# SOLANO COMMUNITY COLLEGE

# TECHNOLOGY MASTER PLAN
## 2017 - 2020

September 26, 2017
Update 1

*"To educate a culturally and academically diverse student population drawn from our local communities and beyond"*

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# Executive Summary

*"Information technology is as essential to Solano College's success as electricity, water, and gas. It is part of the College's core infrastructure. Technology is no longer an elective it is a requirement."* STAC

In January 2016, Solano Community College contracted with Strata Information Group (SIG) to begin the development of an information technology master plan. The plan is intended to describe the College's shared vision for technology and guiding principles; serve as a road map for College technology; detail specific supportive project objectives with required resources and timelines; and to insure that Solano technology is supportive of the College's vision and mission.

The Solano College Technology Advisory Committee (STAC) (Appendix E) with leadership from interim Chief Technology Officer, James "Kimo" Calilan was the campus sponsor for the plan development. The process included several meetings with key campus stakeholders and committees. In addition, a comprehensive campus survey for faculty and staff (Appendix D) was prepared, issued and analyzed by the Solano College Office of Research and Planning. A second student survey (Appendix B) sponsored by the Associated Students of Solano College was administered to students to solicit their perspectives on technology at Solano.

## Major Findings and Recommended Responses

Solano College Technology Services & Support (SCTSS) organization offers a broad array of services to the College and its constituencies in support of the College's mission. The broad range of services provided include: Administrative Systems, Network and Infrastructure Services, Construction Support Services, Classroom Technology, Video Surveillance, Telephone & Voicemail, Web Services, Computer and Media Support, and Help Desk.

1. There was a high level of satisfaction with the manner and quality of services provided by SCTSS staff.
2. Canvas, the College's Course Management System, and the training provided by the Distance Education program received very favorable responses.
3. Students place a high value on technology and use it regularly in their instruction.
4. The majority of students in the survey felt that technology at Solano was equal to or better than their high school experience.
5. Students indicated that email was their preferred method of communicating with their professors.
6. The College's website was identified by faculty, staff and students as being in need of a significant redesign and reorganization.
7. Faculty and staff identified a strong need for consistent and informative communication between SCTSS and the College community.
8. All sectors of the College community indicated that the College needs to develop and publish a funded technology replacement schedule. In addition, there was an expressed desire for a raised campus awareness of the Total Cost of Ownership (TCO) for technology decision-making process.
9. Funding for technology needs to be annual and predictable. Funding should be shifted away from Bond based to being included as part of the College's general fund.
10. There is a College-wide lack of awareness of the impact on staff and budget of the Total Cost of Ownership (TCO) for technology. When making decisions that involve technology the entire College community needs to have an increased awareness of the TCO.

**Major Findings** (Continued)

11. Completion of the implementation of DegreeWorks, a critical component of the Student Services and Success Program, needs immediate attention.
12. While College email has been reliable, there is a need to reexamine college email policy and to increase mailbox size.
13. The College's version of Banner, the College's Enterprise Resource Planning (ERP) application, is outdated and reaching end of support. Banner and associated applications need to be updated to the latest versions. The update will provide the users community with many new requested functions.
14. Training for Banner as well as other campus technologies should be formalized and offered on a regular basis.
15. The SCTSS needs to develop a disaster recovery plan for College's data and critical IT services. Included would be the installation of an emergency generator to provide power and cooling in the data center in the event of an extended power outage.
16. There is a need to increase the bandwidth of the network serving the Vacaville and Vallejo Centers.
17. New technology that has been implemented by Ellucian, the company behind Banner, makes it possible to shift the College's ERP system to be cloud-based rather than hosted locally. This move to the cloud can potentially can improve performance and lower the cost to maintain the system. The feasibility and resource requirement of implementing a cloud-based ERP system needs to be explored.
18. The College recently had a network and systems security review by the State Chancellor's Office. SCTSS will review the findings and address any security vulnerabilities that were identified.
19. In fall 2015, SCTSS started an initiative to virtualize several desktop computers throughout the District. While the initial installations were challenging and had to be terminated, improvements in the network infrastructure and new technology make it worthwhile to try again. When successfully implemented VDI (Virtual Desktop Infrastructure) will save the College money with decreased maintenance costs and improved security.
20. SCTSS works with the College's construction department to define IT standards and technology configurations for new construction and remodeling. SCTSS staff has expressed a high level of frustration with the current process and the time required to support construction.
21. Successful implementation of administrative software applications requires an active participation in specifying and testing of new or updated applications. There has been a lack of consistent follow through on the part of the user community that has resulted in delayed implementation times and user frustration.

A detailed response to these findings along with associated costs and required staff resources can be found in the SCTSS Initiatives and Plans 2017- 2020 starting on 14. Also included are minor projects not listed here but identified during the development of this plan.

# Mission, Vision and Goals

# Mission, Vision and Goals

## Mission

- Solano Community College IT (SCCIT) provides a collaborative, transparent, sustainable, ubiquitous, and responsive information technology environment that is supportive of the College's mission, student success, and is focused on customer service and satisfaction.

## Vision

- Information technology is as essential to Solano College success as electricity, water, and gas. It is part of the College's core infrastructure. Technology is no longer an elective it is a requirement.

- Solano Community College is committed to the effective and responsible use of information technology resources to:

  A. support the College's mission, "to educate a culturally and academically diverse student population drawn from our local communities and beyond."

  B. create an environment that provides accessible, intuitive and seamless access to learning resources and student support services.

  C. complement the teaching and learning process.

  D. improve institutional effectiveness by maximizing resources, improving services, and supporting those learning activities that are enhanced through technology.

  E. streamline administrative processes.

  F. provide timely and accurate information to students, faculty and staff.

  G. improve communications with students, staff, and community.

  H. maintain the security of the College's, students, faculty, and staff 's data.

  I. assist with maintaining a safe and secure campus environment.

  J. extend access to the College's resources beyond campus borders and college time limitations.

  K. support educational access to non-traditional students

## Goals

- Enhance the capabilities and support for the use of instructional technology for teaching and learning.
- Continue to enhance and improve the capabilities and functionality of the administrative information systems environment to better serve faculty, staff and students.
- Continue to improve the information technology infrastructure to provide reliable, secure and high performance access to network and online services.
- Maintain an effective and responsive IT organizational structure to support administrative information systems and instructional technology.
- Research and present to the District new technologies that have the potential to improve teaching and learning or enhance administrative functions.
- Develop and implement a technology replacement strategy that includes budget for servers, computers, printers, copiers, digital signage, network infrastructure, ERP software, classrooms, and other instructional technologies.

# Solano College District

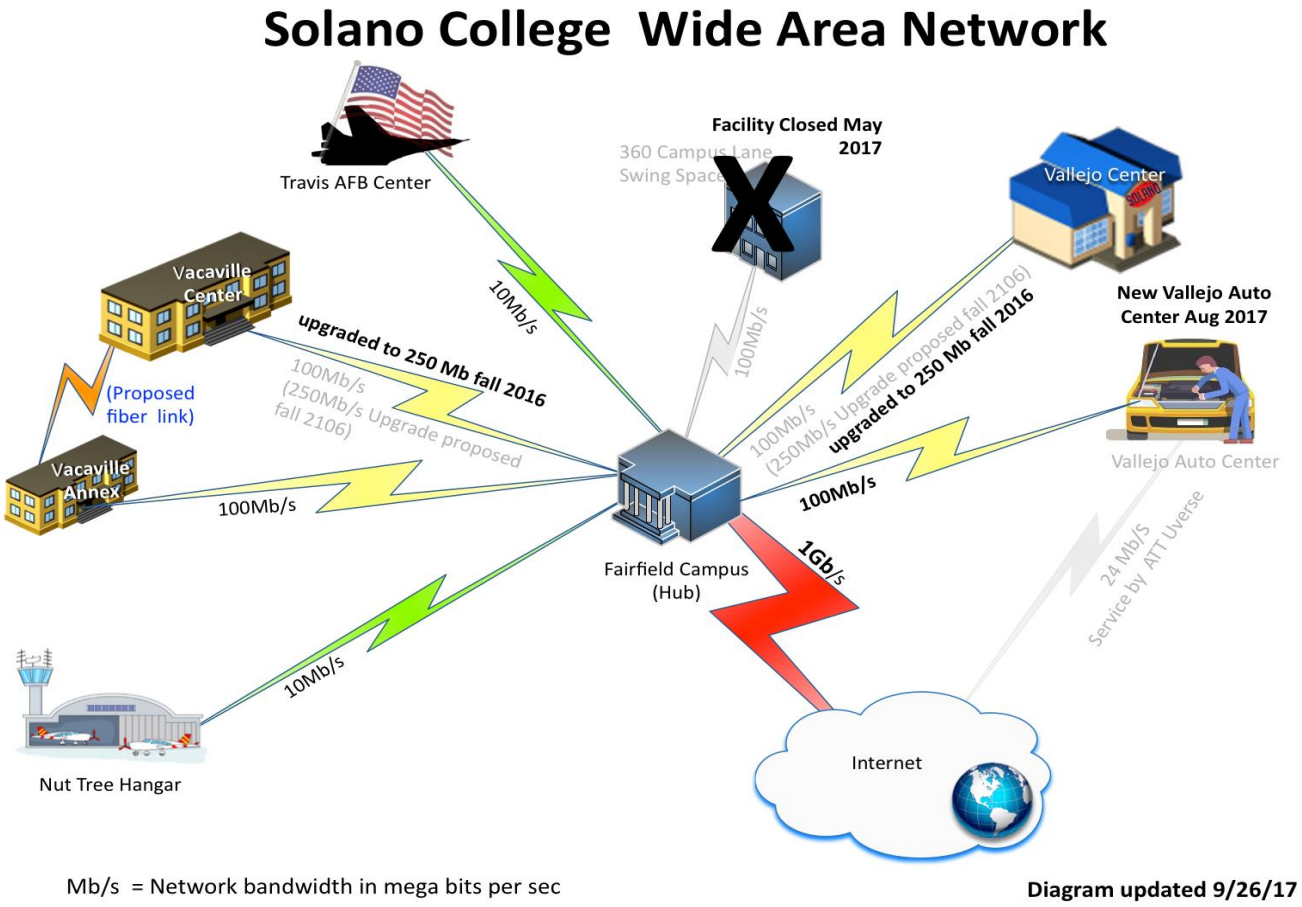
## Current State of Technology

# Current State of Technology

## Infrastructure

### Data Network

The District network is comprised of eight different geographic locations: Fairfield Campus, Vacaville Center, Vacaville Annex, Vallejo Center, Nut Tree Hanger, Travis AFB Center, 360 Campus Lane swing space, and Vallejo Auto Center. The Fairfield campus serves as the hub for 6 of the 7 centers. The Centers are connected to the Fairfield hub via leased fiber optic connections (AT&T Opt-E-Man WAN). The 360 Campus Lane Swing Space, Vacaville Annex, Vacaville and Vallejo Centers are connected to main campus via 100Mb/s (100 million bits of data per second) connections. The centers at Nut Tree Hanger, and Travis Air Force Base are connected via 10Mb/s links. Internet service to the Vallejo Auto Center is provided through a consumer class 24Mb/s ATT Uverse service. The main campus has an aggregated link of 500Mb/s to serve all locations.



At each location/center, 10Gb/s (10 billion bits of data per second) fiber links connect network equipment between buildings and within buildings. Connectivity is delivered to the end user by 1Gb/s switching equipment and a combination of CAT5e and CAT6 cabling. Wireless network services are provided throughout all facilities. Wireless services provide network access via 802.11ac managed access points. There are two primary wireless VLANS (Virtual Local Area Networks). A secure network that requires authentication and a public Wi-Fi that is open. In addition, there are program specific wireless VLANS throughout specific areas of the College.

