

### Standard III.C. Technology Resources

#### Standard III.C.1

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:

- a. The Information Technology department (IT) maintains all internal administrative and networked systems, including the College's Datatel and WebAdvisor systems, all Internet websites, and the institution's recently purchased Learning Management System (LMS), Canvas by Instructure. (E.III.C.1.x **schematic of IT**)
- b. Central to the College's determination of technology needs is the Program Review process, which ties directly into the College's Mission and Education Master Plan. (E.III.C.1.x **program review documents 2014--IT will provide 2016-17 Program Review**) The master technology review takes place through the Technology Planning Committee, a sub-committee of the Budget Planning Committee, and the services, support, hardware and software for all aspects of the College are determined through the central Technology Plan in accord with the Education Master Plan. (E.III.C.1.x **Technology Plan**) Additionally, the College maintains a "Minimum Technology Standard" in order to ensure that all platforms and systems function throughout the institution. (E.III.C.1.x **MTS**)
- c. Administrative Procedure 6365, "Accessibility of Information Technology," guarantees that all technology vendors for the College comply with the accessibility requirements of section 508 of the Rehabilitation Act of 1973. (E.III.C.1.x **MTS**)
- d. Student Services [**CBO will provide**] and Maintenance [**IT will provide**] departments determine technology needs through the same Program Review process used by all departments of the College (E.III.C.1.x **Program Review documents**)
- e. In addition to newly identified needs, IT maintains a Replacement Cycle list to ensure that equipment is updated and replaced regularly. (E.III.C.1.x **Computer Replacement Cycle**)
- f. The College regularly surveys staff (E.III.C.1.x), faculty (E.III.C.1.x), and students (E.III.C.1.x **Student Survey**) regarding the efficacy and suitability of technology, hardware, software, and the College's Internet platform. Results of these surveys are used in the Program Review process and directly affect decisions regarding upgrades, replacements and new purchases. (E.III.C.1.x **surveys**)
- g. A direct email system for registering technology and Internet service failures or shortcomings or need for replacement was put in place in June 2013. Improvements in the College's "ticket" system have led to greater ease of use and efficiency and improved delivery of student learning. Surveys from the

- past [3?] years indicate a higher degree of satisfaction. (E.III.C.1.x IT ticket system screen shot **Check with IT/Canvas Help desk? Surveys?**)
- h. The Distance Education Planning Committee (DEPC) holds regular meetings to review the College's program review reports, evaluate current software and hardware, and consider the development of existing facilities and the creation of new ones. For instance, at an 11 October 2016 DEPC meeting, the committee discussed survey results regarding a proposed change from Turnitin.com to Verisite online anti-plagiarism and authentication software. **Results of this discussion—switching to Verisite?** (E.III.C.1.x)
  - i. The DE coordinator and the DEPC regularly survey faculty regarding adding new DE material and possible software needs or replacements. **(Lisa Sayles/Connie Wolfesen will provide latest survey?)**
  - j. During the 2015-16 DE program review, members of the DEPC discussed increases in enrollment and the need for additional software and services, which led to a report request of the Program Review Committee and the subsequent increased support and additional software. (E.III.C.1.x)
  - k. The DEPC also reviews each class section report in the DE Virtual Campus at the Institutional Research website to determine increased demand and need. (E.III.C.1.x)
  - l. All program review reports, such as those produced by the DEPC, require information concerning how data and material and funding requests meet the needs of the College's Mission statement. (E.III.C.1.x **several PR reports from academic and other depts.**)
  - m. For instance, Distance Education program outcomes assessed at the DEPC meeting of **3-\_-2017** led to the following actions being taken: **[will fill in meeting notes on actions taken in evidence]**.
  - n. The College created an extensive Disaster Recovery Plan to ensure safety and security, including all information technology systems. In the event of a natural or human-caused catastrophe, all information technology and web-based systems and records will be backed-up and retained. (E.III.C.3.x DRP)
  - o. **Funding from the Basic Skills, measure Q, and student technology fees allowed the College to expand and create new computerized classrooms in Sciences 214 in the summer of 2016 and Humanities [210?] in [date completed?]. [Check with Deans about DM 15 and Basic Skills classrooms?]**

