

Standard III: Resources

III.C. Technology Resources

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

III.C.1. The institution assures that any technology support it provides is designed to meet the needs of learning , teaching, college-wide communications, research, and operational systems.

Evidence of Meeting the Standard

Citrus College provides technology that enables the College to, as stated in the [mission statement](#)¹, “deliver high quality instruction to students both within and beyond traditional geographic boundaries.” To this end, technology supports multiple aspects of learning, teaching, and student support as well as provides the foundation and infrastructure for administrative and business processing.

The Citrus College Technology and Computer Services (TeCS) department focuses its resources on the implementation of available [technology applications](#)² that support the College mission, enabling it to expand technology resources in support of student learning and services. In addition, the department is a service organization providing a technology environment to support the mission via central network resources and desktop environments.

The foundation for technology applications and data processing at Citrus College is the Banner Enterprise Resource Planning (ERP) system, known at the College as WingSpan. The initial implementation of WingSpan included the

student, financial aid and human resources modules. The College added the module for degree audits and student education planning, Degree Works, in fall 2012. TeCS integrates many instructional and student support services applications with WingSpan including the chancellor’s office application process, Open CCCApply; a document scanning application, Xtender; a student parking application, iParq; scholarship application processing, Wizehive; orientation and probation workshops, Cynosure; counseling support applications, SARS-SUITE; and transcript processing, Credentials. In support of College business processing, finance and administrative services and human resources, worked with TeCS to add the financial module to WingSpan, going live with the application on July 1, 2015 to begin the 2015-2016 fiscal year.

To maximize technology applications and support with limited staff, Citrus College has implemented several systems that are fully hosted by the application provider. The Blackboard application provides a learning management system used by faculty for both distance education courses and traditional classroom courses. To provide current enrollment information to Blackboard, the College implemented an interface between the Banner Wingspan system and the hosted Blackboard environment. Faculty use the CurricUNET application for curriculum

development and maintenance. The College uses CollegeBoard's Accuplacer testing system to support assessment testing. Students access the Accuplacer testing services from the Testing Center on campus, and, when testing is complete, admissions and records staff upload their scores to the Wingspan system.

Community education has a fully hosted third-party support environment, Lumens, to manage course advertisement, student records, and faculty assignments. Currently, the Los Angeles County Office of Education accounting, payroll, and human resource functions fully support the Citrus College financial systems. However, the Banner financial module will replace much of this processing beginning July 1, 2015. The human resources department uses PeopleAdmin for job postings and applicant tracking.

The College meets the Standard.

Analysis and Evaluation

Citrus College integrates technology planning into the overall planning process as described in the [Integrated Planning Manual](#)³. The College Information Technology Committee (CITC) develops the [Technology Master Plan](#)⁴ and reviews and updates the plan annually as indicated in [minutes from the College Information Technology Committee](#)⁵. The Information Technology Committee ensures that the technology master plan responds to both the 2011-2016 Strategic Plan and the 2011-2020 Educational and Facilities Master Plan. The technology master plan includes planning objectives from the

institutional plans. In addition to considering the College planning objectives, CITC completes a strengths, weaknesses, opportunities, and threats analysis to ensure that new opportunities provided by technology advancement are appropriately included in technology planning.

To ensure that technology is represented in college wide planning, the chief information services officer, who chairs CITC and heads the TeCS department, is a member of the Institutional Effectiveness Committee. This committee monitors and reviews the [Integrated Planning Manual](#)⁶ and [model](#)⁷. In addition to the structured planning process, the TeCS department works closely with academic affairs, student services, and administrative support departments to assist in the implementation of area-specific technologies. These inclusive and cooperative methods allow the College to use funding from the general budget, categorical, construction, and bond sources to meet technology needs.

Governance at Citrus College incorporates many aspects of technology. The technology governance committee, CITC, develops policies and procedures related to technology and creates the technology plan for the College. The administrative procedures define standards for technology use including networks, desktop computers, data, passwords, and electronic communications.

BP 3720 Computer and Network Use ⁸	AP 3720 Acceptable Computer and Network Use ⁹
	AP 3721 Computer and Network Account and Password Management ¹⁰
	AP 3722 Computer and Network Connectivity and Access ¹¹
	AP 3723 Electronic Mail and Bulk Electronic Distribution ¹²
	AP 3724 Data and Information Protection ¹³
	AP 3725 Electronic Equipment Disposition ¹⁴
	AP 3726 Telephone Services ¹⁵
	AP 3750 Use of Copyrighted Material ¹⁶

The chief information services officer initiated the instructional technology leadership team in 2012 to review technology needs specifically for instruction and make recommendations to CITC. Currently the instructional technology leadership team is reviewing alternatives for capturing lectures and delivering these lectures to students. TeCS has representation on many governance committees including physical resources, fiscal resources, institutional research, institutional effectiveness, program review, educational programs, student learning outcomes and assessment, and steering. Representation on the physical resources and fiscal resources committees ensures that both facilities and budget planning consider technology needs. This representation also guarantees that facility designs for new construction as well as remodeling projects incorporate technology infrastructure. Participation on the Institutional Effectiveness Committees facilitates the inclusion of technology planning for the College. Technology representatives provide guidance on data usage and techniques to incorporate technology into College processes through participation on

the institutional research, program review, educational programs, and the student learning outcomes and assessment committees. The chief information services officer is the technology representative to the Steering Committee, reporting for the Technology and Computer Services department as well as for the College Information Technology Committee.

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

Evidence of Meeting the Standard

All areas of Citrus College use technology to support student learning, student services, instructional programs, and administrative support functions. Students use technology to apply to the College, complete steps for matriculation, register for classes, and complete coursework. Faculty members use technology to develop curriculum, obtain class rosters, input course grades and provide a distance-learning environment.

The College administration uses technology for daily operations such as processing new employees, creating purchasing requisitions, and creating state and federal reports. Staff members employ technology for purchasing, scheduling, managing student data, communicating, and managing their daily work. Managers rely on technology for data and statistical analysis to support planning and decision making.

Learning and Teaching

Citrus College provides teaching and learning technology resources in many areas. During the last three years of this reporting period, the College refocused many of its student computer classrooms and labs, moving from an open-lab concept with multiple course applications available in several labs to classrooms and labs that are discipline specific with computer work integrated as part of the classroom experience. In support of this effort, Citrus College currently has 117 [technology-enhanced classrooms](#)¹⁷ that include podium systems with computers and projection equipment. Faculty teach courses in these computer lab classes providing over 1,000 workstations for instruction. The Technology and Computer Services department [loads course-specific applications](#)¹⁸ to these workstations as requested by faculty.

