

Technology Plan

Revised December 2011

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Cañada College Technology Plan

The Technology Plan is a living document providing guidance for the acquisition and application of technology in a continually changing teaching and learning environment. The Technology Committee will review the plan a minimum two times a year, make adjustments as needed and ensure that it is understood throughout the college community and that it is implemented in a timely manner. The Cañada College Technology Committee will ensure that its plan coordinates with the San Mateo County Community College Strategic Plan.

The Technology Plan of the College is intended to act as a compass, giving direction to the technology decisions of the College and ascertains that technology use assists in the fulfillment of the vision of the college.

Technology is implemented both to enhance and improve instruction and provide ways for the college to perform its operations in business, research, and student services more efficiently and effectively. The technology environment is dynamic and changing rapidly. A good technology plan references on a constant basis the vision of the college, examines how technology is applied to fulfill the vision, and determines how new technology advances learning and efficient operation of college programs and necessary supportive infrastructure. Fulfilling the vision of the College sets forth the assumption that the college will work closely in identifying and applying new technology solutions in every aspect of conducting the educational mission.

The Cañada College Technology Committee is a subcommittee of the College Planning Council and is composed of representatives, both classified and certificated from every division of the College, faculty, administrative, a representation from the District Information Technology Services Department, and the Information Technical Services Department of the College. When the Technology committee was developed, the committee was responsible for both the technology and the distance education components for the college. In fall 2010, the Distance Education component was split out and a new committee was formed to work solely with distance education. The two committees invite participants to attend all meetings. The Technology Committee meets a minimum of two times per year and will send a written report to the College Council including the following:

- Assess and report upon the progress of the College Technology Plan.
- Development of new components of the Technology Plan deemed to be accord with the changing technology needs for instruction, student services, and business operations in keeping with the College's strategic planning.
- Utilize appropriate instruments and expert consultation which survey and delineate the technology needs of the College.

• Develop and review the budgetary requirements for the ongoing implementation of the Technology Plan.

Committee Membership

Instructional Dean (chair)
Student Services Dean
Campus IT
District IT
VPI
PIO
Researcher
Instructional Designer
Instructional Faculty members (one from each division)
Classified Staff members (three)
Library Faculty member
Student

Planning for technology needs at the College is informed by the vision, mission, and strategic directions of the College as found in the Education Master Plan.

Vision

Cañada College is committed to being a preeminent institution of learning, renowned for its quality of academic life, its diverse culture and practice of personal support and development, extraordinary student success, and its dynamic, innovative programs that prepare students for the university, the modern workplace, and the global community.

Mission

Cañada College provides our community with a learning-centered environment, ensuring *that* students from diverse backgrounds have the opportunity to achieve their educational goals by providing transfer, career/technical, and basic skills programs, and lifelong learning. The college cultivates in its students the ability to think critically and creatively, communicate effectively, reason quantitatively to make analytical judgments, and understand and appreciate different points of view within a diverse community.

Four Strategic Directions

- 1. **Teaching and Learning** Equip students with the knowledge and transferable skills so they can become productive citizens in our global community; provide clear pathways for students to achieve educational goals; invest in opportunities to promote engagement; conduct provocative professional development; and create innovative and flexible learning systems
- 2. **Completion** Commit to student completion of certificates, degrees, and transfer; and create pathways which support the success, retention and persistence of students in their educational goals.
- 3. **Community Connections** Build and strengthen collaborative relationships and partnerships to support the needs for our community
- 4. **Global and Sustainable** Promote shared responsibility for our environment and social justice; and create a diverse and culturally enriched community of global citizens.

Cañada College Technology Vision

The Cañada College community will have immediate, easy and pervasive access to up to date, secure, reliable technology that expedites learning and teaching, the improvement of instruction and all operations of the College. Technology will have no boundaries, accessible anywhere, anytime and maintained by highly trained technical professionals. The use of technology will enable rapid communication with and between faculty, students, staff and community concerning any aspect of the College environment affecting the progress of the Cañada College Mission and Vision.

Background Information:

Cañada College provides computer work stations for all full time employees. The College also has a limited number of laptops that can be loaned to adjunct faculty. All major classrooms are "SMART" classrooms with data connections, wi-fi availability in most areas, and projectors.

Cañada College has the following computer labs:

Library	9 - 3
Learning Center Lab	9-206
Testing Lab	9-106
Instruction Lab	13-11
Instruction Lab	13-211
Instruction Lab	13-213
Instruction Lab	13-214
Instruction Lab	13-217
Multimedia Lab	22-113

Software used at the campus level includes:

Adobe
College Source
CurricUNET
Intelliresponse
Microsoft Campus
SARS
Simplicity-Advocate
Students Right To Know
TracDat
Advocate
Turnitin
XAP

Instructional areas provide information regarded software and hardware needs through their annual programming planning process and through the six year comprehensive planning process.

Technology Planning Strategic Goals:

Technology Goal 1: Continually promote, improve and expand the use of technology in the teaching and learning process by providing staff development for all faculty and staff that makes their work more efficient and more productive. Training will be available on campus and at the District Office for new software, hardware, and classroom equipment.

Objectives:

- Monitor the use of the CIETL for the application of Professional Development training in programs that add to the efficacy and efficiency of faculty and staff. Offerings included workshops on technology, one-to-one training, and webinars.
- Hire Instructional Designer to work with faculty and staff in integrating pedogy and technology.
- Offer STOT I (Structured Training for Online Teaching) part of the District's professional development program, recommended in the District's Strategic Plan and supported by the Distance Education Advisory Committee (DEAC). STOT I training consists of six weekly online sessions, three of which include a face-to-face (F2F) component given at an SMCCCD campus. Sessions are sequenced to teach faculty how to build highly accessible, easily navigable, pedagogically sound online classrooms that actively engage students! Qualifications/Requirements: (Note: unfortunately, previous

STOT I or Il graduates are not eligible.) Faculty applying for STOT I training must be computer savvy and actively seeking to enhance their current online teaching skills in order to teach online. In each session, instructors will discuss and model online best practices related to their activity and offer support to attendees as necessary. Attendees can expect to spend 5-10 hours throughout each week participating in forums and quizzes and completing weekly assignments that will make up their final lesson project due last class. Each F2F session will be held at one of our three campuses, so attendees can expect to travel to Cañada, CSM, and Skyline. STOT Certificates: Upon successfully completing all six weeks of STOT I training, faculty will receive a \$900 stipend and a STOT I Certificate of Completion signed by the Chancellor.

- Develop and apply instruments that survey, delineate, and evaluate the technology training needs of the faculty and staff.
- Determine where and how pilot programs in the use of technology will be applied at the College whenever deemed to be appropriate.

Accomplishment/Need Summary:

- The District purchased a site license for every district owned computer to have the Adobe Creative Suites software. District offers various levels of training to faculty and staff in Adobe Creative Suites product line (Acrobat, DreamWeaver, Photoshop). This training is provided to all District employees.
- Hired Instructional Designer (adjunct faculty member) to work with faculty and staff in integrating pedogy and technology.
- Library faculty has implemented electronic options for research and reading options for the library
- Enhancing faculty's use of Moodle to integrate classes in Moodle with an interface on the web (meeting with ITS personnel on 12/13/11)
- The grants that are received by the college allows the college to update their hardware to keep current
- College successful in accomplishing many of these objectives even with the lack of local
 and state funding due to the grants that allow for the purchase of equipment. Current
 equipment is then deployed to other departments throughout the campus where the
 technology is older.

Technology Goal 2: Provide the technology infrastructure to continually improve the operations and services of the college. The infrastructure is routinely monitored and updated to allow the college to move forward seamlessly as the technology changes.

- Work closely with District (Information Technology Services) ITS in assessing the infrastructure needs of the college and determining its ability to support state of the art technology.
- Ascertain and delineate new standards for the presence and use of technology in instruction and business operations in the workplace and classrooms.

Accomplishment/Need Summary:

- ACAMS security for doors
 - Need to reassess ACAM needs across the campus to ensure appropriate access needs are addressed. Two new ACAMs were added to interior doors in the CIETL area to allow easier access to the CIETL space.
- Wireless additional "hot spots" were added to the overall college; additional WAP "hot spots" will be added in in Bldgs. 5 & 6.
- The Grove, formerly the cafeteria, has been upgraded with additional power and data ports to support student, faculty, and staff usage. The Grove also includes a video wall-9 panels with integrated sound for college presentations, messaging, and community usage.
- Upgrade of buildings 5 & 6 includes the addition of six Smart classrooms and five conference rooms.
- Due to the expansion of computer use, technology, and environmental needs, e.g. lighting, air conditioning, the main campus electrical service feed is being done in December 2011. New transformer in Bldg 13 will be replaced due to the expansion of technology, as well.
- Bandwidth usage is being monitored by the District personnel to make sure there is sufficient bandwidth as faculty and staff increase their usage on campus.
- The college is committed to support the technological needs at the off campus sites.

Technology Goal 3: Use technology to improve communication with students, faculty, staff, alumni and the general public. Websites, portals and internal software packages which enhance communication will be continually applied and upgraded.

- Evaluate twice yearly the efficacy and attractiveness of the College Website and coordinate improvements with the marketing needs of every division and program. Need additional WebSmart online services for students.
- Ascertain and direct the application of improvements of technology that expedites communication with all students and families of the peninsula.
- Provide technical and development support for faculty
- Analyze the results of having an Instructional Designer available to assist faculty with the implementation of their online courses.