### Analysis and Evaluation:

#### Evidence Sources:

- E.III.C.1.a
- E.III.C.1.b
- E.III.C.1.c
- E.III.C.1.d
- E.III.C.1.e

**Standard III.C.2**

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:**

- a. The College's Information Technology department (IT) performs an annual Program Review process to ensure adequate infrastructure, quality and capacity. All Program Reviews performed throughout the College are tied directly to the Mission and the Education Master Plan. (E.III.C.2.x IT/TSS Program Review screen shot 3-2-17)
- b. The Budget Planning Committee considers resource requests based on a standard rubric applied through the Technology Planning Committee and Facilities Planning Committee requests. On the basis of this rubric, resource requests are ranked relative to meeting the standards of the Education Master Plan and Strategic Plan documents. (E.III.C.2.x 2014-15 IT Program Review, Strategic Plan, etc)
- c. As noted above, the IT department maintains a Replacement Cycle list to ensure that equipment is updated and replaced regularly. (E.III.C.2.x )
- d. The College's IT employs a direct response Help Desk "ticket" system for issues arising with technology, Print Services, and maintenance. The "ticket" request system ensures that material resources or technology needs are adequate to students achieving their educational goals. (E.III.C.2.x )
- e. A central CR-Online resources hub website is two clicks from the College's front page, ensuring that all faculty have a wealth of information and online services and immediate technical support for the recently acquired Learning Management System (LMS), Canvas, and other online facilities used in online and face-to-face courses. The site includes the capacity for reporting problems and seeking immediate assistance with the LMS to improve course delivery. (E.III.C.2.x CR Online Faculty Support screen shot)
- f. The Distance Education Coordinator engages the DE faculty in end-of-term surveys, which are reviewed by the DEPC. The survey results have led to multiple alterations and enhancements of software, as well procurement of new software. (E.III.C.2.x email from DE Coordinator)
- g. During DEPC meetings, committee members discuss the data regarding faculty usage of the new LMS and modes of usage. (Minutes from 1-24-17 discusses a new website that Lisa is creating for faculty teaching DE—see Cathy's .doc on this—including planning for DE faculty survey.)
- h. [Minimum Computer standards and help desk inventory—complaints and review megabit and other minimum standards, processor, storage hard disk space run standard software compatibility tests are run monthly—Mathematica upgrade ticket.] (E.III.C.2.x ticket process leading to monthly test)

- i. During the planning and building of new classroom facilities, the College improved its Computer and Information Systems (CIS) program by including [five? Six?] dedicated technology classrooms with the latest computer technology, local area network and classroom management software, and computerized classroom furniture to enhance student learning and increase pedagogical capabilities in the electronic modalities and information technology. (E.III.C.2.x )
- j. From 2009 through 2014, the IT department created a practically seamless WiFi system in all campus buildings and increased the range to [?] (E.III.C.2.x evidence from IT.)
- k. Prior to 2013 the voice network had reached the end-of-life stage and was no longer supportable. Consequently, the College hired a consulting IT expert to review and make recommendations for a new data system. The current Director of Information Technology responded to the Strategic Plan developed through the Education Master Plan and chose to switch over to a VoIP system for all. Over the course of two years the system was replaces, with every part switched to new technology. in place and all (how would IT describe the VoIP systems functionality? Evidence of replacement.)
- l. After two system-wide outages in 2014, IT department program review proposed increasing bandwidth to 1 gigabit. IT worked with CENIC to provide upgrades for both the data circuit and the router. After 6 months, the new system was complete and the College now operates at the increased bandwidth. By June of 2017, the increase in bandwidth will be expanded to include the Del Norte campus. (E.III.C.2.x CENIC docs)
- m. After surveys of faculty and students over several years indicated dissatisfaction with the existing learning management system (LMS), the College created the LMS Task Force in fall 2013 with the following goal: “to determine which learning management system will most effectively and sustainably support all modalities (face-to-face, hybrid and online) of teaching and learning at College of the Redwoods.” Over [nearly a year/how many months?], the task force engaged in a rigorous, exhaustive, and fully informed process of researching, testing, and selecting several possible LMS for the College. Once the candidates were identified, representatives of the various LMS companies came to campus to demonstrate their products for faculty, students, and staff. After all constituencies were surveyed regarding their choices, Instructure’s Canvas™ platform LMS was selected. (E.III.C.2.x)
- n. The Board of Trustees approved a five-year Canvas Learning Management System contract at their November 2014 meeting. With this contract, CR began transitioning from Sakai to Canvas. (E.III.C.2.x )
- o. The DE director, DE coordinator and instructional technologist provided intensive training for the new system, and IT worked with this group to assist with the transfer of instructional materials from Sakai to Canvas through the 2014-15 academic year. The College’s choice of the leading edge LMS was confirmed when the California Community Colleges Online Education Initiative announced its intent to award Instructure’s Canvas™