All district locations share a common connection to the Internet. Housed at the Fairfield campus, internet connectivity is provided by the Corporation for Education Network Initiatives in California (CENIC). CENIC provides routing equipment and a redundant connection using a 1Gb/s AT&T Gig-A-Man circuit with a 45Mb/s DS3 circuit for backup. These circuits connect the College and the centers to the California Research and Education Network (CalREN), which provides access to many California college campuses as well as Internet access.

The Solano Community College's network is secured using a multi-layered approach. The network edge is protected by a redundant firewall. The district email system is protected from excess spam and mail-borne viruses by a Barracuda spam-filtering appliance. Internally, access control lists are implemented on routing equipment to restrict access at the subnet (VLAN) level. To provide greater access while preventing intrusion, the district utilizes network admissions control (NAC) using Cisco Clean Access to quarantine and remediate under-patched or infected computers.

## Telecommunications

Solano College utilizes a Voice Over Internet Protocol (VOIP) telephone system. Solano College Technology Services and Support (SCTSS) team maintain more than 600 VOIP telephone handsets throughout the District. A small number of analog phone lines remain in place for emergency phones and special applications. A Cisco Emergency Responder unit that assures accurate e911 reporting and dispatch callback handles 911 calls.

Microsoft Exchange 2010 Unified Messaging provides Voicemail services. This voicemail system features speech-to-text captioning, voicemail integrated with email, and a system of auto-attendants to provide menus and directory lookup.

Additional technologies are used for FAX, call load management, hold music in select areas, and monthly bill management.

## Desktop and Classroom Technology

The District provides a computer system for all full-time faculty, staff and administrators. SCTSS maintains 569 administrative desktop computers that have been deployed to faculty, staff and administrators throughout the District. There are 504 computers located on the Fairfield campus, 46 at the Vacaville Center and 19 at the Vallejo Center. Each computer is equipped with software applications that include Microsoft Office Suite, antivirus protection, Acrobat, Cisco Clean Access (loaded on to 50 employee laptops), and Adobe Creative Suite on request.

Desktop computers and smart classroom resources are used throughout the Solano District to support and increase the effectiveness of student learning outcomes, safety, and the quality of services. Approximately 1,380 student computer system are located in instructional laboratories and drop-in centers throughout the District. The majority of systems are located on the Fairfield campus 1054. Vacaville has 190 and Vallejo 136.

Smart Classrooms (classrooms containing at a minimum a projector/monitor, sound system, DVD player, computer and internet) are located at all three centers. Fairfield has 103 smart classrooms including the experimental 21st Century classroom. There are 24 smart rooms at the Vacaville center and 17 at Vallejo.

Recently, the College has begun to deploy Virtual Desktop Infrastructure (VDI) computers/terminals throughout the District. These VDI systems operate like individual computers with the added benefit of decreased maintenance costs and improved security.

There are approximately 330 printers in the District. SCTSS provides tier 1 support (checking for jams, configure, etc.…) for these printers. More extensive support is provided by a contracted vendor.

## Data Center

The District's data center located in building 100, room162D, houses 172 virtual and physical servers, a storage area network (SAN) array, tape library, fiber channel switching infrastructure, core network services, and equipment for connectivity to the WAN and Internet. These systems serve as the basis for **all** District critical applications and data storage. The room is just over 200 square feet, featuring a raised floor with removable deck plates.

However, it should be noted that this critical facility is **lacking** in key support systems that could jeopardize student data and district services. The room lacks an operating fire suppressant system, is subject to inconsistent room temperature, and lacks a back-up generator to keep services running and protect data during extended power outages.

## Campus Digital Signage

SCTSS supports 19 digital signs on the Fairfield campus. The signs were recently upgraded to work on a new technology that includes a hardware player Chromebit and management software from Rise Vision. The Rise Vision software allows for easy Digital Signage Content Management. The digital signs are managed by SCTSS. The current process for content updating is for end users to send images, usually PowerPoint slides, to SCTSS where technicians utilize the Rise Vision to upload content to appropriate screens. In the future, the College will need to develop standards and a distributed management system to allow users to manage their own content.

## Security

SCTSS works with security and facilities for the deployment and maintenance of security cameras and archiving of footage throughout the District. There are 30 cameras located on the Fairfield campus, 18 cameras at the Vallejo Center, and Vacaville has 25 cameras including 6 located on the Vacaville Annex.

It should be noted that the District security system is in desperate need of repair and upgrade. Several of the cameras are not functioning or have limited functionality. None of the cameras on the Vacaville campus are recorded due to defective storage. Vallejo is beginning to experience similar storage failures. All locations experience insufficient storage to accommodate desired retention policies.

## Standards

Solano Community College's network infrastructure is governed by industry best practices and standards as outlined in the Solano Community College Telecommunications Network Standards. These standards are intended to serve as a guide for construction and the College community. The standards can be found at http://www.solano.edu/technology/policies_standards.html

## Administrative and Student Support Software and Services

- **Email**

  Solano College provides all District employees with District hosted email accounts. Email services run on Microsoft Exchange 2010 server located in the data center. Users are assigned a storage quota of 250MB for their shared email/voicemail box, and are limited to sending and receiving attachments of 5MB or less. Exceptions to this policy are made on a case-by-case basis. Examples of exceptions are College President, Vice-Presidents and Deans.

  Email is accessible on-campus via Microsoft Outlook, and off-campus via Outlook Web Access (OWA). Email is also accessible via the voicemail system, featuring text-to-speech capabilities.

- **Banner®** - The Enterprise Resource Planning ERP system utilized by the College is Ellucian Banner®. It was initially installed in 2008 and has undergone modifications and upgrade over the years. 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. Mandated state and federal reporting is largely based on information residing in the Banner® database.

  Banner® is scheduled for major update during the fall 2016 and spring 2017 semester.

- **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®. The application is also intended to provide end-users with the ability to more easily create ad-hoc reports. Argos provides the insight needed in a single, feature rich, user friendly, easily implemented tool.

- **CCCApply®** – Students use CCCApply® to apply for admission and enrollment at Solano. The system is hosted by the California Community College Chancellor's Office. Student applications are automatically downloaded into Banner® throughout each day.

- **Banner® Document Management System** – BDMS is a comprehensive document imaging system that is tightly integrated with Banner®. It allows users to scan, index and retrieve documents in an efficient manner. Documents can be retrieved directly from Banner® or through Xtender's user interface.

  BDMS while imbedded in Banner® has not been implemented to date.

- **SARS** - 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. The interfaces between SARS and Banner® are supported by SCTSS.

- **Degree Works** – Degree Works is a web-based academic advising and degree audit tool that is part of Banner®. 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 has the potential to provide an electronic education plan.

  DegreeWorks is scheduled for implementation during the fall 2017 semester.

- **My.Solano** - My.Solano (Luminis) is a web portal for students, staff & faculty where they can easily access important information such as student records, the Colleges learning management system Canvas, student/staff emails, employee Health & Welfare benefit, paystubs, job details, leave details and additional information. My.Solano is scheduled to receive a significant upgrade during the fall 2016 and spring 2017 semester. The projected go-live date of Spring 2018.

- **ePrint** – ePrint is a web-based system designed to distribute reports securely and quickly to authorized recipients. Using a web browser, authorized users can view reports in a user friendly format. ePrint was developed to provide a faster, safer, and more efficient solution for the process of printing and distributing reports. It handles all of the processing, from input of the formatted report file to the receipt of that report by the end-user. Reports are delivered electronically in a choice of formats that the recipient can view, search, and save. The recipient can print all or selected portions of the report. Some reports can be formatted so that the data can be imported seamlessly into a spreadsheet.

- **Atomic (UC4)** – Atomic automates job scheduling across multiple applications and platforms. Working with Banner®, the Banner® Enterprise Job Scheduler by Atomic queues jobs, balances batch loads from multiple departments, and provides immediate alerts in the event of a job failure. Banner® Enterprise Job Scheduler can decrease the time required for critical system processing, streamline the development of integrated job schedules, reduce errors and risk, free up staff for more productive tasks and improve customer service.

- **FormFusion** – FormFusion is a document enhancement/distribution solution giving Solano complete control over the design and delivery of online documents while automating processes and eliminating paper stock.

## Web Management

- **Solano Community College Website http://solano.edu/**
  In fall 2012, the Solano College website was redesigned. The new design included 5 portals: Student Services, Campus Life, Academics, Campus & Community, and Centers. New Role Navigation for New Students, Current Students, High School Students, and International Students was also added. The website is maintained by 1 FTE.

  To keep the Website content current, SCTSS implemented OmniUpdate, a web Content Management System (CSM). OmniUpdate allows designated end users to update selected content using modern WYSIWYG editors, similar to using MS Word.

  For today's students, a College's website is the virtual front door to the campus. A contemporary college website needs to attract and inform current and prospective students, their families, alumni, employees, and donors. It has to be user-friendly while conveying value to different constituencies. Although there have been significant improvements to the Solano website over the past 4 years, the College will need to re-examine the resources and organizational structure to maintain a contemporary website.

# Solano College Technology Services & Support

# Initiatives & Work Plans 2016 - 2020

# Solano College Technology Services & Support
# Completed Projects 2016 - 2017

## Spring -Summer 2016

- Network Infrastructure Upgrade – Completed
  - New 288 strand fiber backbone for main campus, 96 strand fiber to provide redundant infrastructure
  - All network switches (100+) replaced at edge and core at main campus and centers
  - Added support for 10Gb backbone between buildings, 1Gb to the desktop
  - Installed 300+ 802.11ac wireless access points

## Spring 2017

- Network Applications Deployment – Completed
  - Implemented Cisco Identity Services Engine (ISE) to secure employee laptops
  - Implemented LiveAction for real time network traffic analysis
  - Implemented Cisco Prime Infrastructure for network device monitoring
- WAN Upgrades – Completed
  - Replaced existing Opt-E-Man circuits with AT&T Switched Ethernet (ASE) circuits
  - Upgraded bandwidth from 100Mb/s to 250Mb/s at Vacaville and Vallejo Centers
  - Installed new 100Mb/s circuit to new Vallejo Auto Center

## Summer 2017

- New Construction Smart Classrooms, Computers and Network Technology Installation Includes installation of network switches, patching, programming, wireless, AV equipment, computers, calibration and testing
  - Installation of 512 computers desktops and laptops
  - Removed and reinstalled technology at Vallejo Center for AC remodel
  - Building 1200 – Completed 7/2017
  - Vacaville Biotech Wing – Completed 8/2017
  - Vallejo Auto Center – Completed 8/2017
- Paperclip Migration – Completed 8/2017
  - Migrated legacy application to new virtual instance
- Installation of Redundant Circuit to the Internet
  - CENIC installed a second gigabit circuit to their network for redundancy