Specialized instructional technology is available in several departments. The recording technology program maintains a state-of-the-art recording studio. Theatre arts has recently installed new equipment and applications that provide students experience with production lightening. The nursing program's human simulation systems provide nursing students real-life situations for training. A video recording

system captures the students' responses enabling them to review their work as instructors provide feedback and instruction. The dental assisting facility upgraded its labs in 2014 to include the latest in dental technology. The automotive technology program has a fully computerized Toyota training environment. The technology and engineering program equipped several classrooms with computer-aided design and computer-aided manufacturing software for students to gain experience with applications found in industry.

The [Distance Education Program](#)¹⁹ supports and manages the Blackboard course management system. Faculty use Blackboard to teach distance education classes as well as hybrid classes, which combine classroom and distance education meetings. Additionally, faculty use Blackboard to support traditional classes, providing information, assignments, discussion boards, labs, quizzes/tests, analytics, and additional programs such as [Turnitin](#)²⁰ within Blackboard.

Student services programs and offices use technology to support teaching and learning including support for several components of matriculation. The Learning Center uses the Accuplacer system for [student assessment](#)²¹. Students can complete [orientation online](#)²² with the application developed by the counseling department using the Cynosure New Media application. Since 2013, a cross-functional team including counseling, admissions and records, academic affairs and the technology and computer services department implemented the Degree Works degree audit and student education planning application. Working with students, both

one-on-one and in workshops, counselors assist students to develop student education plans.

The counseling department uses the SAR-Suite of applications to support counselors during their individual appointments with students, and to provide an [early alert](#)²³ notification system where faculty can direct students who need assistance to support services provided by the counseling department. The counseling department also uses technology to assist students who are on probation with an online probation workshop.

Disabled Students Programs and Services provide a laboratory where students use adaptive keyboards, screen readers, speech recognition software, and multimedia accessibility support to [enhance student learning](#)²⁴. The Financial Aid Department, along with the Citrus College Foundation, provides an online scholarship application with the Wizehive system. The Wizehive system enables students to complete one scholarship application, which is matched to multiple potential scholarships. Additionally, the Banner financial application enables the Financial Aid Department to award and distribute student financial aid including Pell grants, board of Governors' fee waivers, and student loans.

Student Learning Outcomes

Citrus College continues to expand technology support for [student learning outcomes](#)²⁵. Academic departments define student learning outcomes in course outlines of record in the CurricUNET curriculum management system enabling review of course-level student learning outcomes, as courses and programs are developed and updated. Many instructors use the

Blackboard course management system to assess student learning outcomes either on a section-by-section or course wide basis.

The Office of Institutional Research, Planning, and Effectiveness provides timely data to programs and individual courses including demographic data that give a complete and meaningful picture of student learning outcome assessment information. The student learning outcomes coordinator, program review coordinator, institutional research staff, and technology and computer services staff provide an [online environment](#)²⁶ on the College intranet with the SharePoint application for instructors to report student learning outcome assessment in coordination with their program reviews. Beginning with the 2012 reporting period, faculty record course student learning outcomes in this online intranet data repository.

Beginning in fall 2014, the governance committee for student learning outcomes, the HotShots, began reviewing technology options for managing both course and program student learning outcomes. The committee chose the PerformanceCloud application from [Weave](#)^{®27}, and implementation of this application began in spring 2015.

College Wide Communication

Citrus College uses both its Internet and intranet websites to create an extensive platform for communication. The College website is a content management system, and each office, department, and program designs and updates its detailed Web content. With this capability, offices, departments, and programs are able to communicate with constituent groups and provide accurate and timely information.

The overall structure of each webpage provides consistent format navigation throughout both the intra- and Internet websites. In addition, the [A-Z index](#)²⁸ provides easy access to information from multiple viewpoints using several terms to reference a single page. In fall 2014, TeCS updated the Web platform to provide dynamic resizing for mobile devices, making it easier to access the website from mobile phones and tablets.

Since its website is maintained offsite, the College can employ it for communications when servers on the campus are disrupted and for timely updates during emergencies. In addition, the College uses the Blackboard Connect alert system, known as [Citrus Alert](#)²⁹, to provide emergency phone, email, and text alerts. The staff compose, store, and send emergency messages from the Blackboard Connect system. Students, faculty, and staff contact information is stored on this system, allowing the College to communicate with these groups even when College resources are not available.

TeCS utilizes the SharePoint intranet application to provide a collaborative environment for departments, offices, programs, and committees and to provide information to the College community, and to work together to create products in an online environment. Most governance committees, including the [Steering Committee](#)³⁰, [College Information Technology Committee](#)³¹, [HotShots](#)³², and the [Institutional Effectiveness Committee](#)³³ provide resource and reading materials to their members via SharePoint. The academic programs and divisions work collaboratively on the intranet to write their [program reviews](#)³⁴. The College accreditation team uses the intranet to

provide resources and a collaborative writing environment for accreditation reporting.

Faculty members use Blackboard not only to create an online learning environment, but also to communicate with students through emails and chatrooms and to post learning resources and grades. Students can access course materials and communicate with each other and the instructor. Faculty members use Blackboard communication in courses taught either fully in a classroom environment, as distance education and classroom hybrid courses, or fully online courses. Faculty can use Turnitin through Blackboard. Turnitin reviews a student's assignment for plagiarism providing the student with originality indices, predefined comments, rubrics, and Quick Comments developed by the faculty members. The [Blackboard LMS](#)³⁵ provides analytics for online faculty to determine student online time, activities reviewed, content covered, and achievements.

For outreach purposes, academic affairs began using the Blackboard Connect system in spring 2013 in support of the registration process to send targeted messages to specific student groups. The outreach office, working with the technology and computer services staff, uses this system to send phone, email, and text messages to students who are at risk of being removed from registration due to nonpayment of fees. Academic programs send messages to students on waitlists, informing them of alternative open sections. Distance education faculty also use the system to contact students on the waitlist, informing them of upcoming course orientations.

Faculty, staff, and students [have access to email](#)³⁶ from both on and off campus. The Technology and Computer Services department maintains email boxes on a central server. Staff and faculty have the option to archive emails either to a local desktop drive or to a centrally provided server. The College provides email accounts to students via the Microsoft Office 365 application, which is maintained offsite.

Citrus College employs email to communicate with large distribution groups such as all students or all staff and faculty, or with targeted audiences such as student groups including science, technology, engineering, and math; Extended Opportunity Programs and Services; financial aid; and Disabled Students Programs and Services. The College uses emails to communicate with community groups such as the Citizens' Oversight Committee for Bond Measure G. Admissions and Records and Financial Aid create targeted email messages via the Banner application for groups such as students completing their applications to Citrus College, students applying for financial aid, and students completing their applications for graduation.