- platform the contract to provide services to community colleges statewide in [2014? 2015?]. (E.III.C.2.x )
- p. Surveys of faculty, students, and staff provided evidence of satisfaction with the selection process and the final choice. (E.III.C.2.x )

### **Analysis and Evaluation:**

#### **Evidence Sources:**

- E.III.C.2.a
- E.III.C.2.b
- E.III.C.2.c
- E.III.C.2.d
- E.III.C.2.e

#### **Standard III.C.3**

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.

- a. Through the first years of the new LMS introduction, surveys and opportunities for feedback on efficiencies and software glitches led to multiple fine tunings [examples of changes?]. (Evidence—technologist, help desk and in-service?) (E.III.C.3.x )
- b. The Distance Education Coordinator engages the DE faculty in [end-of-term/year?] surveys, which are reviewed by the DEPC. The survey results have led to multiple alterations and enhancements of the LMS, as well as procurement of new software across the locations served by the College. (E.III.C.3.x )
- c. In September 2016, IT noticed that during Teleconference course transmitted from Del Norte, a bad echo occurred in the audio feed. IT tested the broadcast facilities and discovered standing sound waves. Sound baffles were erected prior to the beginning of the next semester. It is anticipated that another baffle system will be needed [in DN and KT?](E.III.C.3.x )
- d. After review of the technology infrastructure and the efficacy of the Virtual Campus across the District, the IT Director determined that an upgrade to higher bandwidth was required to increase service and facilitate improvements in student outcomes and availability of the system. Consequently, the College purchased bandwidth from the Corporation for Education Network Initiatives in California (CENIC), which vastly improved capability in distance and online education and remote student learning. (E.III.C.3.x )

- e. With recent technological improvements such as [bandwidth, new TelePresence classrooms for sending and receiving, Canvas, other IT purchases such as video capture, etc.], the College can now guarantee that online services reach throughout the entire District so that any student with Internet access has the same availability to online services and coursework. (Evidence—VC schedules, telepresence screen capture, etc.) (E.III.C.3.x )
- f. TelePresence development in 2015-16 added the capabilities to originate and receive from additional space so that the College's main campus and Del Norte Center can both originate and receive. In addition, the Klamath-Trinity site can now receive TelePresence courses from either Del Norte or Eureka, thus enhancing remote student learning across the College's vast area. (E.III.C.3.x )
- g. The College created an extensive Disaster Recovery Plan to ensure safety and security, including all information technology systems. In the event of a natural or human-caused catastrophe, all mission-critical information technology and site storage systems will be backed up. (E.III.C.3.x DRP)
- h. The College implemented an extensive emergency response system, including tsunami warning sirens, an active-shooter warning system, and emergency notification systems for all classrooms and other rooms in new buildings, as well as a text messaging broadcast system for the Eureka campus and the Del Norte center. These enhancements in communication help ensure preparedness and safety across the College's service area. (E.III.C.3.x )
- i. The College is currently working on improving scheduling efficiencies for DE and Telepresence courses across the District to maximize electronic educational value and ensure that all students can achieve their educational goals and outcomes. (When? Where? Who? Evidence? Meeting minutes and notes?)

### **Analysis and Evaluation:**

E.III.C.3.a  
 E.III.C.3.b  
 E.III.C.3.c  
 E.III.C.3.d  
 E.III.C.3.e

### **Standard III.C.4**

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.