## Fall 2017

- Banner periodic upgrade

# SCTSS Initiatives and Work Plans 2016- 2019

| Administrative Technology | | | | | | |
|---|---|---|---|---|---|---|
| **Task** | **Activity** | **Resources** | **Budget $** | **$ Source** | **Due** | **Priority** |
| 1 | Develop an eMail policy for retirees and usher through shared governance approval *In Progress* | SCTSS, Shared Governance | $0 | NA | SP 2017 | |
| 2 | Increase email box size to 1 GB per account. Requires additional hardware. ***No additional hardware was required. Completed Spring 2017*** | SCTSS | ~~$55k~~ | Solano or Bond | SP 2017 | |
| 3 | Migrate Solano email from locally hosted to cloud based Office365. *Initiative started Fall 2017* | SCTSS | $40k | Bond | F 2017 | |
| 4 | Reestablish a formally recognized campus Banner® Users Group (BUG). BUG will meet twice per month. The meeting will be hosted and the agenda determined by CTO.<br><br>In order for this group to improve campus communications concerning Banner® and insure that SCTSS gives proper priority to Banner® projects, it is essential all affected programs functional leads participate in BUG. ***Name changed to Banner Operations Team, BOT. Started fall 2017.*** | SCTSS, Campus Banner® users. | $0 | N/A | Sp 2017 | |
| 5 | Upgrade to Banner® ~~9~~8, Luminis 5.3, Oracle 12C and ODS (Operational Data Store). These upgrades will improve and address issues with student self-service, campus business process productivity, provide for better integration with DegreeWorks, and add a shopping cart for student enrollment. *In progress DegreeWorks, 12C, Luminis 5.3, and ODS, in progress expected completion Summer 2018. See Appendix C Banner Roadmap* | SCTSS Consultants | $80K | | Sp 2018 | |
| 5A | Upgrade from Luminis 4.2 – 5.3. This will result in responsive student email and overall better MySolano experience *In progress. See Appendix C Banner Roadmap* | SCTSS Consultants | Incl. 5 | | Sp 2017 | |
| 5B | Upgrade Banner® database to Oracle 12C *In progress. See Appendix C Banner Roadmap* | SCTSS Consultants | Incl. 5 | | Sp 2017 | |

| Administrative Technology | | | | | | |
|---|---|---|---|---|---|---|
| **Task** | **Activity** | **Resources** | **Budget $** | **$ Source** | **Due** | **Priority** |
| 5C | Upgrade Evisions to latest versions (Argos, FormFusion, & IntelleCheck) *See Appendix C Banner Roadmap* | SCTSS Consultants | Incl. 5 | | Sp 2017 | |
| 6 | Reinstall and implement DegreeWorks *In progress. See Appendix C Banner Roadmap* | SCTSS Consultants Solano Student Services | $197k - $280k | SSSP | F 2017 | |
| 7 | Assess potential impact on Solano College's student assessment software with pending implementation of the State's new Common Assessment software "Project Blue". Develop a response plan and present to Student Services. *Waiting for direction form State* | SCTSS Solano Student Services | $0 | | F 2016 | |
| 8 | Assess the impact on Solano student services applications and business practices if the State's Open Enrollment Initiative is realized. *Waiting for direction form State* | SCTSS Solano Student Services | $0 | | | |
| 9 | Develop a plan with budget to implement formal Banner® training for SCTSS staff and campus Banner® users. Present plan to College for funding. *In progress. A new Banner trainer will start 9/18/17* | SCTSS Banner Users Group | TBD | TBD | Sp 2017 | |
| 10 | Investigate the resource requirements, costs and timeline to move Banner® to the cloud. This will require that Banner® be version 9 and the District network has the necessary bandwidth. *No Action* | SCTSS Consultants | Est. $15k | General Fund | F 2018 | |
| New 17-18 10 | Develop a re-organization plan for SCTSS. Plan to include new appropriate job descriptions and revised reporting structure. Hire a Director of IS and CTO | SCTSS STAC HR | TBD | General Fund | Sp 2018 | |

| Network Technology | | | | | | |
|---|---|---|---|---|---|---|
| **Task** | **Activity** | **Resources** | **Budget $** | **$ Source** | **Due** | **Priority** |
| 1 | Upgrade network connection to the Vacaville Center to 250 Mb/s. Add a fiber link from Vacaville Annex to Vacaville Center ***Completed Spring 2017*** | SCTSS AT&T | $18k | Bond | Sp 2017 | |
| 2 | Upgrade network connection to Vallejo Center to 250 Mb/s ***Completed Spring 2017*** | SCTSS AT&T | $15k | Bond | Sp 2017 | |

| Network Technology | | | | | | |
|---|---|---|---|---|---|---|
| 3 | Replace Clean Access (Software that checks computers connected to the network for viruses) with ISE (Identity Service Engine) improved technology ***Completed Fall 2016*** | SCTSS | $1k Annually | Bond/ General Fund | Annual | |
| 4 | **TCO**. Develop an annual schedule for network and wireless equipment upgrade and service. Goal is to maintain a high-performance, reliable, and ubiquitous network in the District. ***Major upgrade completed fall 2016. Ongoing*** | SCTSS STAC | $75k Annually | Bond/ General Fund | Annual | |
| 5 | Develop and implement a plan for adding a backup generator, transfer switch and improving reliability of cooling in the College's data center. *In progress* | SCTSS Facilities STAC Construction | $180k Revised budget $550k need to identify additional funding sources | Bond | F 2017 | |
| 6 | Develop a plan a Disaster Recovery (DR) for District critical data and services. . *In progress* | SCTSS STAC Facilities | TBD | Bond | Sp 2018 | |
| 7 | Follow-up on Cal. Com. Col. Technology Center Security Audit recommendations. There may be costs associated with required license updates. *Continuous* | SCTSS | $12k | General Fund | F 2016 | |
| 8 | Review Colleges policies and technologies for protection of student and staff data. Use federal government guidelines for Personal Identifiable Information (PII) as a benchmark. *Continuous* | SCTSS STAC College | $0 | N/A | Annual | |
| New 17-18 9 | Network security Install a robust firewall system to help insure the security of District network and data | SCTSS | $250k | Bond | F2017 | |
| New 17-18 10 | Extension of Fairfield wireless system to athletic fields | SCTSS, Vendor | $22k | Bond | F 2017 | |
| | | | | | | |

| General and Desktop Technology | | | | | | |
|---|---|---|---|---|---|---|
| **Task** | **Activity** | **Resources** | **Budget $** | **$ Source** | **Due** | **Priority** |
| 1 | Initiate a campus communications program that consists of regular participation in campus management committee; membership in appropriate committees; contributing on a regular basis to President's weekly eMail update with technology tidbits and updates. *No Action* | SCTSS<br>STAC | $0 | N/A | Start Nov. 2016. Weekly communications. | |
| 2 | Improve printing economies by implementing Group Printing throughout the District. | SCTSS | $135,000 | Bond | Roll out complete Sp 2019 | |
| 2A | Installation of printing centers on Fairfield campus, Bldgs. 200, 300, 500, 700,1500, 1700. *No Action* | SCTSS | Incl. 2 | | Sp 2017 | |
| 2B | Installation of printing centers on Fairfield campus, Bldg. 400. Installation in Vacaville Center. *No Action* | SCTSS | Incl. 2 | | Sp 2018 | |
| 2C | Installation of printing centers on Fairfield campus, Bldgs. 1600, 1800A, 1900. Installation on Vacaville Annex. , *No Action* | SCTSS | Incl. 2 | | Sp 2019 | |
| 2D | Installation of printing centers at the Vallejo center. *No Action* | SCTSS | Incl. 2 | | Sp 2020 | |
| 3 | **TCO**. Replace ¼ of Districts 570 admin computers. ***Ongoing*** | SCTSS<br>STAC | $180,000 | Bond/ General fund | Begin F 2018. Then annual | |
| 4 | **TCO**. Replace 1/5 of the District's 1,380 student labs and drop-in centers computers. ***Ongoing*** | SCTSS<br>STAC | $230,000 | Bond/ General fund | Begin Sp 2017. Then annual | |
| 5 | Investigate the possibility of implementing VDI at selected locations throughout the District. ***Investigation complete not feasible at this time*** | SCTSS | $0 | | Sp 2017 | |
| 6 | **TCO**. Content maintenance and technical maintenance of campus digital signage.<br><br>Additionally, SCTSS needs to take a leadership role in leading the campus to digital signage management, organization and standards. *No Action* | SCTSS<br>Entire campus | $7,000 | General Fund | Annual | |
| 7 | **TCO**. Maintenance of the Districts 141 Smart Classrooms. ***Ongoing*** | SCTSS | $25,000 | General Fund | Annual | |

| General and Desktop Technology | | | | | | |
|---|---|---|---|---|---|---|
| **Task** | **Activity** | **Resources** | **Budget $** | **$ Source** | **Due** | **Priority** |
| 8 | Investigate the feasibility of converting existing smart classrooms to a more contemporary Utelogy technology to improve reliability and ease of use.<br><br>A 5-year plan that includes updating 26 rooms per year beginning F 2017. Cost per upgrade $15k. *Continuous* | SCTSS | $390k/ year | General Fund/ Bond | 5 year plan beginning F2017 | |
| New 17-18 9 | Standardize District security camera software and storage | SCTSS Vendor | $25k One time | Bond | F2017 – Sp 2019 | |
| New 17-18 10 | Participate in the planning and construction of two major facilities, Fairfield Science and new Learning Resource Center | | | | F2022 | |

| Solano.edu College Website | | | | | | |
|---|---|---|---|---|---|---|
| **Task** | **Activity** | **Resources** | **Budget $** | **$ Source** | **Due** | **Priority** |
| 1 | During the collection of data for this plan, the Solano College website was identified as one of the top issues that needs to be addressed.<br><br>To address the numerous concerns raised, the College will need to consider assigning website "ownership", establishing standards, site organization, and consider a complete redesign. ***On hold. In addition to the loss of a funding source, the College has hired a new PIO firm that should manage the web.*** | SCTSS<br><br>Office of the President<br><br>Office of Planning and Research | Estimated $150,000 | It was planned to be in Bond. However, bond funding was not approved by bond legal counsel | F 2018 | |
| 1A | Determine an ownership model of the website content, structure and standards. ***New PIO firm*** | Office of the President<br><br>Office of Planning and Research | Incl. 1 | Bond | Sp 2017 | |
| 1B | Engage a web design firm to work the College to redesign the website. ***New PIO firm*** | Office of the President<br><br>Office of Planning and Research | Incl. 1 | | Su 2017 | |

| Solano.edu College Website | | | | | | |
|---|---|---|---|---|---|---|
| 1C | Redesign completed, website built and tested. ***New PIO firm*** | Office of the President<br><br>Office of Planning and Research | Incl. 1 | | Su 2018 | |
| 1D | Staff training and content areas responsibilities assigned ***New PIO firm*** | Office of the President<br><br>Office of Planning and Research | Incl. 1 | | Su 2018 | |
| 1E | Website live ***New PIO firm*** | SCTSS | Incl. 1 | | F 2018 | |

# Proposed Annual Budget

## Solano College Technology Services & Support

## 2017 – 2018

## Proposed Annual Technology Budget SCTSS

This budget represents the annual baseline budget for maintaining Solano District technology. It **doesn't** include special projects or addition of new technologies.