Prior to spring 2015, the College used the native Banner student portal to provide student access to the Banner WingSpan system as well as to communicate with students. Starting in summer 2015, the College will begin implementation of a new Banner SharePoint Portal. This portal will link directly to student data and provide students with a single point of access to all online materials and information. The portal will provide a platform for programs

and divisions to communicate to the entire student body or to groups of students.

Many departments, programs, divisions, and offices, especially in student services and student activities, have begun to use or expand their social media, such as [Facebook](#), [Twitter](#)³⁷, and Instagram, for communications. The College [external relations](#)³⁸ department uses [Twitter](#)³⁹ to communicate with the public and maintains the official College [Facebook page](#)⁴⁰. Other departments using Twitter include the [Citrus College Owls](#)⁴¹, who have been on Twitter since 2009 providing updates of important athletic events, and the [Hayden Memorial Library](#)⁴², on Twitter since 2010.

Research

The Office of Institutional Research, Planning, and Effectiveness and staff from TeCS work collaboratively to meet the research and reporting needs of the College. For transactional and longitudinal studies, institutional research staff members use the operational data storage database of the Banner WingSpan system to extract data. The technology and computer services staff assist institutional research personnel with the development of the data extractions programs. In addition to using the WingSpan operational data storage database, the institutional research staff uses the California Community College Chancellor Office's [databases](#)⁴³ for research and reporting.

The personnel from institutional research and the TeCS meet periodically to review data structures and usage to ensure both departments have a consistent understanding of the institution's data resources and use the data consistently for reporting and research. The technology and

computer services department has provided training to institutional research staff on the use of the operational data storage database.

Operational Systems

The Technology and Computer Services (TeCS) department manages the College network and related infrastructure; the [central server room](#)⁴⁴, the telephone system and related infrastructure; [desktop computers and related peripherals](#)⁴⁵ for faculty, staff, classrooms, and laboratories; and administrative applications including the Banner WingSpan system and related support applications. In addition to TeCS, several offices and programs provide technology support and facilities. The Hayden Memorial Library provides an extensive online research environment, open computer labs, and computer classrooms. The audiovisual department of the library provides audiovisual equipment upon request and assists in the maintenance of classroom projection equipment. Distance education staff also provide support for the Blackboard course management system including training for faculty, support for students, and management of the remote Blackboard system. Academic divisions, in partnership with TeCS, provide [technology for classrooms and laboratories](#)⁴⁶. The reprographics center manages all technology support for publications and printing. The purchasing and warehouse offices manage the College purchasing application known as Escape. The facilities department manages the environmental systems with the environmental management system that controls heating and cooling across the campus. Finally, the College uses systems that are fully hosted and maintained off site by third-party vendors.

Technology Environment

The Citrus College technology environment is network-based with a [central server](#)⁴⁷ room that includes large data storage capacity. TeCS provides a secure, file-sharing environment for staff and faculty to create information and data resources for use by all members of a program, department, or office. The majority of College applications are located in this server environment. With the addition of new applications and the growth of stored data, the College reached server and storage capacity in 2013-2014. TeCS completed a major upgrade to the server room in January 2015 to accommodate additional applications and expanding data storage needs.

Faculty and staff receive [desktop computers](#)⁴⁸ including Intel-based PCs as well as Apple computers. Departments deploy tablets, where appropriate, to meet mobile computing needs. All computer users have access to word processing, presentation, spreadsheet, database, and communication software.

TeCS developed a virtualized component for the College network in 2009. The library staff worked with them to implement a pilot program that virtualized 150 student computers in the library. TeCS now provides applications for all library student computers via a virtualized environment and continues to expand the virtual environment where appropriate. During spring 2015, TeCS deployed virtualized computers in the main open computer lab, IS 107, and in a technology classroom, IS 108.

The College's central technology environment has grown slowly due to fiscal challenges faced by the California community college system. Despite fiscal challenges, the department, in partnership with various departments and offices, implemented tools and applications supporting the needs of the College including the new CCCApply application, the new SharePoint Web environment and related intranet environment that supports group work and document sharing, and the initial phases of the Banner Degree Works application for degree audit and student educational planning.

TeCS has an [eight-year technology replacement plan](#)⁴⁹. Beginning in 2014-2015, they worked with the fiscal services department to develop funding sources to support this plan. The new Student Success and Support Program provides additional resources for technology specifically supporting the functions of the program. The department upgraded the server room during winter 2015 that increased server processing and storage capacity.

Applications

Banner WingSpan is the core administrative application system and includes the student, financial aid, and human resource modules. Citrus College is [implementing the financial module](#)⁵⁰, including updates to the human resources module, in 2014-2015 to begin processing with this module for the 2015-2016 fiscal year. TeCS has integrated multiple applications with the WingSpan system, including [Xtender](#)⁵¹ for document processing and [Crystal Reports](#)⁵², which are used by admissions and records, counseling, financial aid, extended opportunity programs and services, and fiscal resources.

Citrus College uses several additional applications that are not directly integrated with the WingSpan system to support processing needs. The SARS-SUITE provides counselors with appointment tracking, early alert functions, reminder calls, and reporting support. The purchasing department uses the Escape application to support paperless purchasing and asset tracking. The online purchasing function will move to the new Banner finance module in July 2015, but the Escape application will continue to support asset tracking. Collegenet's Resource 25 provides a room scheduling application for the academic schedule and event management.

Academic affairs implemented an enrollment management application that allows deans to manage enrollment data, plan scheduling options, and project the cost of the planned schedule. The CI Tracker application records student attendance in computer, music, science, and dance labs. These records include which course a student worked on while in the lab and the time spent on the assignment. A specialized system for the nursing program tracks the medical data for nursing students that is required by the California Board of Registered Nursing.

To maximize the College's technology applications and support with limited staff, TeCS collaborates with various departments across campus to implement systems that are fully hosted off site. The College uses [Blackboard](#)⁵³ for course management; CurricUNET for curriculum management; [Accuplacer](#)⁵⁴ for assessment testing; [PeopleAdmin](#)⁵⁵ for employment applications; [Lumens](#)⁵⁶ for community education course management, student

records, and faculty assignments; and the Los Angeles County Office of Education PeopleSoft system for financial processing, including accounting, payroll, and some human resources functions. Citrus College has added [Open CCCApply](#)⁵⁷, provided by the California Community College Chancellor's Office for college applications; iParq for staff and student parking permits and ticket processing; and Wizhive for scholarship applications. The Citrus College Foundation implemented the new Raisers Edge application for tracking donations and donors. TeCS works with various departments on campus to ensure that all third-party hosted applications meet security-processing needs and that they have the ability to interface with the Banner WingSpan system as needed. TeCS reviews all contracts to ensure security and data processing requirements are met.