- a. The College engaged in a multi-year process for selecting a replacement LMS after multiple surveys and assessments of existing software and LMS were determined to be insufficient (E.III.C.4.x LMS satisfaction surveys?) Regularly throughout the academic year, the Distance Education Coordinator communicates with faculty regarding OTLT (Evidence—screen shot)
- j. As the College increased its online programs, the need was identified for a dedicated Instructional Technologist. In spring of 2013, the position was created and an expert in online education was hired to improve the quality of online instruction and offer assistance to faculty and staff. [Hiring Instructional Technologist, creating DE assistance, Help Desk, IT response: When? Which years? What was the process that led to us determining we needed technologist? Review with DEPC and past DE coordinators.] (E.III.C.4.x process for hiring?)
- b. IT has developed a thorough and broad reaching Distance Education assistance program and a Help Desk process to ensure students and staff using the College's online educational system can receive fast service and assistance regarding difficulties and uncertainties in online operations.
- c. IT ticketing systems and response. [IT will give me information/documentation]
- d. Through the first years of the new LMS introduction, multiple surveys and opportunities for feedback on efficiencies and software glitches led to fine tunings to ensure quality and facility of use. (Evidence—help desk and in-service/professional development presentations.)
- e. The Distance Education Coordinator engages the DE faculty in [end-of-term/year?] surveys that are reviewed by the DEPC. The survey results have led to multiple alterations and enhancements of software, as well procurement of new software. (E.III.C.3.x DEPC meeting minutes)
- f. Through the auspices of the College's Professional Development Committee and under the direction of its Professional Development Coordinator, a regular series of training opportunities are scheduled throughout the year. Staff and faculty who participate in such training sessions are surveyed to identify future topics and improve the quality and value of future trainings. (E.III.C.4.x )
- g. The Redwoods Community College District and the College of the Redwoods Faculty Organization negotiated and agreed through a memorandum of understanding on established minimum qualifications and guidelines in order for faculty to be permitted to teach online. (E.III.C.4.x RCCD/CRFO MOU) The agreement includes specific online preparation for educators.
- h. The College gives substantial reassignment for a faculty member to coordinate all assessment throughout the district. The Assessment Coordinator offers instruction, guidance and assistance with the robust and intertwined online assessment tool maintained and upgraded regularly on the website. (E.III.C.4.x SARTCO DE coordinator; E.III.C.4.x emails, screenshots)

### Analysis and Evaluation:

- E.III.C.4.a
- E.III.C.4.b
- E.III.C.4.c
- E.III.C.4.d
- E.III.C.4.e

### Standard III.C.5

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

- a. The recently revised Administrative Procedure 3720, “Computer and Network Use,” spells out in precise language policies and allowable uses covering everything from copyrights and licensing to strictures against political, personal, or commercial use and security in the work or learning environment. The AP includes possible disciplinary action for violations. (E.III.C.5.x )
- b. Through approval by its Academic Senate and governing Board, Administrative Procedure 4105 “Distance Education,” lays out strictures governing online and telepresence education that may take place at the College. The College requires that all online course proposals receive separate review, that all courses guarantee regular instructor contact, methods for student authentication and online proctoring, Americans with Disability Act (ADA) compliance, privacy, and instructor evaluation. (E.III.C.5.x AP 4105; E.III.C.5.x DE Course outline form)
- c. The Collective Bargaining Agreement (CBA) between the Redwoods Community College District and the College of the Redwoods Faculty Organization includes a special separate evaluation process for faculty teaching online, including guarantees regarding the appropriate use of information systems in teaching and the general work environment. (E.III.C.5.x )
- d. Included on the CR-Online website are several sites offering faculty assistance and the College’s standards for online education, such as an “Online Course Syllabus Checklist” and a “Distance Education Faculty Handbook.” (E.III.C.5.x DE Faculty Handbook)
- e. Students enrolling in online course sections are introduced to online and distance education policies and standard practices through several methods: the College maintains a dedicated website clearly delineated on the opening webpage under the heading “Online Learners; once inside this site, numerous paths are offered to assist students in becoming successful online, such as links to the CCCC’s Online Education Initiative’s Online Student Readiness and Getting Tech Ready Tutorials; the College’s online and DE faculty are required to provide Online Orientation Letters for each course section, which

include standards and policies for success in the DE modality. (E.III.C.5.x screenshots)

**Analysis and Evaluation:**

E.III.C.5.a

E.III.C.5.b

E.III.C.5.c

E.III.C.5.d

E.III.C.5.e