Accomplishment/Need Summary:

- Every student within the SMCCCD is issued an unique college e-mail account, texting for emergency situations--content management system has been implemented.
- Digital signage as a communication tool located in the Admissions & Records office of Bldg. 9 to disseminate information; college needs to look at the possibility of purchasing a digital sign for the front of the school.
- New Smart Projectors include closed caption capability.
- IntelliResponse implemented in 2011-12, the PIO is a key leader in implementing this product.
- Revamping college website, the PIO is currently serving as chair of a committee in revamping the college website.
- Degree Works implemented 2011-12, the A & R personnel, Dean and VPSS are working closely within all three colleges and the District.
- CurricUNET—has been implemented for new courses only; full implementation expected fall 2012
- TracDat—being used by all faculty to document their Student Learning Outcomes and Program Learning Objectives work.
- Increased use and training of CCC Confer with Engineering Professor and the instructional Designer will be offering additional training sessions for faculty and staff.
- Skype Mobile has been created for the college for conference calls

Technology Goal 4: The Research Office will provide resources and training which assist faculty in the analysis of instructional data and accompanying changes in instructional methods. This necessary service is in accord with the use of course and program SLOs. This service will expedite reporting, data collection and research efforts and include data-modeling and performance measurement.

- Implement a new research position: Director of Research, Educational Planning and Student Success.
- Monitor the effective connection of the research and planning position with the strategic Plans of the College and the ongoing research of that office in student performance and the evidence manifesting the educational needs of the community.
- Connect the research of the college with all SLO planning and dialogue of faculty and staff emanating from that endeavor

Accomplishment/Need Summary:

- Researcher needs to work closely with CIETL to increase training for faculty and staff
- Researcher has developed the "Dashboard" and tools to be used as resources and needs to disseminate the information college wide.
- Researcher has worked with the SLO coordinator and has met with faculty and staff at division meetings.

Technology Goal 5: Strategic goals for the acquisition, implementation and maintenance of technology will be delineated, undergirding the strategic planning goals emanating from the vision for the college and identified by the college community through the shared governance process. In the Educational Master Plan for 2012-2015, vetted and approved by all shared governance bodies at the College, the four strategic directions include teaching and learning, completion, community connections, and global and sustainable.

- Develop the appropriate policies and guidelines for expenditures of capital funds for the purchase of new technology and programs and/or its replacement.
- Develop two year plans for the purchase of new technology and the replacement of college technology and infrastructure.

Summary:

Due to the instability of ongoing funding at the state level, it is very difficult to maintain the level of technology on the campus without the support of grant monies available.

Technology Goal 6: Ascertain that state of the art adaptive and assistive technology is available to all students possessing any form of learning and or physical difference.

- Evaluate the present use of adaptive technology by students identified to possess special learning needs.
- Determine the needs for new or expanded technology that is more likely to satisfy special learning needs.

Accomplishment/Needs Summary:

- Digital signage installed in Bldg 9 Admissions & Records Office.
- The new smart projectors have closed caption capability in buildings 16, 17, 18, 9 & 22-113.
- The Alt Media Specialist position was a part time position and in 2010 became a full time position and serves all students, faculty and staff on campus.
- The DSP&S office changed their name in 2010 to DRC (Disability Resource Center)
- The DRC is client dependent at the college. All three colleges purchased a three year universal license/agreement and every computer can have Kurzweil installed on it, as well as students can have the program installed on their home computers; fire fly is also available and places files up in the cloud, v. 13 and works on all mobile devices as this is the professional license. All need to have access to the Internet to get a virtual license. For low vision students, the DRC purchases software and equipment to meet current and future needs. Also for low vision students, we have technology such as Kurzweil (screen reader), and Jaws software for the totally blind students. Kurzweil is more of a universal tool – highlight notes – creates study notes, universal learning tool. The ESL program shows the students how to phonetically say the words, gives definitions, has a thesaurus to be used. Also, if a student is writing in English and then switches over to another language, Kurzweil will highlight and convert to multiple languages. This program removes roadblocks for students. Also, the DRC has Topaz, which is a digital magnifier that enlarges letters and adjusts background colors; Sapphire which is a small magnifier to be used in the classroom; Zoom Text is also available and magnifies 3,600 times. The magnification is very crisp and is a clean font; however, does not work well with the My Math lab program the Math Department uses. For the hearing difference,

the DRC has an FM transmitter/receiver so students can hear clearly like the instructor is standing right next to the student. For the learning difference, pulse pens, ipads, etc. are available to students to check out and use in their classroom. Pulse pens are available to students and instructors to use. For students who have carpal tunnel, Dragon Naturally Speaking is available and is a productive tool.

Technology Goal 7: Continue to develop processes on campus that facilitate faculty and staff access to addressing their technology needs.

- Need to develop a Technology form to be used by all faculty and staff for any technology needs on campus.
- Create the Technology website and place the form on the website to either download
 and complete or complete online and send electronically to the VPI Office for collection
 and then the Technology Committee will meet to discuss and either approve or
 disapprove request.

Accomplishments/Needs Summary:

- Form has been created and was implemented at the beginning of fall 2012
- Website undergoing a complete facelift and launched summer 2012.

Clear Form



TECHNOLOGY REQUEST FORM

The Technology Committee for Cañada College will review your request below and make recommendations to the VPI and/or VPSS. You will be notified by e-mail of the Technology Committee's decision during the week which follows each meeting. Please complete each field in this form and submit to the Division Dean.

I. This section to be completed by the faculty/staff (requestor)

Request Date:	Emergency Yes No
Requestor Name:	Items requested (check below)
E-mail:	PC Desktop Laptop
Telephone:	MAC Desktop Laptop
Division:	Printer
Program/Department:	Telephone Speaker No Speaker
State the reason for the requested item(s):	
Is the requested item noted in the Annual Program Plan and/o	or Comprehensive Program Review? Yes No
Location of the equipment (building and room):	_How old is your current equipment, if any:
Current computer is Desktop Laptop	PC MAC
Have you contacted Cañada ITS (IT Support Technician)?	Yes No
II. This section to be completed by ITS, Division Dean, an	d Vice President.
ITS Comments:	
Division DeanDate	Approved Not Approved
VPI/VPSS Date	Approved

Office of Instruction 07/12

SAN MATEO COUNTY COMMUNITY COLLEGE DISTRICT

Strategic Plan for Information Technology 2012-2016

Revised July 2012

This is a five year plan describing the services, technology initiatives, goals and accomplishments of the department of Information Technology Services at the San Mateo County Community College District which includes Cañada College, College of San Mateo, Skyline College and the District Office.

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Overview

The Information Technology Services (ITS) department is a centralized service organization dedicated to providing information technology leadership, support staff, training, policies and procedures related to technology, strategies for the effective deployment and utilization of information technology, and assisting Cañada College, the College of San Mateo, and Skyline College, as directed, with local technology initiatives, projects, and planning.

ITS provides information technology leadership, has highly qualified support staff, conducts technology training, develops policies and procedures related to information technology, creates strategies for the effective deployment and utilization of information technology, and assists the three colleges within the District, as directed, supporting their mission, advancing college values, goals, vision and improving institutional effectiveness.

All ITS personnel including those providing desktop support to the Colleges are centrally managed and supervised. This allows ITS to allocate its resources to each College as necessary based on need or based on requirements for specialized knowledge or skills. This also helps the Colleges to seamlessly share technology solutions and best practices to leverage savings and efficiency.

ITS and the Colleges collaborate district-wide, and one-on-one, on decision-making processes and set priorities related to technology. ITS staff participates regularly in various College committees to discuss operational issues and developing project plans for a variety of topics which include technology needs in support of teaching and learning, district-wide communications, research, and other operational systems.

Examples of these committees include:
□ Chancellor's Council
☐ District Research Council (DRC)
☐ Enrollment Services Committee (ESC)
☐ Business and Finance Officers Group (BAFOG)
☐ Financial Aid Advisory Committee (FACC)
☐ Distance Education Advisory Committee (DEAC)
\square Facilities Planning and Operations (FPO)
☐ District Safety and Security Committee
☐ District Matriculation Committee
□ Network Advisory Group
☐ Technology Planning Committee (TPC)

A strategic plan is a dynamic roadmap that defines the direction that the Colleges and the overall organization need to take with the deployment and use of technology to support the mission of the Colleges. This alignment begins with the vision and mission for Information Technology for the San Mateo County Community College District (SMCCCD). The vision statement provides an overall "picture" of the state of technology within the institution. It describes the parameters for decision making now and in the future and serves as a baseline for assessing the quality of technology support and services.

Vision, Mission & Goals

In 2008, the following information technology vision and mission statements were developed. These have been validated as part of the effort to revise this plan and remain appropriate. Each year this plan will be reviewed and evaluated based on what has been completed, changes in the evolution of technology, and what resources might be available in the future. Due to the dynamic nature of planning, each year the vision and mission statement will be reassessed.

V I S ION

The San Mateo County Community District is committed to the effective and responsible use of information technology resources to:
\square Enhance and support the teaching and learning environment
☐ Provide easy access to learning resources and support services
☐ Facilitate communication throughout the District
 ☐ Improve institutional effectiveness by maximizing resources, improving services, and supporting those learning activities that are enhanced through technology ☐ Improve operational effectiveness and efficiency
☐ Serve our diverse teaching and learning communities MISSION
The mission statement describes the purpose of technology use within SMCCCD, guides the actions of ITS, and provides a framework and context for current and future strategies and

Mission Statement:

goals.