It is recommended that the College considers the implementation of a sinking fund as a means to fund technology TCO (Total Cost of Ownership) expenses.

| Item | Description | Requested Amount | Funding Source | | Comments |
|---|---|---|---|---|---|
| | | | Solano | Bond/Other | |
| Faculty & Staff Computers | Computers for faculty, staff, & administrators based on 4-year replacement cycle. This would be approximately 150 computers per year. | $180,000 beginning F2018. | √ | √ | Traunch 2 bond funds will fund replacement cycle 2017 - 2021 |
| District Printers | District printer replacement as needed. Projected printer life of 6-years. Approximately 55 per year. Also will support group printing | $50,000 | √ | √ | |
| Smart Classrooms | Replace dated/defective projectors, amplifiers, screens, bulb replacement and Doc cameras | $25,000 | √ | √ | |
| Instructional and Drop-In Lab Replacement | Replacement of instructional lab computers, printers, projectors. Based on a 5-year replacement cycle. | $230,000 | √ | √ | |
| Technology for new hired and replacement faculty. | Computer, phone, and printer for office. Based on 12 new hires or replacement per year. | $24,000 | √ | | |
| Faculty and Staff Technology Training | Funding for staff and equipment | $30,000 | √ | | |
| Network Maintenance/Upgrades and Data Center maintenance | Replacement and upgrades of switches, wireless infrastructure maintenance, Data Center equipment etc. | $175,000 | √ | √ | |
| Annual software licensing renewal | Annual licensing fees for Banner etc. | $464,000 | √ | | |
| Contingency fund | Fund for emergency replacements, unexpected repairs, unplanned program addition, experimentation, & theft. | $20,000 | √ | | |
| Media | Lamps, supplies & equipment (PA systems, DVD players, amplifiers, etc.) | $12,000 | √ | | |
| Digital Signage | Ongoing maintenance and annual licensing fees | $7,000 | √ | | |
| | | **TOTAL** | **$1,217,000** | | |

# Appendices

# Appendix A

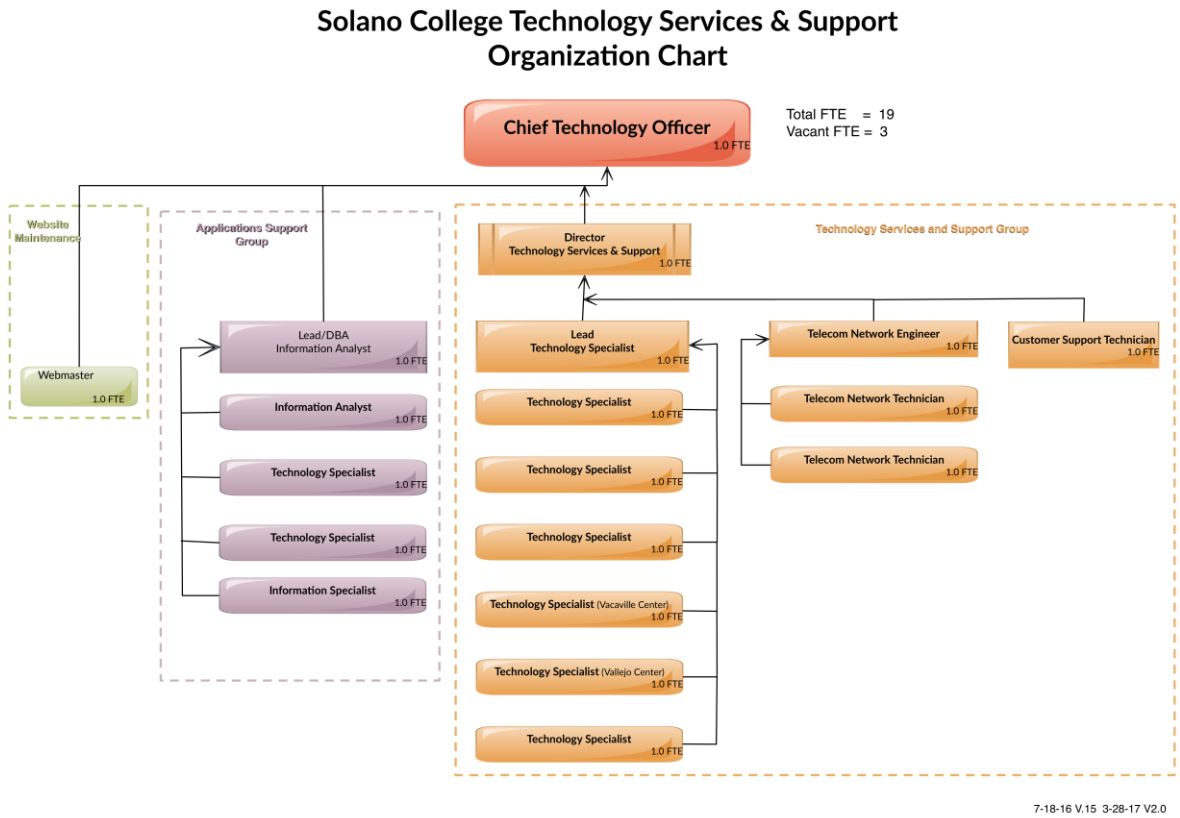
## Solano College Technology Services & Support Organization

Primarily located in building 1 on the Fairfield campus, Solano College Technology Services & Support department includes a staff of 18 FTE (Full-Time Equivalent). There are three functional areas within the department. The three functional areas are Applications Support Group, Technology Services and Support Group, and Website Maintenance. All three report to the Chief Technology Officer.

The Applications Support Group is comprised of 4 FTE. The Applications Support Group's primary function is the support and implementation of Banner along with a variety of related software applications.

The Technology Service and Support Group includes 12 FTE supporting network, telephone, and desktop technology. The Technology Service and Support Group is lead by the Director of Technology Service and Support. On a rotating basis, one FTE is assigned to the Vallejo Center and one FTE is assigned to the Vacaville Center.

The Solano College website is maintained by a single FTE. Working in the framework of OmniUpdate, the Content Management System that the College's website is built in, this position works with all College constituencies to update the website.



# Appendix B

## Student Technology Survey

**Summary**

The Associated Students of Solano College in coordination with the Solano Technology Advisory Committee (STAC) developed a six-question survey that was administered to SCC students. The survey was delivered online using Survey Monkey. The survey was open from May 18 – June 8. 225 students responded to the survey.

The results indicated that Solano students placed a high value on technology, use it regularly as part of their instruction and are generally satisfied with technology at Solano. The majority felt that Solano technology was equal to or exceeded the technology they used at their high school. Wi-Fi/Internet access was identified as their top technology need for instruction. Of note was the students' strong indication that email was the preferred method of communication with their professors.

**Questions/Results**

1. Thinking about the technology you use at Solano, how would you rate the current level available?

| Answer Choices | Responses | |
|---|---|---|
| Cutting Edge with new/innovative technology adoption | 6.22% | 14 |
| Current technology with hardware and software is no more that 3 years old | 29.33% | 66 |
| Adequate, but could be refreshed | 40.89% | 92 |
| Aged and/or dated | 18.67% | 42 |
| In the dark ages | 4.89% | 11 |
| Total Responses | | 225 |

2. How important is the institution's technology offerings, when you are considering where you will attend college?

| Answer Choices | Responses | |
|---|---|---|
| Very Important | 44.39% | 99 |
| Important | 39.91% | 89 |
| Somewhat important | 10.31% | 23 |
| Not important | 5.38% | 12 |
| Total Responses | | 223 |

3. Which of the following do you consider essential to improving your performance/interest in your classes?

| Answer Choices | Responses | |
|---|---|---|
| Wifi/Internet access | 88% | 192 |
| Laptop/netbook computer | 57.92% | 128 |
| Desktop computer | 42.08% | 93 |
| iPod/Mp3 player | 9.50% | 21 |
| E-reader(Kindle/iPad/etc.) | 17.65% | 39 |
| Media tablet (iPad/Android) | 19.00% | 42 |
| Web Conferencing | 13.57% | 30 |
| Digital content (Online books/homework) | 52.94% | 117 |
| Open Source (Google Docs/Open office/iCloud) | 44.80 | 99 |
| Social Media (Facebook/Etc) | 8.60% | 19 |
| Blog/wikis | 9.50% | 21 |
| Podcasts | 11.31% | 25 |
| Access to resource sourcing (ESBESCO) | 42.53% | 94 |
| Recorded Classroom Lectures | 44.80% | 99 |
| Multimedia content streaming | 28.05% | 62 |
| Total Responses | | 221 |

4. What is your preferred method of communicating with your professors?

| Answer Choices | Responses | |
|---|---|---|
| Call Text | 8.11% | 18 |
| EMail | 68.47% | 152 |
| Canvas | 22.97% | 51 |
| Facebook/Twitter | .45% | 1 |
| Total Responses | | 222 |

5. How often do you use technology as a learning tool?

| Answer Choices | Responses | |
|---|---|---|
| Everyday | 70.22% | 158 |
| Often | 25.33% | 57 |
| Rarely | 4.00% | 9 |
| Never | .44% | 1 |

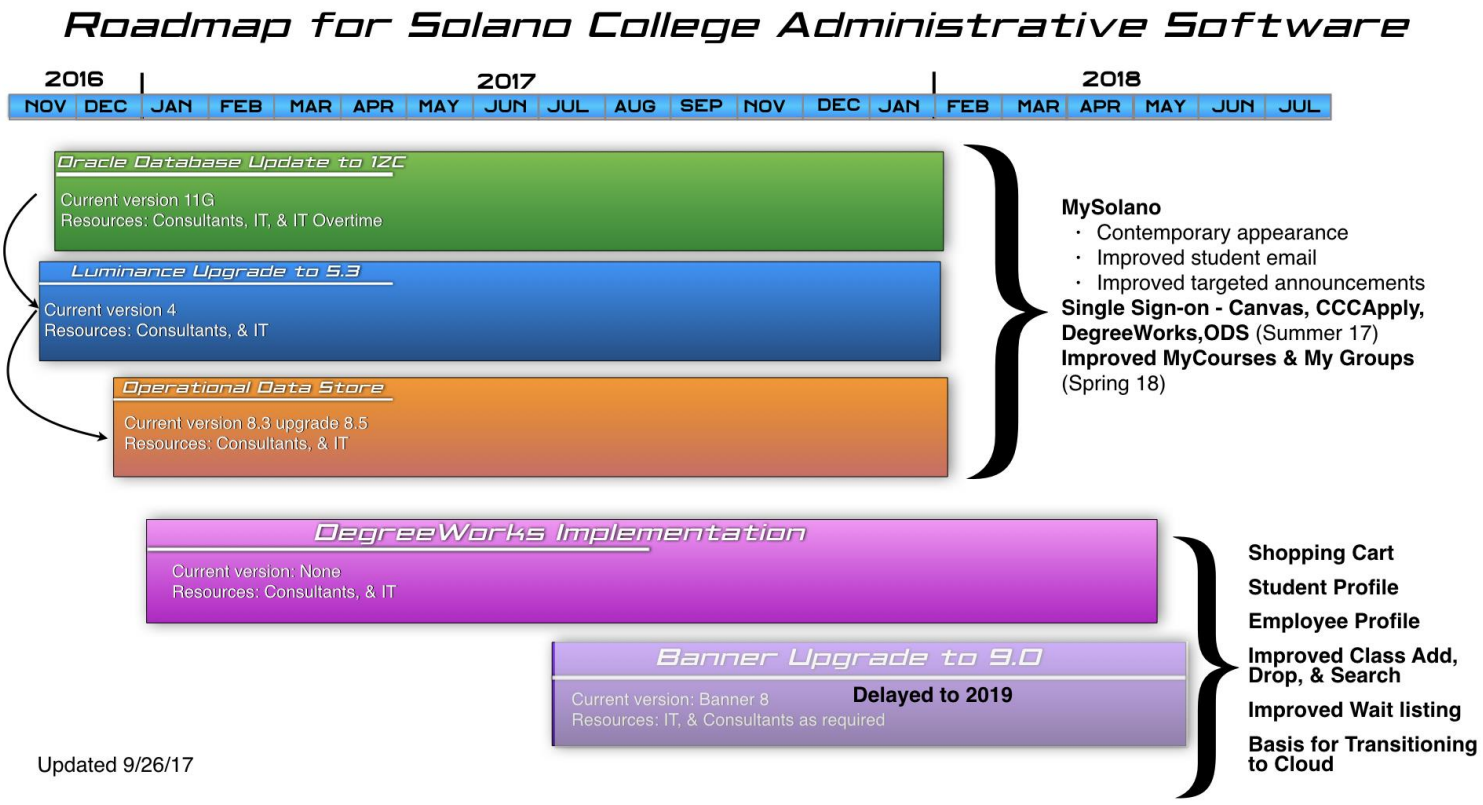
| | | |
|---|---|---|
| Total Responses | | 225 |

6. Consider for a moment the classroom technology you have used in high school (e.g. computers, interactive whiteboards, software, clickers, projectors, etc.). How does that technology compare to the classroom technology here at Solano?

| Answer Choices | Responses | |
|---|---|---|
| The classroom technology on the Solano campus is significantly better than the technology at my high school | 33.65% | 71 |
| The classroom technology at the Solano campus is about the same as the technology at my high school | 45.5% | 96 |
| The classroom technology at the Solano campus is slightly worse that the technology at my high school | 16.64% | 33 |
| The classroom technology at the Solano campus is significantly worse than the technology at my high school | 5.21% | 11 |
| Total Responses | | 211 |

## Appendix C

### Banner and IS Road Map



# Appendix D

## Faculty and Staff Technology Survey

**Summary**

The Solano College Office of Research and Planning in coordination with the Solano Technology Advisory Committee (STAC) developed a 26-question technology survey that was administered to SCC faculty, staff and administration. The survey was delivered online. The survey was open from April 22 – May 11, 2016. There were 211 responses.