Citrus College provides student services support for distance education in several ways. Distance education students can apply online via [CCCApply](#)⁵⁸. Students complete assessment online using the Accuplacer Application, complete an [online orientation workshop](#)⁵⁹ with the Cynosure system, and register online with the Banner WingSpan system. Using the Blackboard system, the instructor can configure the course so that students can access grades on assignments as well as their overall grades including course percentage, letter grade, and hours online. All students can view their final course grades on the Banner WingSpan system. The financial aid office provides direct links from their department website for students to apply for financial aid. The counseling department provides several services online for distance education students. Students can complete a [probation workshop online](#)⁶⁰ via an

application by Cynosure. Students can receive online counseling support and make appointments using components of the SARS-SUITE.

Technology and Computer Services Department

The chief information services officer reports directly to the superintendent/president, is a member of the president's cabinet, and leads the technology and computer services department (TeCS). This department manages the College network and related infrastructure; the central server room; the telephone system and related infrastructure; desktop computers and related peripherals for faculty, staff, classrooms, and laboratories; and the administrative applications, including the Banner WingSpan system and related support applications. TeCS has a [staff](#)⁶¹ of 16 including the chief information services officer, two supervisors, and 13 classified staff. Student workers provide help desk service and support for the open computer lab. One administrative assistant, reporting directly to the chief information services officer, supports the department.

The department has three functional groups to support each of three key technology areas. The network, central computing, and telecommunications group, led by the network computing supervisor, has responsibility for all networks, the College website, email, central hardware with associated software, security, telephones, and construction support. The technology operations and support services group, led by the technology operations and support supervisor, is responsible for instructional computer labs, classroom and staff desktop support, instructional software and

hardware in classrooms and labs, helpdesk support, and training. The instructional and administrative systems group, reporting directly to the chief information services officer, implements, and maintains all administrative software applications and is responsible for supporting state and federal reporting requirements. In support of the Banner WingSpan system, an enterprise resources planning coordinator leads the continuing implementation and upgrading of the Banner WingSpan system and chairs working groups, such as the current Degree Works implementation team.

In addition to the Technology and Computer Services department, several offices and departments provide technology support and facilities. The library provides an extensive online research environment, open computer labs, and computer classrooms. The audiovisual department in the library provides audiovisual equipment upon request and assists in the maintenance of classroom projection equipment. The distance education office supports the Blackboard course management system including training for faculty, support for students and management of the remote Blackboard system. The bookstore manages book supplies with the Sequoia system. The reprographics center manages all technology support for publications and printing. The purchasing and warehouse office manages the college purchasing system, Escape. Finally, the College uses several systems that are fully hosted and maintained off site by third-party vendors.

The College meets the standard.

Analysis and Evaluation

The College uses technology to meet its processing needs for instruction, student support, and administrative operations thus ensuring that it meets the College mission objective to “offer technological services and support for students, faculty, and staff.”

Technology and applications support faculty in classrooms and labs providing tools for teaching as well as for communicating with students. Student services offices use technology to enhance processes such as matriculation, financial aid, educational planning, degree audits and transfers, thereby helping students achieve their education goals.

The College uses technology to enhance communication among all constituents including students, staff, and faculty. Communication options enable offices and departments to target specific groups with detailed messages and to send communications to the entire Citrus College community.

Working cooperatively, TeCS and the Office of Institutional Research, Planning, and Effectiveness make data available for student learning outcomes assessment and provide data to enhance program reviews.

Continuing the philosophy to implement available technology applications and tools along with promoting partnerships between the technology and computer services department and offices and departments throughout the College allows wide array of technology support and applications with a core technology staff of only 16.

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

Evidence of Meeting the Standard

Citrus College provides technology training through a variety of resources. Students receive training in courses via support organizations and online forums and from TeCS personnel. Staff and faculty receive training in multiple formats including one-on-one help for focused tasks, workshops for specific tools or applications, and working groups for new applications or upgrades to existing applications. The Faculty Learning Institute provides professional development activities and workshops for faculty that include technology training.

Student Training

Classrooms and Labs

Many instructors incorporate technology training tools and applications into their courses and work with the technology and computer services department to have these specialized applications provided on computers in classrooms and [labs](#)⁶². Examples of these applications include Quickbook's accounting software and applications for general ledger and finance accounting; publishing software applications by Adobe, such as ImageReady, Illustrator, and Photoshop; animation software, Maya; design software, Chief Architect; and video software, Sonic Foundry. Vocational programs offering technology-based trainings include the Emerging Theatre Technology program, which recently installed technology-based

lighting and sound equipment for design; the Recording Arts Program, which provides students with a state-of-the-art recording studio; the Automotive Technology Program, where students use up-to-date analytical tools from Toyota; and the Engineering Technology program, which offers student networking and computer-aided drafting and design training. The computer information systems, information technology, office technology and computer applications, and computer sciences programs offer courses in computer programming and application development.

Hayden Memorial Library

Library staff members offer workshops on how to use library reference technology and introduce students to the variety of resources available in the library. Faculty members complete [online forms to schedule](#)⁶³ these sessions for their classes. The library offers [online resources](#)⁶⁴ to help students use the [online materials](#)⁶⁵ for research.

Distance Education

The distance education program created an [online orientation](#)⁶⁶ to provide distance education students with information on their readiness for success in online courses. Citrus College obtained permission to link to the Sierra College site, which provides students with immediate feedback on their readiness for online classes. To access the Blackboard learning management system, the distance education program includes a [link to Blackboard](#)⁶⁷ that provides basic information. Students receive instruction on the Blackboard system when faculty use it to support traditional classroom instruction.

Student Services Offices

Disabled Students Programs and Services (DSPS) provides training for students who need specialized technology for both course work and student services tasks such as registration. The DSPS technology lab has specialized technology to support this effort. Admissions and records staff members, as well as student workers, provide training for students on admissions and registration processing via phone support and at the bank of kiosks in the Student Services building.

Students receive one-on-one training and support via the technology and computer services helpdesk for items such as network logon and password maintenance. Staff members from TeCS and Admissions and Records provide phone support and training for students who need help with registration. In addition, student services offices, such as counseling and financial aid, provide individualized training in person or by phone to students who require assistance with the matriculation or financial aid processes.

Personnel Training

Citrus College provides technology training for staff and faculty via one-on-one training, schedules workshops, and application-specific trainings associated with the rollout of new applications. Additionally, staff and faculty receive training via webinars such as those provided by the California Community College Chancellor's Office.

The technology and computer services department provides scheduled one-on-one training sessions for a variety of applications, including desktop training in Microsoft Word and Excel and the SharePoint application for webpage

development. These individualized work sessions focus on the detailed needs of the trainee and meet the specific needs of one office or department. Staff and faculty can receive one-on-one help without a scheduled meeting by calling the technology and computer services helpline. Technology and computer services staff members also offer workshops during faculty spring Flex Day sessions.

