

## **Standard IIIC: Technology Resources**

**IIIC1. Technology services, professional support, facilities, hardware, and software are appropriate and adequate to support the institution's management and operational functions, academic programs, teaching and learning, and support services.**

### **Evidence of Meeting the Standard**

Cypress College ensures that its technology needs are identified and supported through the Technology Plan, Technology Consultation Council, Campus Technology Committee (CTC) documents, regular meetings held between the Academic Computing Technology (ACT) Office and its vendors, email requests received by Academic Computing for technology needs and changes, and the Annual One-Time Funding Request process that provides an opportunity to faculty and staff to purchase items outside annual budget allowances. Training and support of all campus technology systems, training, and resources are maintained by the Academic Computing staff to include maintenance and support contracts with various vendors and contractors to ensure maximum and optimal up-time for all systems and services. Cypress College regularly assesses whether the campus technology appropriately and adequately meets the broad range of needs of both students and staff. ACT evaluates technology services, facilities, hardware, and software through many sources.

At the campus level, Cypress College makes decisions about use and distribution of its technology resources through requests for new technology from the campus community received in many forms. First, ACT conducts the annual Technology Quality Survey presented to full-time and part-time faculty, staff, and students to assess on-going changes/needs (IIIC1.1 - Tech Quality Survey). Another tool is Instructional Program Review, which is conducted every four years by academic departments who identify their technology needs. The Academic Computing Director and staff make the necessary adjustments as identified (IIIC1.2a – Photography PR; IIIC1.2b – ACR PR; IIIC1.2c – Dental Hygiene PR). In addition, technology is requested and prioritized on an ad hoc basis directly from divisions, departments, committees, and individuals (IIIC1.3a Email request 1; IIIC1.3b- Email Request 2). Further, planning documents such as the Cypress College Technology Plan ensure hardware and software are refreshed on a 3-5 year plan (IIIC1.4 -Technology Plan), and Campus infrastructure usage is monitored by Academic Computing to ensure network usage is properly sized, maintained, and supported (IIIC1.5a - CENIC Status; IIIC1.5b - My Gateway Status; IIIC1.5c - Website Status). Finally, in order to assess the professional support provided by the department, ACT evaluates the effectiveness of the services provided through the Academic Computing Program Review conducted every three years (IIIC1.6 - Academic Computing CSQR).

At the District level, ACT and District IT regularly engage faculty, staff, and students in defining technology changes and needs through various shared governance committees, including Technology Consultation Council (IIIC1.7 – TCC Minutes, IS Steering (IIIC1.8 – ISS Agenda), MyGateway (IIIC1.9 – MyGateway agenda), and Student Team (IIIC1.10 – Student Team Agenda). Additionally, the District Technology Survey is conducted each year to identify technology needs of the College staff, faculty, and students. The results are broken down by campus and shared with Campus IT Directors and Executive Management in order to address deficiencies and for long range planning activities (IIIC1.1 - Tech Quality Survey). Finally, the

District Technology Roundtable (DTR) meetings include assessment of core technology and software needs districtwide (e.g. Core Network Infrastructure Equipment and Microsoft Software) including purchase, maintenance, and support (IIC1.11 - DTR Minutes).

For technology provided directly by the institution or through contractual arrangements, Cypress College has provisions to ensure reliability, disaster recovery, privacy, and security (IIC1.12a – Security Notification; IIC1.12b – Wireless Access Notice; IIC1.12c – Wireless Authentication). Reliability is achieved through redundant hardware and software. The College employs industry standard practices using High Availability VMware software combined with redundant hardware across its server farms and also utilizes redundant switches and redundant appliances for critical LAN services. Daily backups of critical server data using Veeam Enterprise software are performed, and data retention is a minimum of 14 days and usually longer. Backups of network switch and router configurations are routinely performed using network management product solar winds, which will allow recovery from a catastrophic switch failure. Security and Privacy at the edge of the campus LAN is achieved through the use of multiple appliances such as Cisco Firewall, Bluecoat Packet Shaper, and Infoblox DNS appliance (IIC1.5a - CENIC Status, IIC1.5b - MyGateway Status; IIC1.5c - Website Status). The primary application for ensuring network privacy on campus is Active Directory (AD), which manages the use of unique user id's and passwords for every user in the Cypress College domain (IIC1.4 – Technology Plan p. 8-9).