To provide a responsive and supportive information technology environment that is consistent with the mission of the Colleges and the District Office. Information Technology Services (ITS) provides all services and support in a manner that is focused on customer service and satisfaction.

Based on a set of planning assumptions, goals can be developed to meet the current and future technology needs of SMCCCD. Goals are strategic level objectives that are intended to achieve the technology vision, support the technology mission, and ensure that there is alignment with AACJC Standard III. The goals are numbered for reference purposes only and are used when aligning projects to meet one or more of the goals. They are all of equal importance and intended to be viewed equally.

These goals are the same as the ones contained in the IT Plan from 2008. They have been validated as still being relevant to the current environment.

GOALS

- 1. Continue to enhance and improve the capabilities and functionality of the administrative information systems environment to better serve faculty, staff and students
- 2. Enhance the capabilities and support for the use of instructional technology for teaching and learning
- 3. Continue to improve the information technology infrastructure to provide reliable and high-performance access to network and online services
- 4. Maintain an effective and responsive organizational structure to support administrative information systems and instructional technology
- 5. Provide technology leadership for the many college construction projects currently in progress or planned for the future
- 6. Research and present to the District new technologies that have the potential to improve teaching and learning or enhance administrative functions.
- 7. Collaborate with the Administration of the District and the Colleges to develop and implement a technology replacement strategy for servers, computers, printers, copiers, digital signage, network infrastructure, and so on.

Current Technology Environment

A first step for the development of a Strategic Plan for Information Technology is to determine the status of the current technology environment. This information is the foundation for planning assumptions from which strategic objectives can be identified. The following description has been updated and properly reflects the technology environment at SMCCCD. ITS provides technology assistance and support in a number of areas: Administrative Systems, Network Services, the Peninsula Library System, Web Services, Computer and Media Support, and Help Desk. ITS offers a broad array of services to the District and its constituencies in support of its overall mission and its commitment to meeting Accreditation Standard III. Below, is a description of the current services provided by ITS.

☐ Administrative Systems
☐ Network Services & Infrastructure
☐ Peninsula Library System
☐ Construction Support Services
$\hfill \square$ Instructional Technology and Web Services
☐ Computers and Media, Service and Support
☐ Technology Training
☐ Disaster Recovery Site
☐ Video Surveillance Systems
☐ Emergency Contact Systems
☐ Building Management Systems
☐ Telephone & Voicemail

ADMINISTRATIVE SYSTEMS

ITS provides and maintains a wide range of tools and applications that are used by the Colleges and the District Office to effectively support operational needs. Many of the core services are provided through the Enterprise Resource Planning (ERP) system and the capabilities of a number of third party systems.

BANNER® - The ERP system in use at San Mateo CCD is ellucian Banner®. It was initially installed in 1991-92 and has undergone significant major upgrades since it was initially installed. Banner® is extensively used by all faculty, staff, and students and includes major modules for: student registration, faculty grading, transcript production, student accounts payable, financial accounting, budget development, purchasing, student financial aid, and payroll and human resources. The Banner® web interface, locally called WebSMART, is accessed by students and staff to conduct a variety of self-service tasks such as registration, payment of fees, faculty grading, etc. Banner® version 8.5 uses Oracle Release 11g as its database and is hosted at the District office on IBM AIX servers. Software upgrades, patches, and the

development of new services are the responsibility of the programming team. Mandated state and federal reporting is largely based on information residing in the Banner® database.

FACULTY AND STAFF EMAIL - ITS maintains a comprehensive unified messaging service for the staff of the colleges and District Office which includes voicemail, email, and fax messaging. The system is based on Microsoft Exchange Server 2007 and Siemens Xpressions products. There are more than 3000 email accounts currently supported by the system. The Exchange environment consists of 2 clustered back-end servers as well as 2 load-balanced front-end servers for high availability. Storage of messages is maintained on an EMC Clarion Storage Area Network (SAN) utilizing RAID technology and redundant hot spare disks for fault tolerance. Data is backed up to high capacity, high-speed tape drives and is stored offsite for disaster recovery.

In addition, to reduce and control email spam, ITS has implemented Pure Message for filtering spam.

Web Site: http://banner.smccd.edu/ (intranet)

Vendor: ellucian Higher Education

Email Training: http://office.microsoft.com/en-us/outlook-help/CH010371352.aspx

Voicemail Training: http://www.smccd.edu/phone

ARGOS® —The web based reporting tool used to provide users with a variety of reports and data extracts from the Banner® transactional or data warehouse Oracle databases is Argos®. It is a product licensed from Evisions, Inc., a company based in southern California. The application is also intended to provide end-users with the ability to more easily create ad-hoc reports.

Web Site: http://www.evisions.com/Products/ArgosEnterpriseReporting/Overview.aspx

Vendor: http://www.evisions.com/

Training: http://www.evisions.com/Services/Training/OnlineRecorded.aspx

FORMFUSION® - Another product from Evisions, Inc. is FormFusion®. It is used to capture output from text-based reports generated from Banner®, add and delete data, insert text and graphics, and then distribute the output where and when it is required. It is used to print and/or email a variety of other forms such as purchase orders, student financial aid correspondence, student schedule bills and tax forms (1099s, W2s).

Web Site: http://argos:8080/

Vendor: http://www.evisions.com/

Training: http://www.evisions.com/Services/Training.aspx

HYPERION® - Extensive enrollment statistics are available from the web-based Hyperion® dashboards. These academic term-based dashboards compare enrollment statistics against the same period in the semester to the previous year's registration cycle. The historical dashboard takes a snapshot of the enrollment statistics at various key points in time throughout the term. Decision makers throughout the institution access these reports for timely and accurate information throughout the term. The dashboards are built from the local data warehouse

using the Hyperion® Developer Tool.

Web Site: http://appserv1.smccd.net/dostats/

Vendor: http://www.oracle.com/us/corporate/press/066183 **Training:** http://education.oracle.com/pls/web_prod-plqdad/db pages.getpage?page id=392&p org id=1001&lang=US

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CCCAPPLY® – Students use CCCApply® to apply for admission and enrollment at any of the three colleges. The system is hosted by the vendor, XAP Corporation, and applications are downloaded automatically into Banner® throughout each day.

WebSite:

https://secure.cccapply.org/logon.asp?nextpage=%2Fadmissionapp%2Fappmanager.asp

Vendor: http://cccapply.org/Apply/

Training: http://cccapply.com/staff/workshop.asp

BANNER® XTENDER SOLUTIONS - Xtender is a comprehensive document

imaging system that is tightly integrated with Banner®. It allows for users to scan, index and retrieve documents in an efficient manner. Documents can be retrieved directly from Banner® or through Xtender's user interface. Student Services, the Financial Aid offices, Purchasing and Finance offices are all heavy users of document imaging to greatly reduce document storage and filing costs. As of January, 2012 the system stores almost 1.4 million documents and 3.8 million images.

Web Site: http://imaging.smccd.edu/AppXtender/Login.aspx

Vendor: http://www.sungardhe.com/Solutions/Banner-Document-Management-Suite/ **DEGREEWORKS** – DegreeWorks is a web-based academic advising and degree audit tool that the district implemented in 2011. Students and advisors are able to check academic progress and receive advice on courses needed to satisfy requirements towards achieving academic goals. The system also provides an electronic education plan which is currently being implemented.

Web Site: https://websmart.smccd.edu/dgwp/

Vendor: http://www.sungardhe.com/Solutions/DegreeWorks/

SINGLE SIGN ON (SSO) – In an effort to strengthen security while reducing the number of user names and passwords that students need to remember ITS is implementing a Single Sign On system. The system is based on Banner Enterprise Identity Services (BEIS) and Central Authentication Services (CAS). When implemented, the system will allow students to sign onto WebSMART, Google Docs for HE and WebAccess through a single set of credentials.

SARS - At all three colleges SARS Software Products are used for counseling appointments and record keeping to enhance student services. Currently supported products include: SARS-GRID, SARS-CALL, SARS-TRAK and eSARS. The SARS servers utilize an MS SQL Server database and are maintained and backed up in the data center. Interfaces between SARS and Banner® are supported by ITS.

Vendor: http://www.sarsgrid.com/

STUDENT EMAIL – The District provides all students with an email address that is branded *my.smccd.edu* when the student is submitting an application for admission.

Web Site: http://my.smccd.edu/

Vendor: http://www.google.com/apps/intl/en/edu/

Training: http://my.smccd.edu/tutorials.php

GWAMAIL —This is a locally developed application that is integrated into Banner® and was launched in the summer of 2007. GWAMAIL allows authorized users to send email messages to targeted populations of students

EMERGENCY TEXT MESSAGING – Students, faculty and staff are able to subscribe to this service receive important campus-wide emergency announcements via text messaging. The District contracted with Alert-U to provide this service.

Web Site: http://www.smccd.edu/alertu/

Vendor: http://www.alertu.org/

PAYMENT PLAN – Students are provided with the ability to sign up for a payment plan for their fees through Sallie Mae. A link from WebSMART directs students to the Sallie Mae's website to complete the application for a payment plan.

Web Site: https://websmart.smccd.edu/stuhelp/fee_payment_faq.pdf

Vendor: https://www.salliemae.com/

FINANCIAL AID DIRECT DEPOSIT – Sallie Mae, a third party vendor, is responsible for processing financial aid payments to students. Students are provided with options to choose a debit card, direct deposit to an existing checking or savings account or to receive a paper check.