TeCS coordinates training for staff members when new applications are introduced and brings in application specialists to provide the training. For example, TeCS collaborated with the foundation and the financial aid office to coordinate training sessions on the new scholarship application, WizeHive.

A Degree Works consultant provided training sessions for counselors throughout the implementation of the application. Since the financial aid module in WingSpan requires annual updates due to regulation changes, personnel from technology and computer services and financial aid provide training to staff during each consulting engagement for module upgrades. To learn the new skills to implement and maintain the degree audit functions of Degree Works, staff from TeCS and Admissions and Records received small group training from Degree Works experts. In addition to group training, the TeCS held three one-on-one sessions regarding student services processing when the College hired a new registrar in spring 2012. The Financial Aid Office receives annual training associated with the updates to the Banner financial aid module.

Staff members participate in technology webinars sponsored by the California Community College Chancellor's Office primarily for reporting needs. Technology and computer services staff participates in the annual webinars for training on MIS reporting requirements and processes. Financial aid and technology and computer services staff attend webinars on financial processing updates and changes to gainful employment reporting requirements. During the implementation of the Open CCCApply applications, technology and computer services and admissions and records staff members took part in the training webinars to understand the application setup and operations.

Staff and faculty receive application-specific training from several departments and groups. The Curriculum Committee provides training for staff and faculty using CurricUNET at the start of each academic year. The program review and student learning outcomes coordinators conduct train-the-trainer workshop for faculty in preparation for fall Flex Day program review working sessions. The Center for Teacher Excellence provides iPad training for Citrus College faculty with monthly training meetings during fall and spring semesters. Faculty who successfully complete this training become peer mentors. The faculty learning institute coordinates training workshops including those presented on faculty Flex Days.

Faculty Distance Education Training

The Distance Education Program offers one-on-one support for faculty developing courses in Blackboard. Additionally, distance education staff members are available to work with faculty, staff, and students, either in person or via phone

support. In September 2014, the distance education coordinator, in collaboration with the dean responsible for distance education and the distance education staff, developed four training [workshops](#)⁶⁸ including What's New in Blackboard 9.1.14, Turnitin, Accessibility and 508 Issues, and Use of Gradebook. Distance Education Committee members completed a survey to determine workshops for spring. These workshops include Online Behaviors/Excuses; Online Cheating, Tests, Surveys and Polls; and Captioned Videos Using YouTube. The workshop evaluation created determines the efficacy of each presentation/experience.

Citrus College offered @ONE four-week training "Online Teaching and Learning" March 9 through April 4, 2015. This @ONE course will provide Citrus College free use of shared resources for future faculty development while training an @ONE facilitator on campus. Plans include @ONE training in Assessment during fall 2015.

In the Distance Education Committee, faculty share techniques and applications and demonstrate how they apply Blackboard to their courses. Citrus College joined the California Community College Open Educational Resources consortium that provides shared resources for distance education faculty including open textbooks that are available online for student and faculty use. Citrus College uses the Creative Commons license to secure online training modules for faculty.

Additionally, faculty use YouTube training videos:

- [CCCConfer](#)⁶⁹
- [Accessible PowerPoints](#)⁷⁰
- [BlackBoard and Turnitin](#)⁷¹
- [Developing a WIKI](#)⁷²
- [Gamification](#)⁷³

There are also [BlackBoard-designed training videos](#)⁷⁴ available for instructors and available on both BlackBoard faculty sites such as *DE Program: Distance Education Committee* and BlackBoard: *Citrus BlackBoard 9.1.14 [all faculty]*.

The College meets the standard.

Analysis and Evaluation

The College provides technology training to students, staff, and faculty via multiple venues including training incorporated into academic coursework, as well as workshops, one-on-one sessions, and online support.

Students receive technology training in courses that help them use learning tools such as Blackboard and gain experience in technologies they will apply in their careers such as nursing, automotive technology, electronics and design, and recording arts. The library provides training in technologies that support research. The distance education office provides training for students taking distance education courses. Student services offices, such as Disabled Students Programs and Services, admissions and records, counseling, and financial aid, provide training in tools and applications that help students navigate matriculation, stay on track for degree completion, and move on to the next step in their educational journey.

Faculty and staff receive training through a variety of methods from multiple offices and departments on campus as well as webinars and online training resources. The Distance Education Program provides faculty training for all aspects of distance education from using Blackboard to enhance traditional education courses to the tools and skills needed to teach full distance education courses. Faculty and staff receive technology training for tools ranging from Microsoft Office tools to the complex modules in the Banner WingSpan system.

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

Evidence of Meeting the Standard

The Technology and Computer Services (TeCS) department manages the technology infrastructure and equipment for Citrus College. The infrastructure includes the central server room, network, desktop computers and related peripheral equipment, and a voice-over-IP telephone system. To coordinate and manage equipment replacement and to respond to fiscal constraints, the department has created an [eight-year replacement cycle for all equipment](#)⁷⁵ starting with the 2014-2015 academic year. To ensure that the central computing systems can support the addition of new applications, planning for implementation of new applications includes hardware requirements. Whenever possible, applications share server and data storage equipment to reduce cost and maintenance.

Network and Infrastructure

The Citrus College computer network core is a switched 100-gigabit Ethernet with 1-gigabit Ethernet fiber connecting individual buildings to the core and a DS3 fiber-optic high-speed connection to the Internet. The network has a backbone with fiber-optic cable, as well as twisted-pair copper wiring to support communications. The core network has two secured segments, one administrative and the second instructional, with additional segmentation as required for support services within the instructional environment. TeCS maintains the storage area network for the Banner WingSpan system on a multi-tiered cluster. The College has a contract for same-day replacement for severe server failures and can replace disk drives without loss of service.

TeCS extensively expanded the [wireless networking](#)⁷⁶ for individual laptop and PDA users. Wireless access is now available in multiple locations across campus. To ensure a secure environment, wireless access is limited to staff, faculty, and registered students. Wireless infrastructure support is included in infrastructure replacement planning as part of the eight-year replacement cycle.

TeCS maintains computer servers in a secure room with environmental controls and uninterrupted power supply. The Facilities Department installed an external generator in spring 2014 to support the server room. In the break between the fall semester 2014 and the winter term 2015, the College completed a major upgrade to the server room, adding additional servers and data storage capacity and upgrading the airflow to address the problem of heat buildup in the room.

Backups

TeCS has implemented a three-level backup strategy. Incremental backups take place daily on all servers in the central server room, and the tapes are stored in the department vault in the Information Systems Building. Full backups occur on weekends with the backup tapes stored locally in the cashier's vault in the Administration Building. TeCS sends backups off site for storage on a regular basis. TeCS encourages staff and faculty to use central server disk storage for all data to ensure the data are backed up daily and provides server space for data backup. The department has developed a [disaster recovery plan](#)⁷⁷ to respond to the loss of the central server room as well as a major campus failure.