**DE** Faculty are an integral part of technology, services, hardware and software for Distance Education (DE). The Distance Education Program works with shared governance, Academic Senate, Academic Computing, and the District's Information Services Department to gain consensus on technology that will meet faculty needs. Cypress College is a faculty-driven institution, where faculty drives the DE platform as noted in the Distance Education Plan (IIC1.13- Distance Ed Plan).



**Baccalaureate Degree** Currently, with the majority of baccalaureate degree students being working adults, the need to offer classes in as flexible a format as possible necessitates the inclusion of online and hybrid courses. The reliance on an effective course management system (CMS) such as Blackboard and the related hardware needed to support the CMS is required. The current fiscal resources of the College and District provide the relevant technology services and support as well as cyclical hardware and software updates required by the baccalaureate program such as industry specific software, The Director's Assistant and Wilbert Family Advisor (IIC1.14 –evidence?).

## Analysis and Evaluation

**The College meets the Standard.** Cypress College operates and maintains its systems to the highest degree of support through team work with Academic Computing and the offsite maintenance agreements that are in place. The College's technology services, professional support, facilities, hardware, and software are appropriate and adequate to support the institution's management and operational functions. Cypress College's physical and logical networks are secure, redundant, and operational 365 days a year. In order to ensure that

technology meets the needs of academic programs, teaching and learning, and support services, decisions regarding current, new, and emerging technologies are openly discussed and shared among the campus community and across the District collectively in various Technology Committee meetings which also include Distance Education needs and technologies. This methodology has also become commonplace in Program Review and the annual District-wide Technology Quality Survey.

#### Evidence Sources

- IIIC1.1 – Tech Quality Report 2016
- IIIC1.2a – Photography Program Review
- IIIC1.2b – Air Conditioning and Refrigeration Program Review
- IIIC1.2c – Dental Hygiene Program Review
- IIIC1.3a – Email-REQ-1
- IIIC1.3b – Email-REQ-2
- IIIC1.4 – Technology Plan 2011-2015
- IIIC1.5a – CENIC Status
- IIIC1.5b – MyGateway Status
- IIIC1.5c – Website Status
- IIIC1.6 – Campus services Quality Review Academic Computing and Technology 2016
- IIIC1.7 – Technology Coordinating Council Minutes
- IIIC1.8 – Information Services Steering Agenda
- IIIC1.9 – MyGateway Steering Meeting Agenda February 24, 2016
- IIIC1.10 – Student Team Agenda
- IIIC1.11 – District Technology Roundtable (DTR) Minutes
- IIIC1.12a – Security Notification
- IIIC1.12b – Wireless Access Notice
- IIIC1.12c – Wireless Authentication
- IIIC1.13 – Distance Education Plan
- IIIC1.14 – awaiting evidence

**IIIC2. The institution continuously plans for, updates and replaces technology to ensure its technological infrastructure, quality and capacity are adequate to support its mission, operations, programs, and services.**

#### Evidence of Meeting the Standard

As a shared responsibility between Cypress College and NOCCCD, technology resources are used to support student learning, student services, and institutional effectiveness across the District. At the District level, the NOCCCD Information Services department supports these goals by providing several essential technology services, including the wide area network infrastructure; an enterprise resource planning system for student information, finance, financial aid and human resources (Banner); an educational planning system (DegreeWorks); an enrollment management system (SPMS); a rooms schedule/event management system (EMS); a library system (Endeavor); and other related systems. Furthermore, NOCCCD Information

Services assists with contract optimization, District wide technology standards, best practices, and data interface with campus specific systems such as distance education systems, security services, and District mandated reporting requirements (MIS, IPEDS, etc.).