Vendor: https://www.salliemae.com/

FEE PAYMENT – Students are provided with the ability to pay their fees via a link on WebSMART that directs them to a third party vendor, Official Payments, which is able to process credit card transactions on a secure system.

NETWORK SERVICES. INFRASTRUCTURE & SECURITY

To ensure that faculty, students, and staff have access to high-performance and reliable network services such as Internet, voice communications and email resources, ITS has implemented a comprehensive and redundant network infrastructure across the District.

The District's WAN (Wide Area Network) interconnects three primary sites: Cañada College, Skyline College, and the College of San Mateo/District Office. The WAN connection between the three sites uses AT&T 1 Gigabit Opt-E-Man circuits. The WAN is implemented in such a way that the three sites have redundant network paths in the event that one link is lost. Internet access is provided to each of the three Colleges and the District Office by CENIC (Corporation for Education Network Initiatives in California). Each of the four sites have individual DS-3 (45 Mbit/sec) connections for redundancy and backup services. The primary connection for each site is via GigaMAN circuit providing one gigabit of bandwidth to access Internet services. As part of the network design, the capability exists to implement a manual failover across the WAN in the event one of the CENIC connections should fail for an extended period of time so that internet access can be provided to that campus. In addition to the wired network, ITS has deployed wireless access points in most high-traffic areas on all three campuses. Additional access points are being added as existing buildings are remodeled or as new facilities are constructed. There are currently more than 275 wireless access points installed. Utilization of the wireless network continues to grow significantly. Network security is provided using a variety of tools and techniques. ITS has secured the internal networks from the Internet by installing Cisco Firewalls at each of the three sites. A DMZ has been established on the CSM/District Office Firewall where most public access resources (Web servers, etc.) are enabled. A DMZ adds an additional layer of security to SMCCCD's LAN. ITS has deployed VLANs (Virtual Local Area Networks) to further secure and isolate network traffic.

There are three primary VLANs in use within the District: Administrative, Instructional, and Public. The Administrative VLAN provides District employees who have appropriate authentication credentials access to Banner® and other electronic resources and services within the District. The Instructional VLAN is for labs and classrooms where students use college owned equipment to access instructional resources that are local or on the Internet. The Public VLAN allows campus guests and students with personal network devices Internet access but they are prevented from gaining access to the other District VLANs and secure network resources.

In addition to the three primary VLANs, there are several other unique VLANs in use. Examples of these are the VoIP telephone system, ACAMS security system, Building Management Systems and environmental controls, Bookstores, and KCSM TV and FM radio station. Wireless access to all but the Public VLAN is protected with encryption and secure authentication through the use of certificates.

The District telecommunications system is a Voice over Internet Protocol (VoIP) telephone

system. A Siemens HiPath 4000 (HP4K) provides unified messaging services to approximately 2,000 users. Telephones handsets are nearly all IP phones with only a few analog courtesy phones. Other analog services provided by the HP4K include modem lines, fax lines, and alarm lines.

The HP4K is coupled with the Siemens Xpressions 4.0 voicemail system. Together with Microsoft Exchange, voicemail and email are unified, providing two layers of redundancy. A network diagram can be found in Appendix A.

The District maintains a high performance data network that connects the workstations and devices of the three college campuses and the District Office. The District Office contracts with AT&T to provide fast, redundant, and reliable connectivity for each of the college campuses and to the Internet. Internet services are provided by CENIC and have been upgraded many times over the years; currently each campus has a 1 gigabyte connection to the internet. All buildings on campus have access to the wireless network for both public and administrative access. Appliances from Exinda are in place between the WAN and CENIC connections to help prevent the illegal sharing of copyright material.

Securing college is data is a high priority and a number of hardware and software tools are in

place to protect and detect unauthorized access, including:
\square Sophos Anti-Virus and Microsoft Forefront: antivirus and malware detection and removal
tools to protect all desktops and servers
\square Sophos Puremessage: to detect and quarantine spam email messages
$\hfill \square$ Snort: to detect and control unauthorized network intrusion
\square Cisco Netflow: to monitor and report on network connections
☐ Exinda: a packet-shaping appliance that blocks peer-to-peer services, like BitTorrent, and other services that can introduce malware and viruses
☐ Microsoft Group Policies: applied to District owned and managed PCs to protect them from malware, plug-ins that are malicious, file attacks, and to prevent students from installing software on PCs in the instructional computer labs
☐ Public Wireless Network: open to use by students and allows access to internet services; access to the public wireless network is automatically shut down from 11:00pm to 6:00am daily
☐ Private Wireless Network: a secure wireless network that requires authentication and provides access to services like Banner
☐ OpenDNS: to prevent faculty, staff and students who use our network from being redirected
to known malicious web sites

PENINSULA LIBRARY SYSTEM

In May 1988, the District joined the Peninsula Library System (PLS) and approved a joint powers agreement that includes all city and county public libraries in San Mateo County. The primary objective of the District in joining PLS was to automate the libraries of each college, expand the library resources available to students and faculty, and benefit from other cooperative activities of the public libraries within the County. This decision continues to be extremely cost-effective and beneficial to the District and each of the three Colleges.

As authorized by the Board in April 1994, an agreement was executed with PLS which relocated the PLS library computer system, network, and their support staff to ITS. In this agreement, the District provides PLS office space for its technical staff, environmentally controlled floor space in the computer center, utilities, network and technical support services, computer operations support, and management services.

The District continues to manage, maintain and operate the PLS library circulation system and network environment. PLS staff will continue to be responsible for the applications software, maintenance and support of the Innovative Interfaces library information system and providing technical consulting assistance to the staff of PLS member libraries.

CONSTRUCTION SUPPORT SERVICES

The inclusion of a robust technology infrastructure has been at the forefront of the recent construction projects across the District. Technology design standards for new construction were provided for all projects and regular meetings were held with all constituents to insure appropriate technology was being incorporated during all phases of planning and construction. Information technologies are a critical element in the design of all new buildings and for the renovation of older buildings. This technology includes voice, data, video, security, fire alarm systems, HVAC systems, audio/visual systems, EAS, Cell Phone Repeaters, Digital Signage and other technology.

https://sharepoint.smccd.edu/SiteDirectory/CPD/CPD%20Downloads/SMCCCD%20Design%20Standards%20and%20Construction%20Specifications/Big%20Picture%20Design%20Standard%20Topics/Telecommunications%20Infrastructure_DS_V4_2009_01_03.pdf

Most classrooms throughout the district have been constructed or upgraded to meet the local standards for smart classrooms. These smart classrooms provide faculty the ability to easily utilize a projector and speakers to enhance the learning experience. Wireless internet access is provided in all classrooms for faculty and student use.

Link to ITS Construction Standards:

http://www.smccd.edu/accounts/smccd/departments/facilities/Dowloadspage.shtml Then select SMCCCD Design Standards and Construction Specifications

INSTRUCTIONAL TECHNOLOGY AND WEB SERVICES

ITS provides a wide array of instructional technology tools and web services to meet the needs of our faculty, staff and students. Below is an alphabetized listing of services with a brief description of each service and links when available.

Link to locations of wireless "Hot Spots" at each College:

http://www.smccd.edu/accounts/smccd/departments/itservices/services/wireless.shtml

CCCCONFER: Online conferencing solution which is built on a software tool called "elluminate" which gives faculty and staff the opportunity to participate in screen sharing, remote lectures, meetings and office hours. The CCC Confer project is hosted at Palomar College in San Marcos, California and is funded by a grant from the California Community Colleges Chancellor's Office.

Web Site: http://www.cccconfer.org

Vendor: California Community Colleges Chancellor's Office

Training: http://www.elluminate.com/Services/Training/?id=70/

CHECKBOX: Checkbox software is an upgrade to Ultimate Survey for delivering online surveys, self-assessment and conduct online elections as needed. *Note: Currently in the process of migrating Ultimate Survey users to Checkbox.*

Web Site: http://checkbox.smccd.edu/ **Vendor:** Checkbox Survey Solutions

Training: http://www.checkbox.com/support/training-videos

DISTRICT SUPPORTED GOODS AND SERVICES: The DSGS website is jointly maintained by Purchasing/General Services and ITS. The website is used by District employees to access information about the purchase of computer hardware, software, audiovisual equipment, and other ITS supported equipment.

Web Site: http://smccd.edu/dsgs

Vendor: homegrown **Training:** N/A

FACULTY DOOR CARDS (OFFICE HOURS): Faculty post their availability for students online via a homegrown system referred to as faculty door cards. The faculty office hours are accessible from this website and also integrate into our online searchable staff directory. Faculty can also print out their hours and post them on their office doors.

Web Site: https://smccd.edu/doorcard/

Vendor: homegrown

Training: N/A

IT SERVICE REQUEST FORM: A one-stop location for users to make IT support requests. Including

- Manager Request for new accounts (Banner, Email, WebExtender, Telephone, WebSMART and Website Requests.)
- HelpCenter (Submit technology-related work orders and track the status of your requests)
- Directory Information (Request your directory information to be updated)
- Email Redirection (Forward or stop forwarding your email
- Surplus (ITS collects/surpluses old computers, AV and electronic equipment)
- MySmccd (Request a @my.smccd.edu Google Apps Email Account)
- Spam Filter (Opt In or Opt Out of our Puremessenger email spam filter)
- iTunesUniversity (Request a course folder to host your podcasts on iTunes University)
- Request Microsoft Outlook Conference Room (ITS can setup your conference rooms in exchange, allowing people to book them in outlook.)