The results of the survey indicated a College wide acknowledgement of the importance of technology for the College to achieve its mission. There was a high level of satisfaction with the manner and quality of services provided by the IT staff. Canvas and the training provided by the Distance Education area received very favorable responses. However, the survey also indicated that there were significant issues that will need to be addressed.

Overarching many of the areas of concern was the need for consistent and informative communication between IT and the College community. While there has been planning within IT, those plans for network, wireless, technology refresh cycle and Banner upgrades have not been effectively communicated as indicated by the survey responses. Training for both Banner and general campus technology was also identified as a high need. Finally, the need to redesign, update and maintain the College's website was the top area of concern from the respondents.

### 1. What is your role at Solano Community College?

| # | Answer | | Response | % |
|---|---|---|---|---|
| 1 | Administrator | | 17 | 8% |
| 2 | Faculty | | 117 | 55% |
| 3 | Staff | | 77 | 36% |
| | Total | | 211 | 100% |

| Statistic | Value |
|---|---|
| Min Value | 1 |
| Max Value | 3 |
| Mean | 2.28 |
| Variance | 0.37 |
| Standard Deviation | 0.61 |
| Total Responses | 211 |

### 2. Do you use any of the following systems?

| # | Answer | | Response | % |
|---|---|---|---|---|
| 1 | MySolano | | 209 | 100% |
| 2 | Banner | | 145 | 69% |
| 3 | Canvas | | 104 | 50% |
| 4 | CurricuNET | | 105 | 50% |
| 5 | Paper Clip | | 32 | 15% |
| 6 | SARS GRID | | 35 | 17% |
| 7 | SARS TRACK | | 24 | 11% |
| 8 | Argos | | 11 | 5% |

| Statistic | Value |
|---|---|
| Min Value | 1 |
| Max Value | 8 |
| Total Responses | 210 |

**3. How important is technology planning to SCC?**

| # | Answer | | Response | % |
|---|---|---|---|---|
| 1 | Very important | | 164 | 92% |
| 2 | Moderately important | | 14 | 8% |
| 3 | Not important | | 1 | 1% |
| | Total | | 179 | 100% |

| Statistic | Value |
|---|---|
| Min Value | 1 |
| Max Value | 3 |
| Mean | 1.09 |
| Variance | 0.09 |
| Standard Deviation | 0.31 |
| Total Responses | 179 |

**4. Please indicate how much you agree or disagree with the following technology planning related statements.**

| # | Question | No Opinion | Strongly Disagree | Disagree | Agree | Strongly Agree | Total Responses | Mean |
|---|---|---|---|---|---|---|---|---|
| 1 | The college has clearly defined goals for the use and deployment of technology. | 42 | 24 | 68 | 46 | 8 | 188 | 1.76 |
| 2 | The College has in-place a strategy for supporting and managing mobile technology. | 51 | 24 | 59 | 45 | 9 | 188 | 1.66 |
| 3 | I have been kept up-to-date and informed about college information technology goals, plans and changes. | 14 | 50 | 62 | 48 | 14 | 188 | 1.99 |
| 4 | Short-term goals and objectives, (immediate-monthly) for the use and deployment of campus technology are prioritized and defined. | 46 | 26 | 71 | 37 | 7 | 187 | 1.64 |
| 5 | Long-term goals and objectives, (3-5 years), for campus technology are clearly defined. | 49 | 38 | 75 | 20 | 6 | 188 | 1.45 |
| 6 | Administrative information systems and campus technology enhances services to students, faculty and staff. | 11 | 18 | 23 | 79 | 57 | 188 | 2.81 |

| Statistic | The college has clearly defined goals for the use and deployment of technology. | The College has in-place a strategy for supporting and managing mobile technology. | I have been kept up-to-date and informed about college information technology goals, plans and changes. | Short-term goals and objectives, (immediate-monthly) for the use and deployment of campus technology are prioritized and defined. | Long-term goals and objectives, (3-5 years), for campus technology are clearly defined. | Administrative information systems and campus technology enhances services to students, faculty and staff. |
|---|---|---|---|---|---|---|
| Min Value | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Value | 4 | 4 | 4 | 4 | 4 | 4 |
| Mean | 1.76 | 1.66 | 1.99 | 1.64 | 1.45 | 2.81 |
| Variance | 1.38 | 1.54 | 1.12 | 1.35 | 1.18 | 1.31 |
| Standard Deviation | 1.18 | 1.24 | 1.06 | 1.16 | 1.09 | 1.14 |
| Total Responses | 188 | 188 | 188 | 187 | 188 | 188 |

| 5. Do you have any other comments related to technology planning? |
|---|
| Text Response |
| Too many senior decision makers are ignorant on the importance and use of technology |
| Tech speak works among techs, need to speak in everyday terms when speaking to non-techs |
| Didn't know it existed. When am I going to get a new computer? Increase email capacity. Teaching learning center??? What happened to that idea? |
| I haven't seen evidence of much of it in the past few years. I am sure something is happening but I don't know about it. |
| Whatever planning has been done has not been shared nor vetted with the staff which used the technology. |
| Some of your questions do not make any sense. If I have to answer that I have no opinion it is because I do not understand the question. Who wrote this???? |
| Train the staff on new implementations |
| Technology planning goes beyond TSS. In other departments where technology is implemented i have found poor communication, incorrect expectations, and poor planning which results in a product that takes very long to implement and/or things do not seem to work properly or as intended. |
| Who does the technology planning? Is it done by the IT department or by another committee like the Faculty Technology committee? |
| The plan to centralize printing to a single printer in a building will waste people's time and energy. We will be waiting in line, running back and forth, and confidentiality will be impossible. When the one device is down, the whole building will be dead in the water. Printed copies of documents are needed at intervals all day long in my work. |
| It would be helpful if training were provided to new Administrators (and I would assume to other new employees) re: Banner, Canvas, etc. as soon as they are hired. |
| Communication with the Campus Community is lacking in regards to strategy and planning of technology enhancements. |
| Technology is essential to my work as a teacher. |
| Need new overhead projectors ASAP |
| What is technology planning? |
| Staff is not included accept in a notice when things will be down |
| there does not seem to be any technology planning. |
| The SCC admin info systems and campus tech are not user friendly. |
| I think access should be relatively easy to navigate. The archive system in outlook has been my trouble and not friendly. |
| Student have cell phones....but the major concern for community colleges is that technology at the campus recognizes that many students do not have access to the WEB at home due to financial reasons. Many simply do not pay for that type of connection or maybe cannot afford it. so they depend on the college technology services to provide that access. |
| The main techno help I would like in my classroom teaching is the cap its to project images without darkening the room. |
| IT needs to be updated to current industry standards including software. |
| Requests for Technology assistance, such as important and timely revisions to the website, to keep students and the public informed, are nearly dismissed or put off for months due to other priorities or lack of IT staff to provide the required assistance. IT also feels they have to initiate any revisions, regardless of how simple. IT needs to adopt "user friendly protocols where users are trained to do the less technical revisions without resistance or delays by IT. |
| since I am a small fish in a big pond, I rarely seem to have any appropriate chances to make my voice herd in the fire technology division |
| I need more space given my multiple roles. Also I often have issues with start up--have to restart almost every day for it to log in--not time efficient. I value the timely service provided by IT staff--ALWAYS there to help and just nice people!!!!! |
| technology imposes educational constraints instead of educational priorities dictating technology requirements |
| No information about the plan for technology has been disclosed to me hence no opinion can be provided. |
| In the past it has been very vague about what is going on re: updates, etc... |

| |
|---|
| I am not aware of what the college's goals or plans are for IT, short or long term. |
| Even though I am not kept up to date in the planning process, I don't think it affects my work! |
| I believe that the Distance Learning (CANVAS) has done a great job of offering trainings, etc. but it would be helpful to have additional trainings in Banner |
| I have not read the technology plan, so I am unable to give an opinion as to the goals and strategy; however, the IT staff has been very helpful and have solved problems that have occurred. |
| There's a plan? |
| Luminis for targeted Announcement is extremely outdated |
| I am wondering about the status of Degree Works |
| I do not keep myself well informed in the area of technology, not because it the information is not available, but because I trust the campus to improve the systems in the manner they see fit. |
| A plan changes depending on who is in office! |
| Security of data and good communication about data breach is seriously lacking |
| There is always a delay with IT, and it's like pulling teeth to get what you need. It's never been easy. |
| I do not blame our technology problems on the IT department. |
| The goals, etc., may be in place but I am not aware of them. |
| Counselors needs to assist students and be compliant by State standards (we are out of compliance) are ignored by Administration and the Tech people. |
| No |
| We purchased Degree Works a number of years ago and where is it? The other colleges are using it and it's great!!! |
| Deployment of new technology has been problematic (e.g. VDI at the Vallejo Center - installed last Fall 2015 and did not work); Mobile App' allows students to submit concerns/complaints, but no ability to respond to the concern because student can't be identified by name or contact info) |
| No option selected since I do not recall being informed of the technology plans. Was or is the information sent in an e-mail, is there a database we should be checking? |
| Banner still does not communicate with SARS in regard to calculating" contacts" for Disability Services MIS reporting. It is unrealistic to have to do it manually and very time consuming when preparing for a visit from the auditors. |
| If there are plans I haven't heard about them or where to look on the website for them. |

| Statistic | Value |
|---|---|
| Total Responses | 48 |

**6. Please indicate how much you agree or disagree with the following college website (www.solano.edu) related statements.**

| # | Question | No Opinion | Strongly Disagree | Disagree | Agree | Strongly Agree | Total Responses | Mean |
|---|---|---|---|---|---|---|---|---|
| 1 | he College's ebsite meets the eeds of the ommunity. | 7 | 25 | 65 | 76 | 9 | 182 | 2.30 |
| 2 | The College's website meets the needs of employees. | 3 | 22 | 61 | 86 | 10 | 182 | 2.43 |
| 3 | The College's website meets the needs of students. | 20 | 25 | 63 | 65 | 9 | 182 | 2.10 |
| 4 | Information on the website is easy to find. | 4 | 45 | 86 | 38 | 7 | 180 | 1.99 |
| 5 | Information on the website is up to date. | 15 | 47 | 65 | 49 | 7 | 183 | 1.92 |
| 6 | I know the process to update information on the website. | 19 | 54 | 49 | 43 | 17 | 182 | 1.92 |
| 7 | The College's website is visually appealing. | 10 | 34 | 55 | 70 | 13 | 182 | 2.23 |
| 8 | Information on the College's website is well organized. | 9 | 39 | 77 | 50 | 7 | 182 | 2.04 |