The NOCCCD Information Services department provides systems and services to support the District Strategic Directions as outlined in the *NOCCCD Information Services Technology Plan 2016-2018* (IIC2.1). Campus information technology staff assists with the delivery of NOCCCD Information Services department systems and services as well as support the classroom, computer labs, and local infrastructure to enhance the learning environment. The Cypress College Academic Computing Technology (ACT) department serves to monitor technology needs, provide staff support, and engage in regular and on-going planning as detailed in the *Cypress College Strategic Plan* Direction B and the Campus Technology Plan (IIC2.2 – CC Strategic Plan; IIC2.3 – Campus Technology Plan).

Policy, planning, and budget recommendations regarding the use of technology across the District is driven by the Technology Coordinating Council (TCC), a District-wide constituency based committee. The Information Services Steering Committee and Student Team focus on operational decisions and Information Services project prioritization. District Technology Roundtable and campus Academic Computing focus on day-to-day operations (IIC2.4- Technology Coordinating Committee Charter). TCC has developed several standards that also ensure the technology is adequate to meet the college needs, including the *NOCCCD Instructional Technology Standards for Classroom Multimedia Systems* (IIC2.5) to provide minimum classroom equipment standards, the *Mobile Computing Device Guidelines* (IIC2.6) for use of mobile devices within the District, and the *Computer Related Equipment Replacement Plan at the North Orange County Community College District* (IIC2.7) which sets minimum equipment replacement standards for District technology assets. All of these standards/guidelines are reviewed annually by the TCC for currency, relevance, and completeness (IIC2.4 – TCC Charter, p. 6). The campus is responsible for implementation of these standards.

The College utilizes both the Campus Technology plan in conjunction with the One-Time Funding Request process to plan, update, and replace technology. Within the campus, the Technology Plan is a guide for technology replacement which includes computers, networking equipment, servers, and classroom projectors. Refreshing these items serves to keep current technology on the campus network, desktops, labs, and classrooms. It also serves to lower the overall Total Cost of Ownership (TCO) by reducing maintenance and support costs while adding all around functionality (IIC2.3 – Campus Technology Plan). In addition, through the One-Time Funding process faculty and staff are provided an opportunity to make technology requests and purchase items outside annual budget allowances. Planning and Budget members assess and rank the requested items based on the presented justification and needs (IIC2.8a - PBC Minutes; IIC2.8b – Prioritization List). Network management appliances are also key in reporting trending network deficiencies that are addressed and rectified with funding from the Academic Computing budget and One-Time Funding Request process if necessary (IIC2.9- OTFR Wireless).

NOCCCD uses the wide area network connection from the Corporation for Education in California (CENIC) to deliver Internet connectivity to the campus and District. The campus provides on-campus wired and wireless network services based on the *NOCCCD Cabling Infrastructure Guidelines* (IIC2.10). Using these guidelines ensures reliability, compatibility,

and consistency of the network across the District by requiring 20-year warranted Sumitomo certified fiber connections and Systemax certified wired connectivity.

District Telecommunications Standards were updated one year ago. This document is used to govern all low voltage installations at all three campuses in the District. A consultant was hired to reevaluate and update the document content. Some of the changes made included telecommunications and electrical (IEEE) code changes, technology changes in fiber optic and copper cabling, and space utilization design standards (IIC2.10 - Infrastructure Guidelines). Cypress College recently enabled authentication policies for those wanting to access its wireless network (IIC2.11 - Wireless Authentication). The use of Active Directory Services across the campus adds another layer of security for our campus user community, which includes both staff and faculty systems (IIC2.12 - Active Directory Migration).