Web Site: https://smccd.edu/portal

Vendor: homegrown

Training: N/A

ITUNES® UNIVERSITY@SMCCD: The District is a participant in Apple Computer's iTunes® University program. iTunes® University is a free, hosted service for colleges to post digital information in the form of podcasts. There are currently over 500 podcasts posted on the District site.

Web Site: http://smccd.edu/itunesu

Vendor: Apple

Training: http://www.smccd.edu/accounts/ctl/itunesu/iTunesU.html

JOIN. ME: Free software used by IT Staff to assist users remotely via an online screen sharing session.

Web Site: http://join.me

Vendor: LogMeIn **Training:** N/A

L Y R I S: Lyris is email mailing list software for marketing and newsletters. Allows you to autosubscribe

users or users can self-subscribe and unsubscribe.

Web Site: http://lyris.smccd.edu

Vendor: Lyris

Training: http://lunar.lyris.com/help/lm help/11.1/

MOBILE SERVICES: ITS is currently developing custom mobile apps for each College and is also making the College websites more "mobile friendly."

MYSMCCD GOOGLE APPS: SMCCCD provides all students with an @mysmccd.edu Google email account, calendar functions and other apps as part of the Google Apps for

Education suite of products.

Web Site: http://my.smccd.edu

Vendor: Google

Training: http://my.smccd.edu/googlesupport.php

MYSMCCD SUPPORT CENTER: A hosted helpdesk is readily available to students and it provides them access to resources to get answers for any questions they may have related to the tools available to them through their my.smccd.edu email account.

Web Site: http://mysmccd.helpserve.com/Tickets/Submit

Vendor: Kayako **Training:** N/A

OUCAMPUS: OuCampus is a Content Management System for web sites. ITS recently deployed OmniUpdate® as a tool for selected end users to maintain their web sites that are hosted on the District's servers. There are currently 100 active licenses throughout the District. Note: In the next 12 months we will be migrating the District office, Cañada College and Skyline

College to Adobe Contribute for future cost-savings.

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Web Site: https://www.omniupdate.com/oucampus/login.jsp?user=sanmateo

Vendor: Omniupdate

Training: http://support.omniupdate.com/documentation/ox/10/

SHAREPOINT® (WEB BASED COLLABORATION TOOL): SharePoint®

Services is included in the Microsoft Office Product Suite and allows users to post and interact with documents via the web. Over 150 District-wide committees, departments, and organizations currently use SharePoint for agendas, minutes, calendars, forms, surveys, forums, picture libraries and more.

Web Site: http://sharepoint.smccd.edu/SITEDIRECTORY

Vendor: Microsoft

Training: http://office.microsoft.com/en-us/training/sharepoint-server-2007-trainingcourses-

HA010235858.aspx

SMCCCD PORTAL: The portal is the gateway for District employees to access College and District Office web-based services and related web sites.

Web Site: http://smccd.edu/portal

Vendor: homegrown

Training: N/A

WEBACCESS: WebAccess is a Course Management System that is the District's implementation of Moodle. WebAccess® is hosted offsite by Moodlerooms. Every faculty member that has a class assignment in Banner® automatically has a WebAccess® course(s) shell created for them. Faculty use of WebAccess® ranges from supplemental course information to providing a course completely online. 24X7 support for students is provided by a third party, Presidium, at no cost to the District. Support for faculty is provided by ITS. *Includes free CCConfer(Elluminate)* and paid Turnitln Plugins

Web Site: http://smccd.edu/webaccess

Vendor: Moodlerooms

Training: http://www.smccd.edu/accounts/ctl/WebAccess/WAInstrWsite.html

WEB FOLDERS: Every staff member, department and service area is given a web folder with 500 MBs of web space to maintain a website or store files. ITS maintains the web server, creates accounts, installs web applications as needed, and assists users with debugging of their web sites. ITS currently supports over 100 active web folders. Note: Many faculty have moved to WebAccess for their course sites and many departments are moving into content management systems under their college websites.

Web Site: http://www.smccd.edu/accounts/smccd/webpages/website_list.asp

Vendor: Homegrown

Training: http://www.smccd.edu/accounts/portal/index.php/posts/district-web-site-hosting/

WEBSCHEDULE OF CLASSES: WebSchedule is a search engine for searching through all courses offered at Cañada, CSM and Skyline College. It provides different entry points for search based on user requirement. It displays all details for any particular course including, important registration dates, course textbooks, class location, etc.

Web Site: https://websmart.smccd.edu/webschedule/default.php

Vendor: Homegrown

Training: N/A

WEBSMART: WebSMART is the web interface to Banner® that enables students, faculty and staff to register for classes, submit grades, request transcripts, update personnel information, and much more. Below is a more comprehensive features list:

For students, it provides the capability to:

0	Add/Drop	classes
_		

- O Add/remove from a waitlisted class
- O Print schedule of classes
- O Pay for account balances
- O Select or update an education goal
- O Link to purchase textbooks
- O Sign up for a payment plan
- O Obtain an unofficial transcript
- O Request an official transcript

O Link to DegreeWorks
O Schedule a counselor appointment
O Order a parking permit
O Sign up to receive emergency texts
O Review financial aid documents, status, requirements and award
O Sign up for a BOG waiver
O Print a 1098T
For faculty, it allows them to:
O Enter grades
O Enter attendance
O Send emails to class
O Download/Print class lists, waitlist and attendance lists
O Print authorization codes
O Print schedule of classes
For employees, they can:
O Enter timesheet details
O View benefits and deductions
O Review/print payroll information
O Review/Print tax forms
O Review accumulated time off balances
For advisers:
O View student's unofficial transfer
O Access DegreeWorks to counsel students
O Access Degree Audit
For staff, it provides the capability to:
O Run reports
O Approve documents
O Enter requisitions
O Review budgets
O Process journal entries
Web Site: https://websmart.smccd.edu/
Vendor: Ellucian

Training: N/A

Computers Support & Media Services

Desktop computers and media services support for the Colleges and District Office is a centralized ITS service. ITS technicians are physically located on each campus. ITS technicians assist the colleges with technology purchases. They also work cooperatively with the colleges to develop minimum supportable standards for computers, provide regular software updates, maintain an inventory database of technology that has been installed, and install new equipment. Service and support is provided through a centralized HelpCenter that uses a webbased tool to enable users to place repair orders and track their status through completion. http://www.smccd.edu/accounts/portal/ITSRequest/requestoptions.asp

ITS maintains an inventory database of all computers, laptops, labs, printers and projectors to assist in technology replacement planning. Based on this information ITS provides the colleges with recommendations on equipment replacement strategies and best use of their technology funding.

When computer labs require computer upgrades, Faculty submit a "program review document" to the Division Office. The Division Office reviews all paperwork received, establish priorities and needs, and then sends them to College Council to review. College Council approves and works with ITS to determine specifications, and then ITS develops the Purchase Order.

Virtualization – In several computer labs at Skyline and CSM we have approximately 120 virtualized desktop computers installed. These virtual computers have no hard drives, cost less purchase and deploy, last longer than traditional PC's due to lack of moving parts, are not susceptible to viruses, save energy, and most importantly our students do not notice any difference between a virtualized computer and a traditional one. The only important factor to consider is the amount of labor required to maintain these virtual labs is substantially less than a traditional computer lab.

Equipment Replacement Strategy

The District has created a new committee called, Long Range Instructional & Institutional Equipment Planning Team. The membership consists of the Executive Vice Chancellor, the Vice Chancellor of Facilities, Operations and Planning, the Vice Presidents of Instruction, the Vice Presidents of Student Services, the Chief Technology Officer, and the Director of Information Technology Services. This group meets quarterly to review equipment replacement needs and to set priorities based on available resources.

The District has set aside funds for equipment replacement for the next five years as follows:

- Instructional equipment \$1,200,000 per year
- Computer labs and software licensing \$1,033,250 per year

In 2012-2013, the following older computer labs will be replaced or repurposed depending upon academic needs and discussions with the Deans and faculty.

Canada Building 9 room 221 Learning Center 30 stations Building 9 room 205 Learning Center 24 stations Building 9 room 321 Library 4 stations Building 9 room 318 Library 39 stations Building 22 room 116 PC Lab 38 stations

CSM Library & MCC ISC Lab 49 stations Building 36 room 329 Chemistry 3 stations Building 36 room 306 Chemistry 4 stations Building 36 room 321 Chemistry 4 stations Building 36 room 300 Chemistry 6 stations Building 18 room 202 Math 13 stations Building 8 room 12 Football 14 stations

Skyline Building 5 room 200 Library 40 stations Building 8 room 209 Accounting Lab 40 stations Building 5 room 100 Learning Center 30 stations

Technology Training

PERSONNEL TRAINING

The district recognizes that in order for faculty and staff to make efficient use of technology they need to be provided with opportunities to learn about the services available. Due to budgetary restrictions, the Centers for Teaching and Learning were eliminated and much of the training that was provided through them is now the responsibility of the Colleges. Training on a limited number of common desktop applications has continued on a periodic basis. A number of workshops on Adobe applications were offered and current plans call for more Adobe classes as well as a limited amount of Microsoft Office workshops. http://www.smccd.edu/accounts/smccd/adobe/default.php ☐ Media Services Website has a wealth of info for smart classroom training: http://www.smccd.edu/media A series of DegreeWorks training workshops were given to counselors and students ☐ In 2008, Google Apps for Education training was provided at all three Colleges. ☐ On request, ITS provides training and workshops on various topics for departments and/or groups of staff. Examples of recent training include Introduction to Sharepoint, Securing your workspace to meet FERPA standards, and single user sign-on. ☐ Jaz's Web Tips – Available from the District's portal page, it provides answers to frequently asked questions regarding the technologies supported by ITS. Opportunities for faculty training in the use of the Moodle software are provided by individual colleges and at a district level through the Structured Training for Online Teaching (STOT)

Through staff development and flex activities, the Colleges regularly offer technology training opportunities for faculty and staff. The staff development program also supports training for distance education faculty using outside resources, such as @ONE, Lynda.com and textbook publisher materials.

part of the district's professional development program.