| Statistic | The College's website meets the needs of the community. | The College's website meets the needs of employees. | The College's website meets the needs of students. | Information on the website is easy to find. | Information on the website is up to date. | I know the process to update information on the website. | The College's website is visually appealing. | Information on the College's website is well organized. |
|---|---|---|---|---|---|---|---|---|
| Min Value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Value | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Mean | 2.30 | 2.43 | 2.10 | 1.99 | 1.92 | 1.92 | 2.23 | 2.04 |
| Variance | 0.82 | 0.70 | 1.13 | 0.71 | 1.01 | 1.32 | 1.03 | 0.84 |
| Standard Deviation | 0.91 | 0.84 | 1.06 | 0.84 | 1.00 | 1.15 | 1.01 | 0.92 |
| Total Responses | 182 | 182 | 182 | 180 | 183 | 182 | 182 | 182 |

| 7. Do you have any other comments related to the Colleges website? |
|---|
| Text Response |
| We have an antiquated model of website management - time to move on |
| Information is hard to find, some areas buried too deep. Not particularly user friendly. |
| some of the information is not up to date so it is hard to help students with old information |
| Check out DVC schedule on website |
| I think it is clunky and poorly designed. Every time I have to use it to show a student how to do something I end up feeling more and more helpless, how can this be what we are offering them? Not to mention when I try to use it to find something. |
| The fact that I strongly disagree with most of the questions indicates that the College's website is in sore need of a complete overhaul. |
| I appreciate that more things, like SLO's and assessments, can be found on the website. It would be great if all things that could be accessed or stored on the website were, as opposed to other locations like mygroups or internal servers. |
| Needs help! |
| Information is buried and disorganized, pages that should have front-page access do not, and many pages are made purposely to be difficult to find. I know this was demanded for some pages. |
| Our current website is not user friendly and difficulty to navigate for information, unless you already know where it is. If you search for something older versions of documents popular before the most current. |
| Perhaps make the navigation bar at the top more prominent, because that's how people get information to the entire campus. Something like, "Click here for information on Student Services, Campus Life, Academics, etc. |
| We hear complaints all the time about how user-unfriendly our website is and how out-of-date the information is |
| No |
| Its all about how easy we can navigate to use points. Keep it simple. |
| Too busy |
| All access should, and must be "user" friendly and provide clear entry to the knowledge that is being offered. |
| Look at other com. colleges. Try to find 'class schedule' or 'majors' or 'calendar' or 'jobs'. See which ones are easiest to use. |
| I find it really hard to find people, program, offices and phone numbers on our website. If one does not already know what one is looking for, there seems to be no way to look for it that feels like you might get lucky. |
| A more intuitive format would be preferable. |
| see prior |
| hard to know where to look - logic is missing |
| I don't think community members will understand where to start. I email the helpdesk when I have issues or see mistakes and they follow-up immediately--they direct me to the correct sources as well. The more recent changes are very nice--just too many clicks to get to places but that will always be the case. |
| The Math/Science division mathsci server needs to be updated or discontinued. Presently, nobody has responsibility for updates and maintenance. |
| Website is confusing and often items are not up to date. It generally works ok. |
| There are both strong points and areas of improvement needed. Some information is outdated, such as the directory for Counseling- some have retired and there are new counselors also that have not been added. Additionally, some aspects of the website is cumbersome for students, especially some of our returning students with little tech skills. |
| I cannot state if all information on website is up to date. Regarding the process to update information on website, there has been some training, but the implementation has been slow, and I have not personally done any updates. |
| Sometimes it's difficult to find the Academic Calendar and other important dates |
| Friends tell me that it is difficult to navigate |
| I think My Solano could be organized in a way that is more intuitive and accessible. |
| The calendar function is not user friendly and pretty worthless. Nearly impossible to find course outlines. The class schedule button is too small and silly to have a rolling display |
| We are behind a good number of schools, not only on our home page, but our athletic site as well. |
| needs usability and interface assessment, modernization |
| The wwebsite functions OK but could always be better. |

| |
|---|
| Website needs to be improved, just look at Santa Rosa Community College's website or DVC very nice looking and user friendly |
| I have found information on our website that is not up-to-date. Using the search feature does not always generate up-to-date results/output? |
| It is second rate to other community college websites |

| Statistic | Value |
|---|---|
| Total Responses | 36 |

**8. Please indicate how much you agree or disagree with the following user access statements.**

| # | Question | No Opinion | Strongly Disagree | Disagree | Agree | Strongly Agree | Total Responses | Mean |
|---|---|---|---|---|---|---|---|---|
| 1 | The College's administrative information systems and network are secure. | 65 | 33 | 16 | 53 | 11 | 178 | 1.51 |
| 7 | I find MyGroups easy to use | 41 | 39 | 51 | 36 | 7 | 174 | 1.59 |
| 10 | I find it easy to run budget queries in MySolano | 2 | 2 | 5 | 8 | 0 | 17 | 2.12 |
| 6 | MySolano is intuitive to use. | 9 | 24 | 73 | 58 | 11 | 175 | 2.22 |
| 9 | I know where to retrieve forms needed to do my job | 10 | 29 | 62 | 63 | 13 | 177 | 2.23 |
| 5 | Using MySolano to manage course rosters is easy. | 4 | 11 | 32 | 41 | 7 | 95 | 2.38 |
| 3 | I have access to software that allows me to do my job efficiently and effectively. | 4 | 15 | 48 | 92 | 17 | 176 | 2.59 |
| 4 | I find MySolano easy to use | 2 | 12 | 53 | 100 | 11 | 178 | 2.60 |
| 2 | College technology and systems are accessible from home or other locations. | 7 | 12 | 45 | 96 | 18 | 178 | 2.60 |
| 8 | I know how to view my leave and payroll information. | 3 | 6 | 11 | 111 | 47 | 178 | 3.08 |

| Statistic | The College's administrative information systems and network are secure. | College technology and systems are accessible from home or other locations. | I have access to software that allows me to do my job efficiently and effectively. | I find MySolano easy to use | Using MySolano to manage course rosters is easy. | MySolano is intuitive to use. | I find MyGroups easy to use | I know how to view my leave and payroll information. | I know where to retrieve forms needed to do my job | I find it easy to run budget queries in MySolano |
|---|---|---|---|---|---|---|---|---|---|---|
| Min Value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Value | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 |
| Mean | 1.51 | 2.60 | 2.59 | 2.60 | 2.38 | 2.22 | 1.59 | 3.08 | 2.23 | 2.12 |
| Variance | 1.96 | 0.82 | 0.75 | 0.57 | 0.88 | 0.88 | 1.38 | 0.61 | 0.99 | 1.11 |
| Standard Deviation | 1.40 | 0.90 | 0.86 | 0.75 | 0.94 | 0.94 | 1.17 | 0.78 | 1.00 | 1.05 |
| Total Responses | 178 | 178 | 176 | 178 | 95 | 175 | 174 | 178 | 177 | 17 |

| 9. Do you have any other comments related to user access and MySolano? |
|---|
| Text Response |
| Again almost worthless and severely antiquated, do we keep anything up to date? |
| Students still cannot access their Ed plans. |
| Trying to find a form is ridiculous. Two I have needed in the last month and couldn't find online - request for a printer cartridge for campus printer and an absence form - why is that so hard? And it is impossible to sort out whether you should look online or in mygroups, and if it is in mygroups you don't know until you are 10 clicks in whether it is there or not. ARGH. Nothing in MySolano is intuitive. Have you tried entering grades? or getting your dashboard set? you have to remember your crn if your course is more than 12 letters because they aren't identified by number, just title of the course, if they are all the same they are usually in numeric order if you can remember it, which at the beginning of the semester is a pain. And trying to enter grades for all your courses? You have to go back and forth to the different menus, making many many clicks and gnashing your teeth the whole time. |
| MyGroups is a pain |
| NEED Training |
| It needs to be replaced. The features is provides is implemented poorly and is more of a reflection of it's age. |
| MyGroups is the worst. |
| I cannot access my schedule outside of the college (SARS). I cannot access Banner outside of the college. |
| MySolano is easy to use, because I have been accessing this website since it was launched. If I was a new employee, it would not be as easy to navigate. |
| Since I no longer have access to campus I am unable to access my M drive and E drive on the servers. |
| I wouldn't say that forms or groups are easy to find, but once you know the navigation then you can fly. |
| My office has the slowest computers/printers at the windows. These are in desperate need of upgrading. |
| No |
| Seems a very complex system, to me items are added on to a dated program to keep it current. |
| There should be discounted copies of MS Office for Mac available for faculty. |
| Students are constantly asking and requesting assistance in locating forms needed to maintain their academic needs at SCC. |
| Your survey needs a 'neutral' between 'disagree' and 'agree'. Or maybe overall, a rating would be better, such as 1 poor, 5 excellent. The way you set up a survey creates bias, or skewed information. |
| it would be great if course rosters could be printed out and used as attendance sheets but difficult to do with the spaces provided |
| Access often freezes; at meetings I am unable to get in with the laptop; at my office I have to restart almost everyday and then it works--time is work and that is frustrating. |
| Portions of MySolano are difficult and/or counterintuitive (e.g. MyGroups, drops etc.). |
| Adjuncts do not have access to laptops, support that could help them. |
| MySolano should default to CURRENT SEMESTER NOT a semester in the future. |
| Regarding home access, only mysolano and email are accessible for most employees. No access to INB for myself and many others. Mysolano is generally easy to use, however, finding forms needed in mygroups is a bit of a hassle; employees are constantly calling the Payroll department for certain forms they were not able to locate online due to the unclear and undefined navigation needed to access many forms. In my opinion it would be easier for have a direct link to Forms. Most staff have stated they had no idea forms were in mygroups and some have told me they had no access to certain groups to get the forms that should be easily accessible to all staff. |
| A portal for forms on the faculty page would be great! |
| I would prefer a "Somewhat agree" option to this survey, because there are some parts where I agree, but not wholeheartedly, with the statement. For Faculty, there are some parts of MySolano that are difficult to find, such as dropping students. |
| Regarding security; I am not certain. If the forms are placed into MyGroups, then they are easy to find; however, not all departments have their information up to date. |
| MyGroups is not user friendly. It's not that easy to locate forms |
| SARS program should be under the direction of IT not counseling. |
| Perhaps part of the problem is lack of initial training as part of a new employee orientation. This may be offered not but not when I was a new hire. |

| |
|---|
| Financial Aid functions and services would be more efficient and effective with implementation of BDM (Banner Document Management) systems to create paperless office functionality for staff and students |
| I use a back door trick to access my rosters. The standard way is too cumbersome. I don't know what MyGroups is. |
| User sharing offsite (one department member is adjunct & often off site) is incomplete. Not able to share calendars to adjunct & technology said there was no fix for this. |
| I know how to do these but it took some time. Not intuitive at all. |