Planning at the District level is defined in the *NOCCCD Integrated Planning Manual* (IIC2.13). This document outlines the comprehensive integrated planning process used across the District. As stated in the plan, District Services units, including District Information Services, complete an annual *District Services Administrative Review* (IIC2.14). From the analysis done during the Administrative Review the units request resources as needed to ensure that technology infrastructure, quality, and capacity are adequate to support the District mission, operations, programs, and services. During the planning process requests for funding from District Information Services identified in the Administrative Review, along with the needs of other District Services units, are prioritized by the District Services Committee (DSC) (IIC2.15 – DSC Spreadsheet). Recommendations from the DSC are forwarded to the Council on Budget and Facilities (CBF) (IIC2.16 – CBF Approved Summary) who recommends funding priorities to the District Coordinating Committee (DCC) (IIC2.17). DCC makes recommendations to the Chancellor, who then makes recommendations to the Board regarding funding of identified District-wide technology projects/needs.

One example of a project funded through the District planning process is the Network Refresh project. The District is currently in the assessment phase of completing a refresh of the wired, wireless, video, and voice network. The purpose of the project is to determine the network requirements for the future and update the network to better serve the students and staff of the District into the future. This project was presented through the planning process and culminated in the Board of Trustees approving the assessment phase of the project and setting aside funding for execution (IIC2.18 – Board Agenda- Network Refresh).

At the campus level, technology planning begins with Program Review. Conducted every four years, departments identify technology needs which are shared with the Academic Computing Director and staff to make necessary adjustments to better serve our campus community (IIC2.19a - Photography PR; IIC2.19b – ACR PR; IIC19.c – Dental Hygiene PR). Based on their reviews, departments submit One-Time Funding Request proposals based on the previously identified needs (IIC2.20- One-time Funding Form). In addition, ACT and the District regularly engage faculty, staff, and students in defining technology changes and needs through shared governance committees such as the Technology Consultation Council, Information Services Steering, MyGateway, and Student Team, as well as in one-on-one requests from those in need (IIC2.2 - Technology Plan, p. 13-14). Finally, a District Technology Quality Survey is conducted each year that includes staff, faculty, and students. The results are broken down by campus and shared with Campus IT Directors and Executive Management. The questions in this

survey are targeted to technology needs provided and available to all groups. Academic Computing uses the results to address deficiencies and for long range planning activities to address needs (IIC2.21- District Tech Quality Survey).

Reliable, safe, and secure technology resources are the primary responsibility of the colleges and a shared responsibility with the District. The NOCCCD Information Services department has developed a Disaster Recovery/Business Continuity Plan, which includes local backup to disk, offsite encrypted backup to tape, and out of state encrypted backup (IIC2.22- District Continuity/Recovery Plan). The out of state backup is currently being implemented using facilities in Chandler, Arizona provided by the Orange County Department of Education (IIC2.23 - OCDE Agreement). This project is another example of planning, funding and execution completed using the NOCCCD Integrated Planning process (IIC2.24 - Minutes Disaster Recovery Project).

Support, including training, in the effective use of District-wide technology is a shared responsibility with the campuses. District Information Services conducts training in the use of the systems provided by the department along with security training (IIC2.25 - Training Calendar). Each semester, a memo is sent out to the campus community as a reminder of the support services provided and available from the Academic Computing Technologies (ACT) office. Department staffing consists of 9 members: 2 IT Coordinators responsible for network and server support and services, 2 IT Specialist's responsible for server database and web systems support, 2 IT Technicians responsible for desktop PC systems, multimedia, classroom technology and inventory control for all of these systems, and 1 User Support Analyst responsible for Helpdesk requests. However, in support of our campus community, the Department phone tree was altered enabling Helpdesk calls to be routed to all ACT staff phones in an effort to expedite solutions for the end user while on the phone (IIC2.26 - Welcome Spring).

**DE** - The College provides training for Learning Management System-Blackboard (LMS) utilized for Distance Education. Blackboard is the single official course delivery system administered and supported by the Distance Education Program. The Blackboard system has maintained at least 99% up-time. As a managed hosted site, the College receives web-based and phone support 24/7 from Blackboard to assure maximum reliability for students and staff. Technology and digital infrastructure is outlined in the Distance Education Plan (IIC2.27- DE Plan, page 33). The College also maintains both a DE faculty and a DE student website to aid in student success. These sites are hosted by Cypress College ACT and are updated by both DE and ACT.