In addition, each year the California Community College Banner Group (3CBG) hold an annual conference for the California Community Colleges that use the Ellucian Banner application. Staff from various departments throughout the district attend and participate in workshops and discussions on how to get the most effective use of the Banner software. http://www.3cbg.org/

STUDENT TRAINING

113 provides 1 AQ3 and tatorials offline for students and does presentations to students in
classes as-needed when launching new systems, such as Student Email, WebSchedule and
Degreeworks.
Examples of Online Training Materials for Students:
☐ My.Smccd tutorials: http://my.smccd.edu/tutorials.php
☐ Student WebAccess Tutorials: https://smccd.mrooms.net/course/view.php?id=6270

ITS provides FAOs and tutorials online for students and does presentations to students in

ITS Data Center

To maintain the reliability of services that are hosted by ITS at the District Office, the facilities department has installed and maintains an emergency generator to provide backup electrical power to the building for as long as necessary during a power outage.

For fire protection, a VESDA (Very Early Smoke Detection Apparatus) system has been installed in the Computer Center. In the event of a fire or overheating of equipment the VESDA systematically shuts down the equipment in the computer center and sets off the appropriate warnings.

ITS conducts backups for all administrative data stored on its servers on a daily basis. In addition, ITS has in place a comprehensive backup strategy to ensure that all server-based data is recoverable. This data is written to high-density tapes that are stored in an off-site location on a weekly basis.

ITS facilities around the District host the District's security system, ACAMS. ITS supports the network services that are required to operate this system.

DISASTER RECOVERY CENTER

ITS conducts backups for all administrative data stored on its servers on a daily basis. In addition, ITS has in place a comprehensive backup strategy to ensure that all server-based data is recoverable. This data is written to high-density tapes that are stored in an off-site location on a weekly basis.

In addition, for all major systems including Banner, email services and web services, ITS has built a disaster recovery computer center that is located at Cañada College. Using specialized features in Oracle enables this backup/recovery site to stay synchronized with the primary Banner system located at the District Office.

Telephone and Voicemail

The District uses a Siemens HiPath 4000 to meet voice telecommunication requirements. Along with the phone system, SMCCCD deploys approximately 1400 Voice Over IP (VOIP) phones, 350 analog devices (*faxes, courtesy phones and elevator phones*), and 16 Session Initiated Protocol (SIP) Emergency phones across the district. Included with the HiPath 4000 telephone system is the Siemens Xpressions voicemail system which integrates with Microsoft Exchange to provide unified messaging and delivers voice messages to an individual's email inbox.

ITS Organization

ITS is divided into four units which including desktop and media support, network services and support, web support services and administrative information systems.

1. DESKTOP AND MEDIA SUPPORT

The ITS department consists of 35 employees dedicated to assisting the colleges meet their technology goals. Of the 35 employees, a majority are IT Support Technicians responsible for desktop and media support across the three colleges. They work cooperatively with the colleges to develop minimum supportable standards for computers, provide regular software updates, maintain an inventory database of technology, and install new equipment. Service support is provided through a centralized HelpCenter that uses a web-based tool to enable users to place repair orders and track their status through completion. (http://www.smccd.edu/accounts/portal/ITSRequest/requestoptions.asp)

After each HelpCenter work-order is closed a satisfaction survey is sent to the end-user. Three questions are posed to users regarding time of response, professionalism of the technician and resolution of the problem. From August 2009 – November 2011 ITS received over 1164 responses. The overwhelming majority expressed satisfaction.

\square Was the work order attended to within a reasonable amount of time? – 98% said "Yes"
\square Did the Technician assigned to your work order handle your issue in a friendly and
professional manner? – 97% said "Yes"
$\hfill\square$ Were you satisfied with the resolution to your work order? If no, please explain below. –
97% said "Yes"
Over the past three years (2008-2011) the number of computers has grown significantly
impacting the workload of these technicians which led to additional IT Support Technicians

hired in 2011.

2. BANNER PERSONNEL/STUDENT DATA SUPPORT

ITS has five Programmer Analysts, a Database Administrator, a Computer Operations Manager, a Director and Associate Director responsible for maintaining Banner modules and supporting external systems that integrate with our banner system. They assist end-users with the saving and retrieving data from our mainframe database as well as implementing new efficient workflows or tools to assist with day-to-day business procedures.

3. NETWORK SERVICES AND SUPPORT

ITS has one network manager, two network infrastructure technicians and two Systems Administrators responsible for maintaining, supporting and ensuring the reliability of the network infrastructure, wireless internet, network security, backups, telephone VOIP system and over 150 physical and virtual servers.

4. WEB SERVICES AND SUPPORT

Web services is a team of two web programmers and one director who support several web systems as well as assist with web sites and applications district wide. Web Services Support maintains the Course Management, Content Management, Sharepoint Portal, Support Ticket system and writes many custom applications such as the webschedule, employee directory, faculty door cards, etc... They assist the colleges with existing tools as well as researching and implementing new web solutions, best-practices and custom programming.

Summary of Major Projects Completed

In order to continue on a path of progress, moving projects and initiatives forward in a strategic manner, best practices suggest that an organization review what has been accomplished in the near past. Over the past 36 months, ITS has provided services and support to the Colleges in a variety of ways. This support is in alignment with Accreditation Standard III by providing support to student learning programs and services and all SMCCCD constituencies. Below, are summaries of the major accomplishments of ITS. ITS has provided services on a daily basis which may not be documented or included below but are reflective of the commitment ITS has to the needs of the Colleges and other constituencies.

A list of projects that have been completed by ITS over the past 3 years is contained in **Appendix B.**

ITS PROJECTS:

 \Box 46 total projects have been part of the workload of ITS in support of the District and the colleges.

$\hfill\Box$ Of the 46 total projects, one was cancelled and three were placed on hold. The remainder have been completed.
\square 21 of the projects were in direct support of student learning and programs.
$\hfill\square$ 23 of the projects were in direct support of administrative systems and functional users.
$\hfill\square$ 16 of the projects were directly related to infrastructure in support of SMCCCD systems.
\square 3 of the projects were related to planning and leadership in exploring new technologies that will respond to specific needs of the Colleges.
DESKTOP SUPPORT:
☐ Completed approximately 9373 work orders at our 3 campuses and the District Office via the online HelpCenter work order system and telephone Help Desk.
☐ Installation and replacement of approximately 1242 computer systems (included Bond funded replacements mentioned above) and 445 printers.
$\hfill\square$ Replacement of 33 failed projectors and 14 projector screens in campus classrooms due to deterioration.
\Box Specified and installed Cell Phone repeater systems in 17 buildings (some multi-story) at 3 campuses.
☐ Specified and installed a variety of Digital Signage monitors, connected to content management server and provided instruction to appropriate staff. Ongoing support for server and signage required.
Replacement of approximately 28 Uninterruptable Power Supply (UPS) systems due to deterioration. This UPS system ensures the ITS guaranteed "uptime" of 4hrs in the event of a power outage at any of our campuses. Equipment is housed in the IDF(s) in each building at all 3 campuses.
Future IT Initiatives
Future Trends in technology that will affect the Colleges of the District include:
☐ Mobile applications, services and devices
☐ Network bandwidth demand
☐ Wireless networks
☐ Cloud and hosted services
☐ Virtualization of servers and desktops in computer labs

☐ Services Integrated across multiple platforms
\square Network and data security
\square Backups, recovery and redundancy
\square Paperless and automation of work flow and processes
\square Protection from identify theft
\square Protection against spam, viruses, and other threats
\square Impact of social networking on teaching and learning
☐ QR codes for marketing, promotion and communication

Once technology goals are determined, the initiatives, objectives, and projects that fulfill the goals on a more tactical basis can be identified. To ensure that the proper direction is taken for each of these endeavors, projects need to be aligned with the relevant Accreditation Standard and related ITS technology goal. Shown in Appendix A are the projects that have been prioritized for implementation by ITS for the next three years. In the table, the Accreditation Standard and the ITS technology goal that is supported by the project is shown. Similarly, Appendix B provides a list of projects that have been completed by ITS over the past 3 years.

Self-Assessment

ASSESSMENT OF ITS SUPPORT AND SERVICES

A key performance indicator of success is to gauge to what extent the SMCCCD community perceives that it is being well served. In order to determine user satisfaction, ITS has surveyed users and tracked technology support.

This self-assessment aligns with best practices and in keeping with the Accreditation Standard III of technology support of student learning, teaching, and administrative services. A survey of faculty and staff was conducted in April 2012 to evaluate their level of satisfaction with the services and systems provided by the department. Using a scale of 1 to 5, with 5 being highest level of satisfaction, ITS was rated from 4.10 for technology purchases to 4.69 for reliability of the services provided. One area for improvement includes the need for more training related to the use of Banner, the document imaging system and DegreeWorks (score 3.75). Overall, the average rating across 12 categories was 4.33. The following services were the highest rated in terms of need: WebSmart, telephones, employee email, ITS HelpCenter, the wireless network, cell phone reception, web-based schedule of classes and emergency text messaging.