## 10. How important are these technologies

| # | Question | Very Important | Somewhat Important | Not Important | N/A | Total Responses | Mean |
|---|---|---|---|---|---|---|---|
| 1 | Up-to-date computer | 157 | 18 | 1 | 2 | 178 | 2.85 |
| 2 | Telephone System | 97 | 57 | 18 | 4 | 176 | 2.40 |
| 3 | Smart Classrooms | 122 | 33 | 2 | 20 | 177 | 2.45 |
| 4 | Online Learning | 117 | 30 | 7 | 23 | 177 | 2.36 |
| 5 | Reliable Network | 171 | 5 | 1 | 1 | 178 | 2.94 |
| 6 | Outlook | 128 | 38 | 5 | 4 | 175 | 2.66 |
| 7 | Outlook Web | 104 | 37 | 8 | 23 | 172 | 2.29 |
| 8 | MySolano | 156 | 20 | 0 | 0 | 176 | 2.89 |
| 9 | Banner | 106 | 9 | 0 | 4 | 119 | 2.82 |
| 10 | Solano.edu Website | 148 | 23 | 2 | 1 | 174 | 2.83 |
| 11 | CurricUNET | 66 | 21 | 4 | 1 | 92 | 2.65 |
| 12 | Canvas | 74 | 8 | 0 | 3 | 85 | 2.80 |
| 13 | SARS Grid | 24 | 6 | 0 | 0 | 30 | 2.80 |
| 14 | SARS Track | 13 | 5 | 3 | 0 | 21 | 2.48 |
| 15 | Paper Clip | 22 | 2 | 1 | 1 | 26 | 2.73 |
| 16 | Argos | 8 | 2 | 0 | 0 | 10 | 2.80 |

| Statistic | Up-to-date computer | Telephone System | Smart Classrooms | Online Learning | Reliable Network | Outlook | Outlook Web | MySolano | Banner | Solano.edu Website | CurricUNET | Canvas | SARS Grid | SARS Track | Paper Clip | Argos |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Min Value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 2 |
| Max Value | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Mean | 2.85 | 2.40 | 2.45 | 2.36 | 2.94 | 2.66 | 2.29 | 2.89 | 2.82 | 2.83 | 2.65 | 2.80 | 2.80 | 2.48 | 2.73 | 2.80 |
| Variance | 0.20 | 0.58 | 0.95 | 1.10 | 0.10 | 0.42 | 1.11 | 0.10 | 0.35 | 0.20 | 0.38 | 0.38 | 0.17 | 0.56 | 0.52 | 0.18 |
| Standard Deviation | 0.45 | 0.76 | 0.98 | 1.05 | 0.31 | 0.65 | 1.05 | 0.32 | 0.59 | 0.45 | 0.62 | 0.61 | 0.41 | 0.75 | 0.72 | 0.42 |
| Total Responses | 178 | 176 | 177 | 177 | 178 | 175 | 172 | 176 | 119 | 174 | 92 | 85 | 30 | 21 | 26 | 10 |

## 11. How satisfied are you with these technologies

| # | Question | Very Satisfied | Somewhat Satisfied | Not Satisfied | N/A | Total Responses | Mean |
|---|---|---|---|---|---|---|---|
| 1 | Up-to-date computer | 45 | 77 | 42 | 3 | 167 | 1.98 |
| 2 | Telephone System | 62 | 62 | 24 | 19 | 167 | 2.00 |
| 3 | Smart Classrooms | 26 | 67 | 39 | 33 | 165 | 1.52 |
| 4 | Online Learning | 32 | 55 | 17 | 62 | 166 | 1.34 |
| 5 | Reliable Network | 48 | 79 | 38 | 3 | 168 | 2.02 |
| 6 | Outlook | 66 | 76 | 16 | 7 | 165 | 2.22 |
| 7 | Outlook Web | 47 | 68 | 24 | 25 | 164 | 1.84 |
| 8 | MySolano | 35 | 95 | 35 | 0 | 165 | 2.00 |
| 9 | Banner | 16 | 46 | 48 | 4 | 114 | 1.65 |
| 10 | Solano.edu Website | 22 | 88 | 53 | 3 | 166 | 1.78 |
| 11 | CurricUNET | 11 | 37 | 31 | 3 | 82 | 1.68 |
| 12 | Canvas | 44 | 30 | 4 | 3 | 81 | 2.42 |
| 13 | SARS Grid | 11 | 10 | 6 | 0 | 27 | 2.19 |
| 14 | SARS Track | 5 | 7 | 7 | 0 | 19 | 1.89 |
| 15 | Paper Clip | 9 | 10 | 5 | 1 | 25 | 2.08 |
| 16 | Argos | 1 | 7 | 1 | 1 | 10 | 1.80 |

| Statistic | Up-to-date computer | Telephone System | Smart Classrooms | Online Learning | Reliable Network | Outlook | Outlook Web | MySolano | Banner | Solano.edu Website | CurricUNET | Canvas | SARS Grid | SARS Track | Paper Clip | Argos |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Min Value | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| Max Value | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Mean | 1.98 | 2.00 | 1.52 | 1.34 | 2.02 | 2.22 | 1.84 | 2.00 | 1.65 | 1.78 | 1.68 | 2.42 | 2.19 | 1.89 | 2.08 | 1.80 |
| Variance | 0.60 | 0.98 | 0.97 | 1.37 | 0.59 | 0.62 | 1.02 | 0.43 | 0.58 | 0.48 | 0.56 | 0.57 | 0.62 | 0.65 | 0.74 | 0.62 |
| Standard Deviation | 0.77 | 0.99 | 0.99 | 1.17 | 0.77 | 0.79 | 1.01 | 0.65 | 0.76 | 0.69 | 0.75 | 0.76 | 0.79 | 0.81 | 0.86 | 0.79 |
| Total Responses | 167 | 167 | 165 | 166 | 168 | 165 | 164 | 165 | 114 | 166 | 82 | 81 | 27 | 19 | 25 | 10 |

| 12. Please list any additional technology that is important to your role at SCC |
|---|
| Text Response |
| Portable light laptops to carry to meetings with access to the internet and my documents. |
| Certain websites |
| The wireless just got better in the upgrade although still not great. But that is important. It would be great to have more mobile computing, and the current laptops are not very good, |
| Shared printing |
| we need more training |
| Of crucial importance to me is for overhead projectors to be continued to be maintained and supported. |
| A more robust SARS/GRID with current functionality. |
| Not having to reload info to MySolano every semester for the same course. |
| accessible online storage of data, classroom computer, outlook from remote locations. |
| Ability to access my email using a client application of my choosing, on my home computer. |
| Colleges are victims of marketing of terrible software. Canvas touted as so great, but it's cumbersome to use, for both teachers and students. Curricunet, like something from the 80s. |
| Being able to use my devices wirelessly in Smart Classroom — or at least having the College support ready, flexible connectibility. |
| Chemistry lab computers and software; printers in offices and in the labs/classrooms necessary as well |
| cordless headset and mic; screens that you can actually see more cleary--but that would require a lighting change. |
| I've had two tech problems recently. My phone wasn't working properly and it took a month to get a replacement--why can't the District have a few on hand so they can be replaced quickly? The same problem with a document camera in 1600--no extra ones on hand so had to wait for it to be replaced. I use the document camera every lecture--great to have and a great resource for the way I teach. |
| Using Outlook Web at home is exceedingly frustration with the limitations on storage of emails and the file size of emails. In the 21st century it is absolutely necessary to have adequate storage and be able to send necessary files. I have had to resort to personal emails when sending large file packages to department heads. |
| At one time, there was discussion about getting Degree Works and I think it is extremely important that this become a TOP priority, as this is a great tool for allowing students to have 24 hours access to their education plans, which is a mandate of SSSP. |
| I'm not certain about the online learning; is that for students, if so, then I have no experience with it. Banner could be improved upon; you already know that... The website is helpful. |
| Faster computers and clickers in the 400 building |
| Internet native banner is very cumbersome, but I have learned to work with it. |
| BDM Banner Document Management system to further enhance processing of student financial aid applications and delivery of funds to students |
| When the network goes down unexpectedly it takes WAY too long for it to get back up. Is there a policy in place for helpdesk tickets that are entered on weekends and holidays? If we are planning on offering more online courses this is vital. Please consider a better way to fix helpdesk ticket issues during off hours. |
| The plans for these technologies ARE NOT VETTED with Faculty and USERS |
| I wish online teachers had a better system for transferring files from teacher to student than just Canvas |
| the system here is cumbersome and outdated. This school needs to get it together in order to compete w/sister colleges in the area |
| As the program review coordinator, I need faculty to have access to programmable student surveys in scantron form to probe students about questions meaningful to their departments |

| Statistic | Value |
|---|---|
| Total Responses | 26 |

| 13. Which Banner areas do you mostly use? | | | | |
|---|---|---|---|---|
| # | Answer | | Response | % |
| 1 | Banner Student | | 63 | 55% |
| 2 | Banner Financial | | 42 | 37% |
| 3 | Banner HR | | 16 | 14% |
| 4 | Banner Financial Aid | | 9 | 8% |
| 5 | Other | | 26 | 23% |

| Other |
|---|
| Banner Admission and Records and Faculty |
| Banner Scheduling or is that what you mean by Student? |
| INB |
| I have no idea which one I use of the above. I do not recognize them by the names. |
| Facutly |
| Classroom schedules |
| class enrollment; pre-req management |
| Faculty |
| What's the diff between Banner and MySolano? |
| don't really know! |
| Banner faculty |
| none |
| Faculty |
| Faculty |
| SCC Applications |
| I don't really know what Banner is. Not the same as MySolano? |
| Faculty, Student, Employee |
| Banner Faculty |
| Class lookup |

| Statistic | Value |
|---|---|
| Min Value | 1 |
| Max Value | 5 |
| Total Responses | 115 |

**14. Please indicate how much you agree or disagree with the following Banner related statements.**

| # | Question | No Opinion | Strongly Disagree | Disagree | Agree | Strongly Agree | Total Responses | Mean |
|---|---|---|---|---|---|---|---|---|
| 1 | For Banner, the College has clearly defined long-term goals and objectives (3-5 years). | 51 | 21 | 39 | 8 | 1 | 120 | 1.06 |
| 2 | Banner meets all of my functional needs to fulfill job responsibilities. | 15 | 17 | 41 | 43 | 3 | 119 | 2.02 |
| 3 | I can use Banner to accomplish job tasks. | 14 | 9 | 22 | 69 | 5 | 119 | 2.35 |
| 4 | I am knowledgeable of Banner reporting capabilities. | 19 | 25 | 37 | 35 | 4 | 120 | 1.83 |
| 5 | Banner reports meet my needs. | 41 | 15 | 33 | 27 | 3 | 119 | 1.46 |
| 6 | If Banner reports do not meet my needs, I am able to request new reports. | 59 | 10 | 23 | 25 | 3 | 120 | 1.19 |
| 7 | Banner revisions and upgrades are communicated well in advance and implemented in a timely manner. | 26 | 15 | 16 | 45 | 17 | 119 | 2.10 |

| Statistic | For Banner, the College has clearly defined long-term goals and objectives (3-5 years). | Banner meets all of my functional needs to fulfill job responsibilities. | I can use Banner to accomplish job tasks. | I am knowledgeable of Banner reporting capabilities. | Banner reports meet my needs. | If Banner reports do not meet my needs, I am able to request new reports. | Banner revisions and upgrades are communicated well in advance and implemented in a timely manner. |
|---|---|---|---|---|---|---|---|
| Min Value | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Value | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Mean | 1.06 | 2.02 | 2.35 | 1.83 | 1.46 | 1.19 | 2.10 |
| Variance | 1.10 | 1.12 | 1.18 | 1.25 | 1.56 | 1.72 | 1.96 |
| Standard Deviation | 1.05 | 1.06 | 1.09 | 1.12 | 1.25 | 1.31 | 1.40 |
| Total Responses | 120 | 119 | 119 | 120 | 119 | 120 | 119 |