The DE Program Review assesses the efficacy and satisfaction with the DE technology provided. According to the DE Program's last Program Review, 85% of those surveyed use Blackboard and expressed an overall satisfaction with the program, and more than half (55.7%) expressed no technical software problems. When problems were experienced, 37.2% of students were able to resolve the issue themselves or with the assistance of an instructor or peer. Students reported the overall quality of the DE CMS/LMS as 88% (IIC2.28 – DE CSQR p. 3-4).

## **Analysis and Evaluation**

**The College meets the Standard.** NOCCCD and Cypress College work together to continuously ensure the technology utilized is appropriate. Through on-going planning and assessment, the District and College evaluate technological infrastructure as well as the quality and capacity of technology services to ensure that they are adequate to support the mission, operations, programs, and services of both the District and College.

While the College meets the standard, issues regarding DE infrastructure remain. Blackboard continues to be a growing and popular program for students and instruction. In 2013, District Information Services hosted the LMS system for Cypress College and experienced problems. Blackboard hosting was then removed from District Information Services support and returned to Blackboard in late 2014. The College hired a Blackboard coordinator (non-faculty management position) and increased administrative support to a full-time position in an effort to provide better support for the system, students, and faculty. With the reorganization of the DE Program, faculty will again have a more direct impact on DE. Additionally, other issues with DE will be addressed in a new DE Plan written in 2017.

#### Evidence Sources

- IIC2.1 – NOCCCD Information Services Technology Plan 2016-2018
- IIC2.2 – Cypress College Strategic Plan
- IIC2.3 – Campus Tech Plan - 2013
- IIC2.4 – Technology Coordinating Committee Charter
- IIC2.5 – NOCCCD Instructional Technology Standards for Classroom Multimedia Systems
- IIC2.6 – Mobile Computing Device Guidelines
- IIC2.7 – Computer Related Equipment Replacement Plan at the NOCCCD
- IIC2.8a – Planning and Budget Committee Minutes October 15, 2015
- IIC2.8b – One-Time Funding Prioritization List
- IIC2.9 – OTFR 2015-16-Wireless
- IIC2.10 – NOCCCD Cabling Infrastructure Guidelines
- IIC2.11 – Wireless authentication-rec
- IIC2.12 – Active Directory Migration
- IIC2.13 – NOCCCD Integrated Planning Manual
- IIC2.14 – District Information Services Administrative Reviews
- IIC2.15 – District Services Committee Spreadsheet of Resources Requests
- IIC2.16 – District Council on Budget and Facilities Approved Summary
- IIC2.17 – District Consultation Council Summary
- IIC2.18 – NOCCCD Board Agenda Network Refresh
- IIC2.19a – Photography Program Review
- IIC2.19b – Air Conditioning and Refrigeration Program Review
- IIC2.19c – Dental Hygiene Program Review
- IIC2.20 – One-Time Funding Form 2015-16
- IIC2.21 – District Tech Quality Survey
- IIC2.22 – District Disaster Recovery/Business Continuity Plan
- IIC2.23 – Agreement with OCDE re: Out of State DR Site in Chandler, Arizona
- IIC2.24 – DSC/CBF/DCC Minutes regarding Disaster Recovery Project
- IIC2.25 – IS Training Calendar and Materials

IIC2.26 – Welcome - Spring 2014  
IIC2.27 – Cypress College Distance Education Plan  
IIC2.28 – Campus Services Quality Review DE 2012

**IIC3. The institution assures that technology resources at all locations where it offers courses, programs, and services are implemented and maintained to assure reliable access, safety, and security.**

### **Evidence of Meeting the Standard**

Cypress College Academic Computing is continually monitoring its core networking equipment and servers on campus and has settings enabled to alert senior staff 24 hours a day, 365 days a year through text and email messaging. Systems are set up to allow remote access for senior staff to address problems, and in many cases they are able to solve problems without having to physically come to campus. All core networking and server equipment are also supported by maintenance and support agreements (IIC3.1 – Cypress Support Contract Spreadsheet).