Help Desk:

During the period of June 2010 through June 2011, there have been 1266 help tickets logged for AELearn support. ITS has provided a total of 553.66 hours of support, of which 32.83 hours were for advanced assistance and problem solving.

HelpCenter:

The satisfaction survey results below are a summary of the assistance provided to users from
August 2009 to November 2011. Three questions were posed to users with 1,164 responses.
The overwhelming majority expressed satisfaction with the:
\square How quickly a problem is resolved
\square Professionalism of the technician assigned to the case

WebSMART:

☐ Effective resolution of the problem

In 2008 WebSMART student users were also surveyed to determine the level of satisfaction they have in email and student services. Nearly 800 students responded to nine survey items expressing overall satisfaction. The results of the survey can be found in the table below.

In the past year, how satisfied have you been using WebSMART to:

	Please answer all that apply					
	Very Satisfied	Somewhat Satisfied			N/A	
View/Update your email or home address	733	134	16	18	113	
	72.29%	13.21%	1.58%	1.78%	11.14%	
Find the class you wanted	665	235	58	30	35	
	65.00%	22.97%	5.67%	2.93%	3.42%	
Register for classes (including add/drop)	740	166	50	40	23	
	72.62%	16.29%	4.91%	3.93%	2.26%	
View an unofficial transcript	604	126	28 12.54% 22.99%	16 2.79%	231 1.59%	
Order an officialtranscript	400	114	23 11.54% 44.03%	16 2.33%	435 1.62%	
Review and pay student fees	704	174	26	30	74	
	69.84%	17.26%	2.58%	2-98%	7.34%	
Place yourself on a waitlist	450 44	140 4.87%	44 13.96% 33.40%	34 4.39%	335 3.39%	
Applying for financialaid (including a fee waiver)	371	108	53	40	423	
	37.29%	10.85%	5.33%	4-02%	42.51%	
View your schedule of classes	779	136	37	26	30	
	77.28%	13.49%	3.67%	2.58%	2.98%	

Appendix A – Projects Completed Over the Past 36 Months

				• • • •			
1 a	1	Automated Scholarship Application and Awarding	The current scholarship application process is very manual and time consuming. The goal of this project is to allow students to submit applications online and utilize Banner to match them to scholarships that they may potentially qualify for. Reports will be generated to support a more efficient awarding process.	1-High	Jan 2011	Completed	Installed Stars online
1 c	1	Banner 7.x upgrade	Evaluate need to upgrade to a 7.x version of Banner	2-Med	Fall 2007	Completed	Decided to wait for Banner 8
1 a, b, c, d	1	Banner 8 upgrade	Upgrade to Banner 8.x and CalB solutions	1-High	Apr 2010	Completed	Implemented
1 a, b, c, d	1	Banner 8.5 Upgrade	Upgraded to latest versions supported by CalB	1-High	Oct 2011	Completed	Implemented latest available releases
1 a	1, 2, 5	Campus Website Maintenance	Help colleges update their websites	2-Med		Completed	Implemented
1 a, d	1	CCC Trans	The request and fulfillment functionality of CCCTrans has been completed.	1-High	2010	Completed	

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1 a	1	Credit Card	Ellucian changed the credit card	1-High	July 2010	Completed	Implemented Official
		Upgrade to be	connection gateway to comply				Payments Solution
		PCI Compliant	with new regulation issued by				
			the credit card industry. Since				
			Banner needs to be upgraded				
			to use the new gateway, the				
			district decided to look at				
			potential new vendors in hopes				
			of better service and pricing.				
			or zoner correct and promy.				
1 a, d	1, 2	CSM	Course Management System	1-High		Completed	Implemented Moodle and e-
				-			college
1 c	5	CSM Building	Outfitted entire 4 floor newly	1-High	Jun-Dec	Completed	Project Completed
		10	constructed building with		2011		
			computers, printers, Digital				
			Signage, Live TV signal, Cell				
			Phone repeaters. Transferred				
			user data from previous				
			computer to new location.				
			Installed 17 Smart Classrooms,				
			2 with high-end sound systems				
			and 1 large "high profile" event				
			room.				
			100111.				
		1	I		1	I	

1 c	5	CSM Building 5	Outfitted newly constructed 3 story building with technology consisting of computers, printers, laptops, Public Address System (Cosmetology), Audio Visual recording station (cosmetology) and several specialized Smart Classrooms for the Fitness Center. In addition, specialized hardware and software installed for Dental labs including 2 video recording studios. Fitness Center also included installation and television connectivity for approx. 20 flat panel, ceiling mounted monitors with head end unit installed in IDF.	1-High	May 2011	Completed	
1 c	5	EAS install at all 3 colleges	Electronic Announcement System (EAS) installation at all 3 campuses. This project consisted of running POTS (telephone) lines from every building on campus to the Main Point of Entry (MPOE), then the installation of speakers and horns to key locations on campus to allow for emergency announcements to be heard anywhere on each of our 3 campuses and the District Office.	1-High	Jul 2010- Nov 2011	Completed	Project Completed
1 a, b, c, d	1	DegreeWorks	Implement DegreeWorks	1-High	Summer 2011	Completed	Live with Counselors and Students

1 c	5	Digital Signage	Large project at both CSM and Skyline to roll out new Digital Signage technology. Work with campus Administration and Public Relations offices to provide content and train staff.	1-High	Aug2010		
1 a	1	Direct Lending Support	This project was initiated to configure Banner and help users with procedures to comply with the new Federal direct lending regulations.	1-High	Jun 2010	Completed	Implemented
1 a	1	Discontinuing Oracle Reports	Develop replacement reports	1-High	End 2009	Completed	Replaced mostly with Argos and some SQR
1 c	3	Disk Storage	The maintenance of the technologies used for backup of the various systems is about to run out. ITS is actively seeking replacement alternatives.	2-Med	End 2010	Completed	Implemented N-App solution
1 a, d	1	Early Alert	Faculty requested a process to notify students when they were falling behind	2-Med	Fall 2007	Completed	Implemented in WebSMART
1 a, d	1	Emailing Students (GWAMAIL)	Provide district branded email accounts to students	1-High	Spring 2007	Completed	Gmail accounts provided to all active students
1 a, d	1	Emergency Text Message	Implement an Emergency Text Messaging System	1-High	End of 2009	Completed	Initially developed local solution using SMTP that turned out not to be optimal. Signed up with AlertU

1 a	1	Financial Aid Direct Deposit	Provide the ability to disburse financial aid funds via ach	2-Med	Jan 2008	Completed	Developed local process to allow students to sign up for direct deposit and used Banner baseline solution for ach.
1 a, b	1	Fixed Assets	Implement Banner's Fixed Assets Solution	1-High	Fall 2007	Completed	Implemented
1 a	1	Imaging	Explore use of OCR technology to automate indexing of documents	1-High	Summer 2007	Completed	Due to licensing and hardware cost users decided not to proceed with implementation
2	4	IT Plan	Update 2008-2012 IT Plan	3-Low		Completed	Completed
1 a	1	MIS CalB Reporting	Update MIS CalB Reporting	1-High		Completed	Implemented
1 c	3	Network Management	Review network, UPS, etc.	1-High		Completed	Review completed
1 a	1	New Procurement Card Load Program	The district is in the process of changing procurement card vendors to US Bank. In addition, the current loading process is considered technically obsolete and it will not fit the new business process. A new set of programs will be designed to download charge card information from the bank that will contain Banner account code information.	1-High	Fall 2010	Completed	Implemented

1 a	1	Office Hours	Change in union contract required a new process to calculate and pay office hours earned by adjunct faculty	1-High	Jul 2007	Completed	Implemented
1 a	1	Outsource Fin Aid Payments/Pay ment Card Processing	The district is interested in outsourcing the check printing for financial aid payments. An ERP has been issued and is currently being evaluated.	2-Med	Summer 2011	Completed	Implemented
1 a	1	Parking Permits	The district decided to outsource the sale and distribution to Credential Solutions. Need to develop interface from WebSmart	1-High	Jun 2010	Completed	Implemented
1 a	1	Payroll	Bring payroll processing in- house from the County	1-High	Jan 2007	Completed	Implemented
1 a	1	PERS upgrade	Staff participated in the design and testing of CalB solution.	1-High	Nov 2011	Completed	Implemented
1 a	1	Portal/Student email	Evaluate options to improve electronic communications with students	1-High		Completed	Decided to implement Google Docs for Education and not a full Portal

1 a	1	Provide Employee Paycheck pdf format in WebSMART	ITS is exploring using Intellecheck to create paychecks in .pdf format, load them into BDMS using the Index Image Import Wizard and use the new toolkit provided by Ellucian to develop the ability to retrieve documents from	1-High	Fall 2010	Completed	Implemented
1 c	3	Rebuild IBM servers	Rebuild LUCY	1-High		Completed	Implemented
1 c	5	Sky/CSM/CAN	Moved hundreds of staff offices (computers, printers, telephones) into "swing space" during construction of new buildings, then moved them again into permanent locations.	1-High	Jan 2010 Dec 2011	Completed	Project Completed
1 c	5	Skyline Building 4N	Outfitted entire 3 floor newly constructed building with computers, printers, Digital Signage, Live TV signal, Cell Phone repeaters. Transferred user data from previous computer to new location. Installed 17 Smart Classrooms	1-High	June-Oct 2011	Completed	Project Completed
1 c	5	Skyline Facilities Maintenance Center	Outfitted new building with technology such as computers, printers, telephones and DISH television service	1-High	Mar 2010	Completed	Project Completed