Security

Providing a secure technology infrastructure is a high priority. The [College Information Technology Committee](#)⁷⁸ developed administrative procedures [AP 3720](#), Acceptable Computer and Network Use⁷⁹; [AP 3721](#), Computer and Network Account and Password Management⁸⁰; and [AP 3722](#) Computer and Network Connectivity and Access⁸¹ that define acceptable computer and network use and include security and privacy provisions. These administrative procedures define [federal and state laws](#)⁸² and practices that govern computer use at Citrus College including correct password usage, acceptable use of College networks and resources, data protection and usage, and correct usage and distribution of email. The information technology committee worked during the 2014-2015 academic year to develop new administrative procedures that define acceptable webpage development and content and the use of

social media tools such as Facebook and Twitter.

TeCS limits central server room access to network and system administration personnel who are assigned secure key cards. The department patches the server systems regularly with current operating system spyware and antivirus software maintained from a central server. A perimeter firewall protects the College network. To provide additional security, TeCS split the network into two segments, administration and instruction. The College wireless network is limited to providing access to the Internet and does not provide direct access to College systems.

All user access, whether for applications supported on site or for those hosted off site, requires approved user logons and passwords. The department grants access on an “as needed” basis as requested by the application manager using the [approval form for access](#)⁸³. Only students currently enrolled in courses have access to college network resources and applications. The technology and computer services department grants limited system access to students applying to the College and, in recognition that students may skip a term, to those recently enrolled.

Desktop Environments

TeCS manages the desktop equipment for classrooms, labs, faculty, and staff including over 1,500 computers. The [eight-year replacement cycle](#)⁸⁴ defines the order of replacement. Since replacement is not always feasible due to funding constraints within any given budget year, technology and computer services replaces the oldest computers first as defined in the eight-year replacement cycle and extends the lifecycle

of computers wherever possible by adding memory. Exceptions occur when additional funding becomes available from grant or categorical sources, or when planned construction and remodeling projects include funding for technology equipment. These exceptions instances allow TeCS to place new equipment off schedule.

The College purchases the majority of its [desktop licenses](#)⁸⁵ from the [Foundation for California Community Colleges](#)⁸⁶. The TeCS manages licenses for desktop and general use software. Twice a year, the department upgrades and replaces instructional software in classrooms and labs according to the [lab load schedules](#)⁸⁷.

Citrus College provides computer [podiums and projection equipment](#)⁸⁸ in 155 classrooms as part of the eight-year replacement plan. The podiums are equipped with computers and DVD players connected to ceiling-mounted projectors. Technology and computer services works with academic affairs to manage the maintenance and replacement of this equipment.

In addition to instructional classrooms, several labs in the Student Services building, including the Transfer Center and the Career Center, have work areas with desktops. The Financial Aid Department has a laptop cart with 15 computers to support student-training workshops. Departments and offices in Student Services work with technology and computer services to manage this equipment.

The operations and technology support group within TeCS provides general maintenance and support for all desktops. Staff and faculty place and track services

requests via the [Footprints work order system](#)⁸⁹. Additional support comes from several departments across campus. For example, staff members from the Fine and Performing Arts division support technology in the recording arts program, the Haugh Performing Arts Center, and the music program. Staff from Library Services and from Natural and Physical Sciences provide support for several library systems and science programs. The library's audiovisual services supply audiovisual equipment to classrooms, meetings, and campus events as well as training on the use of multimedia classroom equipment.

The College meets the standard.

Analysis and Evaluation

TeCS supports a network and technology infrastructure designed to meet the processing needs of the College. The department developed an eight-year replacement plan to support the infrastructure replacement and maintenance. TeCS and fiscal services work together to implement the plan.

TeCS ensures that the technology infrastructures and supported applications are secure. The department has implemented data backup procedures and has developed a disaster recovery plan.

The College provides desktop environments for classrooms and labs as well as for staff and faculty. TeCS provides support for desktop and peripheral equipment. Replacement and maintenance planning for the desktops are included in the eight-year replacement plan, which began in 2014-2015.

Actionable Improvement Plan

In order to further advance the College technology plan, Citrus College will make resources available in a timely manner to address critical training, manage personnel and financial resources, and procure, replace, sustain, and expand services. (III.C.1.c.)

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

Evidence of Meeting the Standard

Technology Distribution

Citrus College integrates decisions regarding technology distribution into the program review, governance, and planning processes. The planning process defines and prioritizes program technology needs, and TeCS coordinates the implementation of these resources in collaboration with the programs receiving the new technology. This inclusive method allows the College flexibility to apply funding sources, such as general budget, instructional equipment, matriculation, construction, and bonds and grants effectively and to meet technology needs comprehensively.

Academic Affairs

The vice president of academic affairs and the instructional deans prioritize academic technology needs from the program reviews submitted by academic programs. Faculty make requests to their respective deans for software upgrades in classrooms and labs to support course needs. Academic affairs deans and faculty make requests for new software through the program review

process. The vice president of academic affairs and the academic affairs deans review and prioritize these requests and determine which to support. These requests are then coordinated with TeCS via the instructional status meetings.

Throughout the year, the dean responsible for library services meets with the technology and computer services network and operations support supervisors to review classroom and laboratory instructional technology needs and requests for new software applications. These needs range from requests to upgrade software loads in classrooms and laboratories for new semesters and terms to requests to upgrade classroom hardware.

Short-term needs, such as the classroom and laboratory software upgrades, are included in TeCS' operational planning for [classroom and laboratory load sets](#)⁹⁰. The department incorporates replacement and upgrade hardware requests into [the eight-year technology replacement cycle](#)⁹¹. The department works with each academic dean to define the equipment needs and cost for implementation. As instructional equipment funds become available through yearly allocations from the Chancellor's Office or grant funds. The Office of Academic Affairs determines how to distribute the funds to best support instructional programs.

Student Services

The student services deans work with the chief information services officer to prioritize implementation of their technology resources. In addition, staff members from technology and computer services work with the student success and support program coordinator to define

specific technology needs for this initiative. The dean of admissions and records works with technology and computer services to manage implementation of new tools and processes for application and transcript processing. The director of financial aid prioritizes and coordinates annual updates to the WingSpan financial aid module, the processing for gainful employment reporting, and the scholarship application process with the Wizehive application.

The Degree Works implementation team oversees this application, which includes student education planning and degree audit tools integrated in the Banner system. The Degree Works implementation team includes membership from counseling, admissions and records, academic affairs, and the technology and computer services department. This application requires coordination of processes including curriculum development, CCCApply application processing, and degree evaluation.