Cypress College maintains maintenance agreements with various vendors in support of its core networking equipment (IIC3.1 – Cypress Support Contract Spreadsheet). Switches, routers, and servers carry equipment life cycles and are replaced in accordance with vendor support contracts, recommendations, and the Cypress College Technology Plan specifications (IIC3.2 – CC Technology Plan). Core infrastructure components are redundant and provide maximum up-time to support the campus user community needs and functions. Academic Computing also uses network monitoring applications to ensure optimal network performance on a daily basis. In order to provide an appropriate system for reliability and emergency backup, all core networking equipment serving the campus is connected to a transfer switch and generator in case of power problems. This configuration allows for the core network hardware, phone system, and servers infrastructure to remain available in the event of power loss. All Cisco data switches in each campus building are connected to Uninterruptable Power Supply (UPS), providing only a small window of up-time to the switching equipment. In the event of campus/building power loss, this lesser configuration does allow a small window of time for connected security cameras to record data as they are powered directly to these switches (IIC1.3.2 - CC Tech Plan, p. 10).

The generator serving the Main Distribution Frame (MDF) is serviced and tested once a semester and has a 48-hour run-time on a tank of fuel. To date, the generator has not been in continuous service for more than 8 hours, which was for planned electrical maintenance work performed by campus and the local power utility (IIC1.3.2 - CC Tech Plan, p. 10).

The Cypress College Hotel/Restaurant/Culinary Arts (HRC) Department is located offsite on the first floor of the NOCCCD Anaheim Campus. Network Access (Internet) Support is handled by and/or in collaboration with District IT while all other departmental support is the responsibility of Cypress College Academic Computing Staff. HRC receives the same level and attention in support for its programs and classroom spaces as any other department on campus (IIC3.3 - Kavanaugh email).



**DE** There are provisions for reliability, disaster recovery, privacy, and security to ensure that the technology platform for distance education courses and programs is reliable and sustainable (IIC3.4 – BB Managed Hosting Schedule p. 4-6). All users in the District (faculty, students, and administrators) are issued a unique user ID and control their password to assure privacy and security. Blackboard provides course backups. Faculty export their courses and maintain backups at the end of each semester (IIC3.5 - DE Plan, p. 22-33).

## **Analysis and Evaluation**

**The College meets the Standard.** Cypress College assures that technology resources at all locations both on the Cypress Campus and the Anaheim Campus are appropriately maintained through the use of alert systems and ongoing maintenance contracts with appropriate vendors. Through the use of redundant infrastructure components emergency back-up systems, the College ensures reliable and safe access to technology. In addition, access, safety and security measures are in place to ensure privacy for DE students through District Information Services (IS).

### Evidence Sources

- IIC3.1– Cypress Support Contract Spreadsheet
- IIC3.2 – Cypress College Technology Plan 2016-18
- IIC3.3 – Mike Kavanaugh, Manager, Academic Computing email
- IIC3.4 – Blackboard Managed Hosting Schedule
- IIC3.5 – Distance Education Plan

**IIC4. The institution provides appropriate instruction and support for faculty, staff, students, and administrators, in the effective use of technology and technology systems related to its programs, services, and institutional operations.**

### **Evidence of Meeting the Standard**

Cypress College offers training and instruction for faculty, staff, administrators, and students in the effective use of technology in a wide variety of formats. Both the College and NOCCCD offer professional development opportunities in technology on the District-wide Staff Development calendar. Training is available to all employees at any site and includes subjects such as Video-making for Online Instruction, Canvas Gradebook, Online Pedagogy, Collaboration in the Online Classroom, and Digital Literacy (IIC4.1 - NOCCCD Staff Development Calendar).

Given the busy schedule of campus staff, formal training sessions are not always conducive to employees' schedules. Therefore, Academic Computing Technology (ACT) has worked to provide training and instruction alternatives in the form of training at the desk and Email Tips. Over the last several years, training has also been conducted on a personal level within a target office. Academic Computing receives a request for assistance, and a date/time are set up to offer

short (15-30 minute) sessions to individuals at their desks, and others in and around the office are invited to participate (IIC4.2 - ACT Service Memo).

