provides a public opportunity to advocate for the resources needed at all levels in order to meet institutional needs.

## **Self Evaluation**

The College meets this Standard. BCC systematically uses its planning structures to acquire, maintain, and upgrade or replace technology infrastructure and equipment to meet institutional needs.

## **Actionable Improvement Plan**

While the College meets this Standard, BCC will enhance wireless internet access, as well as hardware and software, in order to meet growing enrollment and student needs.

### **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 College maintains a large number of workstations and servers over a complex network. District IT, with guidance from the College, is responsible for providing the College's faculty, staff and students with high-performance and reliable network services. The District, in consultation with the College, also sets standards for technology to be purchased and maintained. [Standards for technology](#) that connect to the network include specifications for anti-virus software and policies for updating software that prevent viruses and other damaging situations.

College IT staff members handle collegewide technology requests. When a user requires technical assistance, he or she submits an e-mail to the IT department, describing the need. IT staff troubleshoot the issue and either resolve it locally or determine that it needs to be escalated to the District IT team.

District IT personnel often receive requests from the college communities that require specialized technology and, at times, no one at the College has the capability or skill to complete the request. When this happens, District IT will lead the effort to procure a vendor, following District Purchasing Guidelines, which often leads to a Request for Proposal process. In the case of requests that involve a high dollar amount, three bids are required for an Independent Contractor to do the work. District IT works with the constituency group to develop a statement of work in collaboration with purchasing, then puts together the bid documents for the process.

District IT provides Data Security (PeopleSoft), using secure databases and sound security principles. System Security (Network) is also provided by District IT, which owns a security compliance package that blocks invalid network connectivity. The network is secure, consisting of firewalls and certificates.

The District Office stores new and end-of-life equipment in the IT "cage." District personnel process end-of-life equipment in the cage and then send a request to the warehouse to begin salvaging the equipment. The District houses new equipment until it is ready for deployment.

## **Self Evaluation**

The College meets this Standard. BCC uses systematic approaches for distribution of technology and responses to technology support requests in order to ensure that the use of technology enhances its programs and services.

## **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**

All major technology decisions are integrated with institutional planning processes. The College relies on a participatory governance process to provide input into and review plans. This process includes annual assessments and evaluations of strategies addressing technology.

The College's technology planning is integrated with the District's institutional planning through participatory governance processes that channel College requests through the District's Planning and Budgeting Integration Model (PBIM). The PBIM is an integrated districtwide planning and budgeting advisory system of four committees that receive input from the colleges. It consists of the District Education Committee, the District Facilities Committee, and the District Technology Committee, which make recommendations to the District Planning and Budgeting Council, which in turn advises the Chancellor.

Through program reviews and annual program updates and the shared governance process, BCC faculty, staff and administrators determine and prioritize lists of equipment and technology needs. These prioritized lists come to the College Technology Committee, which applies a rubric to each of the requests and considers them in light of the Technology Plan, in order to develop a collegewide, prioritized list of technology needs, which it forwards to the College Roundtable for Planning and Budgeting and College President, before sending the final list to the District Technology Committee. This process allows all relevant College personnel to provide input and advocate for resources necessary to improve student learning and student support.

Once lists are prioritized, the College Technology Committee collaborates with District IT for recommendations on standard equipment. These recommendations include consideration of long-term maintenance and repair costs.

As described previously, technology planning at the College is coordinated with District technology planning. College requests for new technology resources are channeled through the districtwide shared governance process of the Planning and Budgeting Integration Model (PBIM). Prioritized college lists are forwarded to the District Technology Committee (a committee of the PBIM) for dialogue and recommendation to the District Planning and Budgeting Council before going to the Chancellor. This planning and budgeting process provides a public opportunity to advocate for the resources needed at all levels to meet institutional needs.

The District Associate Vice Chancellor of IT co-chairs the District Technology Committee (DTC), providing guidance and support in making technology recommendations. District IT staff and faculty from the colleges serve on the DTC. This provides a liaison between the District and College to assure effective coordination and delivery of technology services. The DTC provides a forum for administrators, faculty, staff, and students from the District and all four colleges to discuss, review, prioritize, introduce, and recommend technology products and services and to view application demonstrations, along with discussing pedagogy, as each relates to using technology for teaching and learning. For example, the PCCD Information Technology Strategy was documented at the [PBIM meeting](#) in February 2012.

The Director of Technology Services is a member of the District Facilities Committee, ensuring coordination between District IT and the District Office of General Services. In addition, the Director of Enterprise Services attends the District Education Committee, providing expertise in making technology-related recommendations. The Associate Vice Chancellor of IT regularly attends all PBIM committee meetings, answering questions and providing input on an as-needed basis.

The District Technology Services staff and the colleges' network coordinators, along with senior college information systems analysts, are all members of the districtwide Engineering Network Group (ENG). At monthly meetings, they agree upon standards and guidelines, and discuss issues concerning the districtwide network infrastructure, desktop computing and telecommunications. The Director of Technology Services reports related issues, concerns, and updates to the District Technology Committee (DTC) monthly. This staff person also reports on facilities issues or other matters pertinent to service-related information technology.

Technology planning is incorporated into capital improvement planning through the [Information Technology Strategy](#) and the Five-year Facilities/Construction Plan, which is updated annually. The IT Strategy prioritizes projects utilizing an A/B/C hierarchy, with priority A applied to projects that must be completed first.

### **Self Evaluation**

The College meets this Standard. BCC uses its systematic planning processes to assess the effective use of technology resources and uses the results of these evaluations as the basis for improvement. These planning processes are coordinated with systematic district level processes.

### **Actionable Improvement Plan**

None.