Administrative Support Departments

TeCS collaborates with leads from the various administrative support departments to define, prioritize, and implement technology applications. These applications are often stand-alone applications such as PeopleAdmin for employment applications, the Escape application for processing purchases, and the energy management system for monitoring building environmental controls. In addition, TeCS works with members from fiscal services and human resources to support testing and validation of WingSpan upgrades. In fall 2014, fiscal services, purchasing, human resources, and technology and computer services began the implementation of the Banner financial module.

TeCS dedicates a portion of its budget to keeping the desktops and peripheral equipment up to date. Construction projects that include funds for new desktop computers, categorical funds, and grants help support the replacement cycle. The department redeploys desktop computers whenever possible. Planning for implementation of a new application includes hardware requirements. The department upgrades and expands servers and related support equipment in the central server room as new administrative systems come online. Whenever possible, applications share server and data storage equipment to reduce maintenance and replacement costs.

Distance Education Program

The Distance Education Program supports distance education needs. When the Blackboard license was due for renewal in 2014, the distance education coordinator led a review of three course management system options. The distance education program developed a rubric prior to vendor presentations and provided the rubric to the vendors as well as the College staff who were reviewing the product. Afterwards, the Distance Education Program surveyed faculty about the systems, and the faculty voted. Based on these reviews, the College chose to retain Blackboard and update the system from the current Blackboard version, 9.1, to the newest version, 14.

Governance

The chief information services officer chairs the College Information Technology Committee (CITC), the primary technology governance committee for the College. The committee members represent all constituent groups including academic

affairs, student services, human resources, fiscal resources, and student government. In addition, area experts from technology and computer services, including the network central computing and telecommunications supervisor, the operational support supervisor, and the external and government relations director, participate in the CITC. This committee is responsible for the Technology Master Plan. In addition, this committee reviews and proposes changes to board policies and administrative procedures that guide the use of technology at Citrus College.

The Instructional Technology Leadership Committee evaluates instructional technology needs. TeCS' network supervisor and the dean from curriculum, career/technical, and continuing education co-chair this committee. Faculty comprise the majority of the membership of this committee along with a representative from student government and a TeCS programmer. The charter for this committee is to review technology recommendations based on instructional needs and make recommendations to the CITC that will then include the recommendations in technology planning. During 2014-2015, this committee reviewed alternatives for applying lecture capture technology.

In addition to the committees listed above, several additional governance committees contribute to the decisions regarding technology use at Citrus College. To incorporate technology planning into new construction projects and facility upgrades and remodeling projects, the technology and computer services network supervisor represents the technology and computer services at the [Physical Resources](#)

[Committee](#)⁹². This representation ensures the committee discusses and includes technology plans in the planning and funding stages of these projects.

TeCS has representation on additional governance committees, as defined in the Citrus College [Organization and Governance Handbook](#)⁹³, including financial resources, institutional research and planning, program review, HotShots, enrollment management, and steering. Membership in these committees ensures that, when committees address technology needs, the needs will be reviewed in context of the existing College technology infrastructure and applications.

The College meets the standard.

Analysis and Evaluation

Departments and programs define and prioritize initial requests and prioritization for technology in the program review and technology planning processes. To implement technology needs, TeCS works with offices and departments to ensure that technology is available to support programs and services. CITC has representation from throughout the College so that all areas are involved in technology planning. To ensure that technology needs are represented in other areas of planning, the TECS has representation on several governance committees including institutional effectiveness, physical and fiscal resources, and program review. TeCS department works closely with offices and departments in academic affairs and student services to coordinate technology support for these areas.

III.C.2. Technology planning is integrated with the institutional planning. The institution systematically assesses the effective use of technology resources and uses the results of evaluation as the basis for improvement.

Evidence of Meeting the Standard

Technology Planning

The College Information Technology Committee (CITC) develops and monitors the [Technology Master Plan](#)⁹⁴. This plan, which guides the implementation of technology, is part of the College [Integrated Planning Manual](#)⁹⁵ and is incorporated into the [integrated planning model](#)⁹⁶. The Technology Master Plan guides the development of technology infrastructure, administrative information systems, operations support, and management of web resources.

During the development of the Technology Master Plan, CITC conducts a strengths, weaknesses, opportunities, and threats analysis to understand the current technology environment. In preparation for the analysis, members of the [information technology committee](#)⁹⁷ review the Strategic Plan, the 2011-2020 Educational and Facilities Master Plan, program review input, and results of surveys, such as the Community College Survey of Student Engagement to gather data. The committee then integrates data from these documents into the analysis to create the Technology Master Plan. The committee defines goals for each area and annual implementation objectives for each goal.

When designing the technology planning process, CITC factored in the dynamic nature of information technology. During the initial development of the plan, the committee defines high-level technology goals for the duration of the plan in five technology areas: administrative information systems; education technology, network, infrastructure, and telecommunications; operations and support; and Web environment. The committee then develops planning objectives for each technology goal that the committee [reviews and updates annually](#)⁹⁸. During the annual technology and computer services program review, the committee evaluates the prior year's planning

objectives, recording the results of each objective in the Technology Master Plan. Those objectives that require more time to complete are included in the next set of planning objectives.

To support the planning and budgeting processes in TeCS, CITC organized the Technology Master Plan's goals and objectives to match the operational areas of technology and computer services. This alignment, shown in the table below, helps the department link the planning goals and annual objectives to operational planning and budgeting, ensuring that the department responds to the Technology Master Plan.

Technology Master Plan Technology Planning Areas	Functional Organization of the Technology and Computer Services Department
- Administrative Information Systems - Educational Technology	Instructional and Administrative Applications Systems
- Network, Infrastructure and Telecommunications - Web Environment and Social Media	Network, Central Computing, and Telecommunications
- Operations and Support Services	Technology Operations and Support

CITC wrote the first edition of the Technology Master Plan to cover a five-year period from 2009 to 2014. This edition was created prior to the development cycle for the College's current 2011-2016 Strategic Plan and the 2011-2020 Educational and Facilities Master Plan. Since the committee designs the master plan to be responsive to both the Strategic Plan and the Educational and Facilities Master Plan, they shortened the planning period of the first edition of the Technology Master Plan to four years. The committee undertook the development of a second Technology Master Plan in 2012 and created the plan to cover a second four-year period, 2013-

2017. The 2011 edition of the strategic plan and the educational and facilities plan guide the technology plan. The College begins development of the next edition of the strategic plan in spring 2015 for implementation beginning in 2016-2017. CITC will begin the development of the next edition of the Technology Master Plan in fall 2016 to respond to the new edition of the strategic plan.