A secondary form of faculty training is presented to the campus community in the form of "Email Tips." These messages are generated based on frequently asked questions of Academic Computing staff and Help-Desk calls. Topics and questions are discussed in ACT staff meetings. Three questions are chosen and steps for resolution are provided and sent to the campus community via email (IIC4.3 - Email Tips).

Both the District and Campus Staff Development programs offer technology training. District Staff Development provides self-guided training materials on various technology systems used by employees, including Argos (data reporting tool), Banner (data warehouse), Blackboard (CMS), Microsoft Office, MyGateway (portal), and Qualtrics (online survey tool) (IIC4.4 – NOCCCD IS Training Webpage). Cypress College Professional Development offers new faculty orientation each semester for both full-time and adjunct faculty where they are trained on the technology systems utilized on the campus. Additionally, Professional Development is able to reimburse staff and faculty for outside training and conference activities directly related to their job functions and duties, including on-going technology training. In addition, in order to determine what technology training is desired a Needs Assessment Survey is sent out regularly to the campus community (IIC4.5a – PD Needs Assessment Survey; IIC4.5b – PD Needs Assessment Report; IIC4.5c- PD Email).

Technology training for students comes in various forms. At the instructional level, students are trained to use field specific technology in their courses by their instructors. Various forms of technology are an intrinsic part of curriculum across campus (IIC4.6 - College Catalog). While ACT does not provide formal training opportunities for students, the Department does provide a Frequently Asked Questions (FAQ) section on its webpage where anyone can find self help information for several systems accessed on campus. In addition, instructions for students using the District Portal, MyGateway, are published in the campus Class Schedule each semester (IIC4.7 - Class Schedule). Within MyGateway are links to intuitive self-help guides in both electronic print and short video formats for faculty, staff, and students. Finally, staff monitoring campus computer labs answer individual questions, as do Academic Computing Staff members when approached (IIC4.8 - Kavanaugh email-Student Training).

ACT also provides on-going technology support through planned maintenance and service on key systems such as MyGateway, Internet, and Network (IIC4.9a - MyGateway Status; IIC4.9b- CENIC). Campus Service notices are sent out in advance and work-arounds to issues have been provided to limit actual downtime (IIC4.10a - Notification 4; IIC4.10b – Notification 5; IIC4.10c - Service Notifications). Further, technology support is available through the IS Helpdesk in the form of desktop PC systems, multimedia, and classroom assistance as well as telephone customer support (IIC4.11- Kavanaugh email - Faculty Training).

**DE**- All faculty are required to complete the Faculty Basics training, or opt-for the equivalency process, before they can teach online and hybrid courses or access Blackboard, which is the standard learning management system. They must also complete web-enhanced training to supplement face-to-face courses (IIC4.12 - DE Faculty Handbook p. 2). The training for DE faculty includes modules to assure substantive and regular student-faculty contact (IIC4.12 - DE

Faculty Handbook, p. 10), support for online students, and student engagement so that technology is not a barrier for online learners but rather improves retention and academic success. Faculty training information is available on the faculty DE website (IIC4.13 – Faculty DE Webpage). Students receive training on Blackboard through an online orientation within their courses or on the DE Program webpage. Before the start of the course, some instructors provide students with a quiz to test their understanding. Students can also complete a self-assessment online to determine if DE courses will meet their needs. The training is accessible via the Blackboard login page (IIC4.14 - Blackboard Login), and additional information is available on the student DE website (IIC4.15 – DE Website).

### **Analysis and Evaluation**

**The College meets the Standard.** Cypress College provides appropriate instruction for faculty, staff, students, and administrators in the effective use of technology through formal workshops and training, self-guided training modules, email messages, personalized training opportunities, and occasional email “Tips & Tricks.” Professional Development continues to promote and encourage on-campus as well as off-site training and personal growth opportunities for all employee groups. Training for hybrid and Blackboard course offerings is administered through a structured web based system and is a requirement for faculty interested in pursuing course delivery via online means. The College provides support for technology systems through regular and on-going maintenance and IS Helpdesk support in an effort to support the College’s programs, services, and institutional operations.