1 c	3	Virtualization of Instructional desktop/lab computers	Virtualization of approximately 100 computers at College of San Mateo and 14 at Skyline campus with centralized "image" running from server located in the MPOE. Testing to ensure technology is viable before expanding roll-out across all 3 campuses in areas where the technology is feasible. At CSM, testing is underway in Buildings 9 (Library), 10 (Registration), and 18 (Math Resource Lab). At Skyline, testing in Building 2 (Registration).	1-High	Jan 2010 - ongoing	Completed	Project Completed
1 c	3	Vista/Office 2007 Upgrade	Upgrade MS-Office and Windows	2-Med		Completed	Implemented
1 a, d	1	Waitlist	Implement waitlist functionality	1-High	Jul 2007	Completed	Implemented
1 a		Warehouse (ODS/EDW)	Evaluate the need for ODS/EDW	3-Low	Winter 2008	Completed	Cost does not justify the need. Continue with local data warehouse
1 a	1	Web Taylor 8.3	WebTaylor 8.3 will enhance WebSMART's user interface to a Web 2.0 look and feel. ITS will test and determine if it would be a good enhancement for the students.	3-Low	End 2010	Closed	Decided not to use this option at this point

1 a	1	Year Round	Year Round Pell	1-High	Jun 2011	Completed	Implemented	Ì
		Pell						l
								l

Appendix B – ITS Planned Future Projects

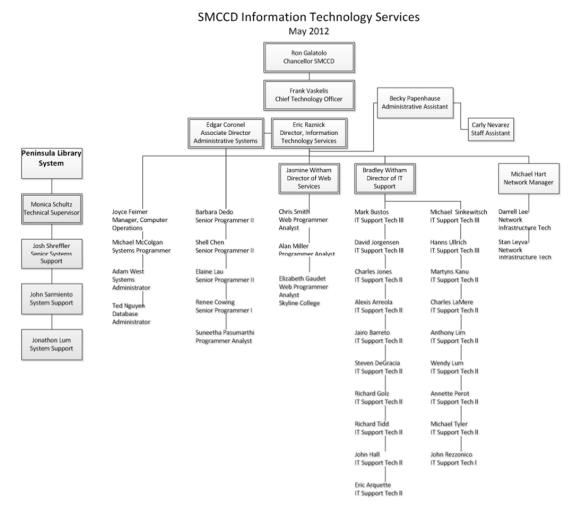
Standard III	IT Goal	Name	Description	Rank	Target Date	Status	Estimated Effort Level
1 c	3	Disaster Recovery Upgrade	ITS implemented a DR site at the Cañada College. The site currently hosts backup servers for Banner, Exchange and other services. The project will continue to add server/services and will refine procedures.	1-High	Summer 2012	In-progress	1 – Large
1 a	1, 3	Single Sign On	The objective is to strengthen user authentication while providing for an easy way to connect users to their various systems such as WebSMART, Email, WebAccess, Sharepoint, Banner, etc.	1-High	Spring 2012	In-progress	1 – Large
1 c	3	Oracle 11.g	Database upgrade scheduled for Spring 2012	1-High	Spring 2012	New	2 – Med
1 a, d	1	DW - Electronic Student Plan	New project to implement Degree Works SEP functionality	1-High	Spring 2012	In progress	1 – Large

1 a, d	1, 6	Electronic transcript processes and articulation	This project has two parts. 1st need to establish policies and procedures and configure Banner to articulate incoming transfer course work. 2nd need to setup system and procedures to bring transcript	1-High	Fall 2012	New	1 – Large
1 a, d	1, 6	Financial Aid BPA	Implementation of recommendations from BPA (Business Process Analysis)	1-High	Spring-	In progress	1 – Large
		Implementati on	sessions conducted on Oct 2011		Summer 2012		
1 a	1	Tuition Payment Plan	Integration between Sallie Mae and Banner contract amounts and payment information	1-High	Fall 2011	In progress	3 – Small
1 a	1	Drop for non- payment	The district will begin dropping students for non-payment. Several exceptions allow students to not be dropped even with a balance: Signed up for payment plan, applied for financial aid, fees are paid by a third party and others.	1-High	Fall 2011	In progress	1 – Large
1 a	1, 6	Pre-requisites in Degree Works	DegreeWorks provide for a more flexible way of creating rules to check for prerequisites. We will evaluate and see it a change from Banner is feasible.	1-High	Fall 2012	New	1 – Large
1 c	3	Upgrade to Exchange 2010	Large complex project that requires Siemens HiPath upgrade or replacement due to compatibility issues	2-Med			1-Large
1 a	3	Credit Card Processor upgrade	A new contract has been signed with Heartland which will provide credit card processing at a lower price	2-Med	Spring 2012	New	3 – Small

1 a	3	Cañada Website Redesign	Vebsite		In progress	2 -Med	
1 a	3	Skyline Website Redesign	Skyline Website Redesign 2-M			In progress	2 -Med
1 a	3	WebAccess 2.0	Upgrade the online schedule of classes	Upgrade the online schedule of classes 2-Med		New	2 -Med
1 c	3	SharePoint 2012 Upgrade	SharePoint 2012 Upgrade	SharePoint 2012 Upgrade 2-Med		New	2 -Med
1 a	3	Directory/ITS Support form	Directory/ITS Support form	ectory/ITS Support form 2-Med		New	1 – Large
1 a	1	Banner 9 Upgrade	Plan and prepare for Banner 9 upgrade which will use project Horizon technologies (Groovy on Grails)	2-Med 2013 Ne		New	1 – Large
1 a, d	1, 2, 6	Mobile Applications and Devices	Provide student, faculty and staff with access to services through mobile devices	1-High	2012	In-progress	2 – Med
2	4	IT Strategic Plan	4-year update of plan	1-High	January 2012	In-progress	2 – Med
1 b	3	Web tips	Continue to provide quick tips on use of technology 2-Med		In-progress	3 – Small	
1 b	1	Peer Training	Continue training in the M/S Sandbox 2-Med In-prog		In-progress	3 – Small	
1 b	1	Informal training for students	Continue to support Counseling and A&R staff for as needed help for students			In-progress	3 – Small

1 b	1	WebAccess tutorials	Support links from student and faculty WebAccess pages	2-Med		In-progress	3 - Small
1 c	5	Cañada Bldg 5/6	Outfitted newly remodeled 3 story buildings with computers, printers, and 12 new Smart Classrooms, including installation of Document Cameras for most classrooms.	2-Med	January 2012	In-progress	1 – Large
			Installation of Video Wall (consisting of 9 flat panel monitors) and Digital Signage server.				
1 a, c	3	Enhance System Wide Status Notification Enhance non-emergency student messaging and incorporate SMS (text) capabilities		2-Med	Spring 2012	New	2 – Med
1 a	1	Admissions and Records BPA A review of internal A&R business processes will be conducted to identify potential areas for improvement.			March 2012	New	1 – Large
1 c	3	VoIP – New Phone System	Upgrade phone system	2-Med	TBD	New	1 – Large
1 c	5	Construction and Design of New IT Building		2-Med	TBD	New	1 – Large
1 c	3	Equipment Replacement Strategies		2-Med	Fall 2012	New	2 – Med

1 a	1	Intelle-	2-Med	Fall 2912	New	2 – Med
		response				



Spring 2012 Technology Effectiveness & Needs Survey

1. Please check as many items that apply to you:

		wide communi systems, such			
And do the tools mee	t your needs?	YES or NO			
Give specific example	es that demons	trate how your r	needs are beir	g met or not be	ing met:
2. Please rate he	ow often you us	se the following	types of techr	nology:	
	1 Never	2 Occasionally	3 Frequently	4 All the time	N/A
Smart classroom v	vith Projection e	equipment Docu	ıment camera		
IPad or similar tabl	let				
Tablet computer					
Mobile Devices					
Smart board					
Audience Respons	se Clickers				
Podcasts/Streamin	ng Media				
VHS					
Other:					

3	Please rate your agreement with the following statements about technology				
	1 Strongly disagree	2 Somewhat disagree	3 Somewhat agree	4 Strongly agree	N/A
Technology makes my job easier.					
stuc	n serve lents better technology.				

4 I have access to training that I need for the technology I use.

Strongly disagree

Somewhat disagree

Somewhat agree

Strongly agree

5 From where do you get your training? Check as many as apply

SMCCCD (STOT) in-person Training

CIETL

College courses within SMCCCD

Web-based tutorials

Flex day workshops

Manuals

Conferences

External sources such as @ONE

Other:

What additional technology and training needs do you have? Please be as specific as possible

	Check all that apply:
	What avenues have you used to give input to technology adoption and implementation on the campus: Division meetings Technology and or Distance Education meetings Department meetings Annual Program Plan Comprehensive Program Review Personal request through College or ITS Department Surveys Other:
	8 Would you like to be more involved with the technology decisions at the college level?
	YES NO
	If so, how:
	9. Do you teach a hybrid or online course? YES NO
	10. If YES, how well does the technology accommodate your curriculum for the online/hybrid course?
	11 What suggestions do you have to improve technology at Cañada College?
Optional: Name, Ema	
	SUBMIT