Evaluation of Technology Effectiveness

Citrus College assesses the use and effectiveness of its technology through several methods, including program reviews, surveys, committee reviews, and implementation team analysis.

Program reviews, both annual and comprehensive, include evaluations of technology effectiveness and requests for changes and updates. The academic affairs deans coordinate academic program reviews, prioritizing needs in their respective divisions. The vice president of academic affairs and the deans from the academic divisions then review and prioritize the requests and determine which to bring forward. Student services and administrative support units also provide technology requests in their programs reviews. Prior to 2014-2015, the fiscal services department consolidated these program review requests and either met the requests when possible within the fiscal resources available or passed the requests to the Technology and Computer Services department, which met the requests as funding allowed. When feasible, CITC incorporates these technology needs into the next set of annual objectives in the Technology Master Plan. Starting in fall 2014, the [Financial Resources Committee](#)⁹⁹ began the development of a new a process for reviewing and consolidating program review requests that includes the review of technology requests generated in program reviews.

To gather input from the overall student population, Citrus College conducted the [Community College Survey of Student Engagement](#)¹⁰⁰ in 2010, 2012, and 2014. Each survey includes technology specific questions for students. CITC included these survey results in the strengths, weaknesses, opportunities, and threats analysis during development of the Technology Master Plan. To supplement this data, the library staff conducted [student technology surveys](#)¹⁰¹ in fall 2012,

spring 2013, fall 2013, and spring 2014. The library brings the identified needs to both the technology and computer services and to the College Information Technology Committee planning process. These surveys from library users demonstrate a common need for more computer access, enhanced wireless access, and printer access. In fall 2014, the library faculty and dean met with the chief information services officer. As a result, staff from Technology and Computer Services are working to address concerns identified in the student surveys.

Citrus College conducts specific surveys to evaluate how well individual processes meet student technology needs. The respective implementation groups review the results of these surveys and use the results to improve the processes. An example of these is the [Pell/EOPS/Bookstore survey](#)¹⁰² of use of financial aid funds. While the results indicate that students appreciated having the funds available at the bookstore to purchase their textbooks and supplies, many students were not aware of the process. The implementation group worked to improve communication to students regarding the availability of funds, and the number of students using their funds at the bookstore has increased each year since 2012.

During each spring semester, a work group including staff from technology and computer services, institutional research, and the program review coordinator meet to review and improve the online support for instructional program review. At the end of each cycle, this group reviews the feedback from the program review

committee and, based on this feedback, the staff update the online work environment and data structures to improve data access and understanding. Implementation groups provide evaluation and feedback for technology improvement. The program review coordinator shares feedback on technology-related concerns from surveys on program review conducted by the institutional effectiveness committee once the Program Review Committee reviews them. Feedback from the [2012](#)¹⁰³ and [2014](#)¹⁰⁴ surveys indicate the need for improvement in the online work environment. In response, staff from technology and computer services serve on the program review committee, and participate in the process of adopting a new online resource in fall 2015.

The Degree Works implementation team included workshops for counselors as part of the implementation process. These workshops provide training for counselors as well as a platform for the Degree Works implementation team to hear the counselors' suggestions for application configuration. Whenever possible, the Degree Works implementation team incorporates the counselor suggestions into the Degree Works.

The distance education coordinator and the dean for distance education use the [distance education site review rubric](#)¹⁰⁵ to conduct annual site reviews. The rubric assists the distance education coordinator and members of the evaluation team in reviewing distance education course sites.

The Distance Education Program conducts annual [student surveys](#)¹⁰⁶ to evaluate the Blackboard learning management system including access, communication, usability, and relevance of online materials.

The College meets the standard.

Analysis and Evaluation

The College's integrated planning process includes technology planning. The information technology committee produces and monitors the Technology Master Plan that is responsive to the Strategic Plan and the Educational and Facilities Master Plan and incorporates input from program reviews and surveys. The committee reviews and updates its multi-year plan annually resulting in a dynamic strategy that can take advantage of new technologies and opportunities.

Citrus College evaluates technology throughout the institution in multiple ways. Various offices and programs including institutional research, planning, library, and distance education conduct student surveys to gather input on technology. Distance education staff members annually review faculty course sites in Blackboard. Program reviews provide evaluations of technology in programs, departments, and divisions. Work groups and implementation teams provide feedback to the Technology and Computer Services department on technology applications and tools.

Evidence

III-C-1	Citrus College Mission Statement
III-C-2	Citrus College Software Applications
III-C-3	Citrus College Integrated Planning Manual 2014-2015
III-C-4	Citrus College Technology Master Plan 2014
III-C-5	College Information Technology Committee – Home
III-C-6	Citrus College Integrated Planning Manual 2014-2015
III-C-7	Integrated Planning Model Diagram
III-C-8	Citrus College Board Policy BP 3720
III-C-9	Citrus College Administrative Procedure AP 3720
III-C-10	Citrus College Administrative Procedure AP 3721
III-C-11	Citrus College Administrative Procedure AP 3722
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III-C-16	Citrus College Administrative Procedure AP 3750
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III-C-20	Turnitin.com
III-C-21	Testing Center > Accuplacer
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III-C-33	Institutional Effectiveness Committee
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III-C-45	<u>Computer Inventory</u>
III-C-46	<u>Software Lab Loads 2015</u>
III-C-47	<u>Citrus College Network Diagram</u>
III-C-48	<u>Computer Inventory</u>
III-C-49	<u>Technology Replacement Plan</u>
III-C-50	<u>Citrus College Board of Trustees Minutes, January 20, 2015</u>
III-C-51	<u>Educational Master Plan 2009 (page 3)</u>
III-C-52	<u>Institutional Research > Sample Reports</u>
III-C-53	<u>Blackboard Login Page</u>
III-C-54	<u>Testing Center > Accuplacer</u>
III-C-55	<u>Citrus College Employment Site</u>
III-C-56	<u>Continuing Education > Online Registration</u>
III-C-57	<u>Admissions and Records > Checklist for Applying, Registering</u>
III-C-58	<u>CCCApply – Home</u>
III-C-59	<u>Citrus College Online Orientation – Home</u>
III-C-60	<u>Counseling and Advisement > Probation Workshop</u>
III-C-61	<u>Citrus College Organizational Chart > Technology</u>
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III-C-96	<u>Integrated Planning Model Diagram</u>
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III-C-98	<u>College Information Technology Committee – Home</u>
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III-C-101	<u>Library Survey Results: Technology</u>
III-C-102	<u>Survey Results: Pell Funds use at the Bookstore</u>
III-C-103	<u>Program Review Committee Survey Results 2012</u>
III-C-104	<u>Program Review Committee Survey Results 2014</u>
III-C-105	<u>Distance Education Site Review Rubric</u>
III-C-106	<u>Distance Education Student Surveys – Index</u>