#### Evidence Sources

- IIC4.1 – NOCCCD Staff Development Calendar
- IIC4.2 – ACT-Services-memo
- IIC4.3 – Email-Tips
- IIC4.4 – NOCCCD Training and Training Materials Webpage
- IIC4.5a – Professional Development Needs Assessment Survey
- IIC4.5b – Professional Development Needs Assessment Report
- IIC4.5c – Professional Development Email
- IIC4.6 – Cypress College Catalog 2016-17
- IIC4.7 – Cypress College Class Schedule Fall 2016
- IIC4.8 – Mike Kavanaugh, Manager Academic Computing email- Student Training
- IIC4.9a – MyGateway-Status
- IIC4.9b – CENIC-Status
- IIC4.10a – Notification 4
- IIC4.10b – Notification 5
- IIC4.10c – Service-Notifications 1-3
- IIC4.11 – Mike Kavanaugh, Manager Academic Computing email Faculty Training
- IIC4.12 – Cypress College DE Faculty Handbook 2015-2016
- IIC4.13 – Cypress College Faculty DE Webpage
- IIC4.14 – Cypress College Blackboard Login
- IIC4.15 – Cypress College Distance Education Website

**IIIC5. The institution has policies and procedures that guide the appropriate use of the technology in the teaching and learning process.**

**Evidence of Meeting the Standard**

*NOCCCD Board Policy and Administrative Procedure-3720-Computer and Electronic Communication Systems* (IIIC5.1a; IIIC5.1b) are in place to guide the appropriate use of technology across the District. These guidelines on computer and electronic communication systems govern various aspects, including access to systems, use disclaimer, acceptable use, access and disclosure, and system agreements. The Technology Coordinating Council reviews *BP3720* and *AP 3720* annually and recommended changes are forwarded to the District Consultation Council for consideration (IIIC5.2 – TCC minutes). In addition, *NOCCCD Administrative Procedures 3750- Use of Copyrighted Material* regulates the use of copyrighted materials in online courses, including user permission guidelines (IIIC5.3 – AP 3750).

The College Distance Education Plan, in conjunction with *NOCCCD Administrative Procedure 4105-Distance Education*, provides appropriate guidelines for teaching and learning. *AP 4105* governs course approvals, certification, and duration of approvals (IIIC5.4 - AP 4105). The DE Plan provides guidelines for online, hybrid, and web enhanced course regarding accessibility, copyright, course guidelines, evaluation of faculty, electronic mail, faculty home-pages, student authentication and fraud prevention, syllabus requirements, and training (IIIC5.5 – DE Plan).

**Analysis and Evaluation**

**The College meets the Standard.** NOCCCD and Cypress College have policies and procedures in the form of *BP/AP 3720 Computer and Electronic Communication Systems* (reviewed annually), *AP 3750 Use of Copyrighted Material*, *AP 4150 Distance Education* and the Cypress College DE Plan that guide the appropriate use of the technology in the teaching and learning process.

Evidence Sources

- IIIC5.1a – Board Policy 3720 Computer and Electronic Communication Systems
- IIIC5.1b – Administrative Procedure 3720 Computer and Electronic Communication Systems
- IIIC5.2 – TCC Minutes regarding BP/AP 3720 Annual Review
- IIIC5.3 – Administrative Procedure 3750 - Use of Copyrighted Materials
- IIIC5.4 – Administrative Procedure 4105 - Distance Education
- IIIC5.5 – Cypress College Distance Education Plan

## Plans Arising out of the Self Evaluation Process

<b>Planned Change, Improvement and Innovation</b>	<b>Standard</b>	<b>College Lead</b>	<b>Timeline</b>	<b>Anticipated Outcome</b>
Complete the assessment of the Network Refresh Project	IIC2	District Director, Information Services	2017-2018	District Information Services will complete an assessment of the wired, wireless video and voice network to better serve students and staff.