## 15. Please rank how important the following items are by dragging and dropping.

| # | Answer | | | | | | Total Responses |
|---|---|---|---|---|---|---|---|
| 1 | Training on Banner queries | 11 | 28 | 38 | 18 | 5 | 100 |
| 2 | Training on Banner reporting | 7 | 14 | 32 | 38 | 9 | 100 |
| 3 | General Banner training | 52 | 23 | 13 | 5 | 7 | 100 |
| 4 | Having stable and accurate Banner data | 30 | 24 | 8 | 31 | 7 | 100 |
| 5 | Knowing how other Banner users affect the data I use | 0 | 11 | 9 | 8 | 72 | 100 |
| | Total | 100 | 100 | 100 | 100 | 100 | - |

| Statistic | Training on Banner queries | Training on Banner reporting | General Banner training | Having stable and accurate Banner data | Knowing how other Banner users affect the data I use |
|---|---|---|---|---|---|
| Min Value | 1 | 1 | 1 | 1 | 2 |
| Max Value | 5 | 5 | 5 | 5 | 5 |
| Mean | 2.78 | 3.28 | 1.92 | 2.61 | 4.41 |
| Variance | 1.06 | 1.09 | 1.49 | 1.90 | 1.09 |
| Standard Deviation | 1.03 | 1.05 | 1.22 | 1.38 | 1.05 |
| Total Responses | 100 | 100 | 100 | 100 | 100 |

## 16. Do you have any other comments related to your use of Banner?

| Text Response |
|---|
| Again you have to question the maintenance of this system, we seem further behind other colleges |
| There are probably banner screens that would be useful but I've had no training. |
| Dislike it--not user friendly and lack of training. Understand that there is a report writer program that would help but it has not yet been made available. (Argos) |
| Drag and drop where??? I feel that the Technology department does not have enough staff, is not functioning well enough on the user end and that the overall thinking in Technology does not provide enough front end support. |
| Banner is not particularly useful for my line of work. I rarely use it. |
| The navigation is not user friendly. Too many acronyms to remember to get to the proper screens. Seems like a very old database format. |
| Banner is a very frustrating system that is often faulty and unresponsive. It takes more time than is reasonable to wrestle with it. |
| No |
| A monthly general banner training will be helpful. |
| The requisition process is extremely slow and there are too many approvers. It takes about two weeks from the day requisitions are initiated in Banner for approvals to be recorded and for the purchase order to be sent to the vendor. It takes nearly a month to receive orders. |
| I do not find Banner very intuitive or user friendly. My understanding is that it is still not compatible with updated Java. |
| I only use Banner for my students (rosters, dropping, grades) and for my payroll info. I don't use Banner reports. |
| How am I supposed to use banner? |
| I'm satisfied that I am able to get the information I need from Banner reports, however, I am dissatisfied with the output format. Some of the reports are needed to send to outside agencies and I spend way too much time trying to break pages and make the data fit on typical word documents. The reports I need to forward show way more information than needed, at least for my job purposes. I plan to learn how Argos works in hopes of creating my own reports using only the data needed. |
| PLEASE provide regular and on-going trainings in Banner!!! This is critical to doing our jobs effectively. |
| Banner software and technology functionality is major component in administering student financial aid programs for the campus. |
| As a faculty member for seven years I still don't know the difference between Banner and MySolano. Is Banner how students add classes? Cause as a course with a co-requisite I've had nothing but problems with add codes and waitlists - inconsistencies with my co-class, missing students, too many students enrolled, and no consistent information on how to resolve these problems (this might be an A&R issue, though). |
| Really hope this district gets their act together someday regarding technology, i work at a number of districts and this is the least efficient and student user friendly or staff friendly system ...Good luck out there |
| Does not meet the needs of our students..not student friendly |
| If possible please provide more training opportunities to all users at all levels. Show user how to use query forms, whenever possible, instead of the forms where data can be altered if inappropriately used. |
| It seems it should be capable of outputting more specific info than what I can get. |

| Statistic | Value |
|---|---|
| Total Responses | 21 |

## 17. Do you teach or have you ever taught online?

| # | Answer | | Response | % |
|---|---|---|---|---|
| 1 | Yes | | 42 | 45% |
| 2 | No | | 52 | 55% |
| | Total | | 94 | 100% |

| Statistic | Value |
|---|---|
| Min Value | 1 |
| Max Value | 2 |
| Mean | 1.55 |
| Variance | 0.25 |
| Standard Deviation | 0.50 |
| Total Responses | 94 |

**18. I am satisfied with off-campus and distance education technology support.**

| # | Answer | | Response | % |
|---|---|---|---|---|
| 0 | No opinion | | 46 | 48% |
| 1 | Strongly Disagree | | 2 | 2% |
| 2 | Disagree | | 8 | 8% |
| 3 | Agree | | 30 | 32% |
| 4 | Strongly Agree | | 9 | 9% |
| | Total | | 95 | 100% |

| Statistic | Value |
|---|---|
| Min Value | 0 |
| Max Value | 4 |
| Mean | 1.52 |
| Variance | 2.44 |
| Standard Deviation | 1.56 |
| Total Responses | 95 |

**19. My students have sufficient technology skills to improve their learning in my courses.**

| # | Answer | | Response | % |
|---|---|---|---|---|
| 0 | No opinion | | 13 | 14% |
| 1 | Strongly Disagree | | 13 | 14% |
| 2 | Disagree | | 20 | 22% |
| 3 | Agree | | 43 | 46% |
| 4 | Strongly Agree | | 4 | 4% |
| | Total | | 93 | 100% |

| Statistic | Value |
|---|---|
| Min Value | 0 |
| Max Value | 4 |
| Mean | 2.13 |
| Variance | 1.33 |
| Standard Deviation | 1.15 |
| Total Responses | 93 |

## 20. My students have sufficient access to technology resources to improve their learning in my courses.

| # | Answer | Response | % |
|---|---|---|---|
| 0 | No opinion | 13 | 14% |
| 1 | Strongly Disagree | 11 | 12% |
| 2 | Disagree | 25 | 27% |
| 3 | Agree | 40 | 43% |
| 4 | Strongly Agree | 5 | 5% |
| | Total | 94 | 100% |

| Statistic | Value |
|---|---|
| Min Value | 0 |
| Max Value | 4 |
| Mean | 2.14 |
| Variance | 1.30 |
| Standard Deviation | 1.14 |
| Total Responses | 94 |

## 21. How often do you use the following technologies in the classroom?

| # | Question | Often | Occasionally | Never | I would if I had access | Total Responses | Mean |
|---|---|---|---|---|---|---|---|
| 1 | Computer | 84 | 9 | 0 | 1 | 94 | 3.87 |
| 2 | Projection System | 75 | 14 | 3 | 1 | 93 | 3.75 |
| 3 | Document Camera | 29 | 28 | 31 | 4 | 92 | 2.89 |
| 4 | iPad/Android Tablet | 7 | 7 | 54 | 23 | 91 | 1.98 |
| 5 | Smart Phone | 13 | 24 | 49 | 7 | 93 | 2.46 |
| 6 | Smart Board | 9 | 5 | 38 | 39 | 91 | 1.82 |

| Statistic | Computer | Projection System | Document Camera | iPad/Android Tablet | Smart Phone | Smart Board |
|---|---|---|---|---|---|---|
| Min Value | 1 | 1 | 1 | 1 | 1 | 1 |
| Max Value | 4 | 4 | 4 | 4 | 4 | 4 |
| Mean | 3.87 | 3.75 | 2.89 | 1.98 | 2.46 | 1.82 |
| Variance | 0.18 | 0.32 | 0.82 | 0.64 | 0.69 | 0.86 |
| Standard Deviation | 0.42 | 0.56 | 0.91 | 0.80 | 0.83 | 0.93 |
| Total Responses | 94 | 93 | 92 | 91 | 93 | 91 |

| 22. What technology issues are important to you as a faculty member? |
|---|
| Text Response |
| What happened to the counselor support programs??? |
| The online courseware is the most important and losing all the helpdesk support we used to have matters a great deal. We can't chat with the Canvas helpdesk anymore and our requests aren't answered when we need them. Also, many things in Canvas are actually less useful than they were before and it isn't clear if that is by design or accident. Emailing in Canvas is much harder than it used to be, for example. |
| Having up-to-date computers and software. |
| up to date and speedy computers in the classroom to access either the internet or to use Microsoft Office programs for instruction |
| Projection system and computer are CRITICAL. |
| Ability to find and send information reliably and securely |
| support, speed, access both public and private, informed |
| I am referring to an overhead projector in response to the "Projection System" question. As stated above this needs to be supported. |
| Working computer in my office and the smart classrooms, Wireless network so I can connect my phone to it all day and not use data., |
| I would like to have access to Smart Boards and better projection (often they wash out with room lighting) |
| updates to google browser; irrelevance of Internet Explorer |
| increased broadband support for lap tops |
| having a calibrated projector so color and contrast match watch I see on the monitor. Having a computer that starts up fairly fast, reads my drives, is up to date on software, and plug ins that allow use of Netflix and other sites where I access documentary and other educational video. |
| The servers are very slow in Fairfield and Vallejo. Cell phone service in Vallejo is rare. |
| Dependable and easy use of the smart classroom to use my own laptop with the projection display. The Vallejo classrooms should have VGA and audio cables to connect my laptop, like they have in the rooms at Vacaville. |
| something that works, is up to date with the rest of the classroom. |
| Easy and flexible use of iPad with Smart Classroom, preferably wirelessly and absolutely without darkening the room. |
| The most important, again, is having current operating systems with speed. Current software, overall maintenance, and essential tech support are critical. |
| Having specific programs installed on classroom computers like graphing calculator emulator and other graphing technology, minitab or similar program, wxmaxima |
| Network speed |
| Projector screens that work (not tied down with strings!) and in good placement in the classroom (not in front of the white boards!) Projectors that are focused and give true colors. |
| document camera doesn't work; clicker for PowerPoints often don't work |
| quick log in; no freezing or lags; items not missing--like remotes; items working--like remotes |
| Computers in classrooms--very important teaching tools--are unbearably slow and outdated, and classroom equipment is often faulty. Teaching tech should be our focus! |
| As I wrote earlier, making sure the technology we have can be repaired or replaced quickly. |
| projection system, access to online info during class |
| Having a day or two AT THE END of the semester to train and practice with technology so that I can incorporate it into my classes for next semester. Training the day before the semester begins is TOO LATE. |
| Fasr in-class boot-up. Customizable desktop teaching configurations (i.e. a customized user-view/log-in so that a desktop work area can be created for each course. |
| Up to date computers with Adobe/Flash/Quick time, etc. Bright projectors and document cameras |
| Internet connection, latest updates and programs, more data capacity for email |
| Smartboard is great, but not all classes have them. |
| user friendly technology, easy to use as a faculty |
| Training in smart classrooms |
| Fewer network outages, more tech support on weekends when things go wrong, more support for students on |

| |
|---|
| Canvas, MySolano, Banner, etc. |
| THE value of technology to learning on a Face to Face basis! Cost Effective ?? |
| Access to electronic education plans and degree audits |
| Computers running the most current version of software. |
| Wife access. File storage and transfer ability. |
| Reliability |
| Smart classrooms that work and are up-to-date |
| smart classrooms, reliable computers in classroom, document cameras that work, etc. |
| fast internet, fast computers, reliable browsers, easy authentication |
| Security!!!! |
| Wife access, network access, and online platforms (MySolano, publisher's website, canvas, etc...) |
| The SMART Classrooms working, often they don't - Issues w/online teaching and extending assignments for DSP students as needed very difficult |
| Smart classroom |
| Up to date laptops for office use, smart classrooms, access to Chromebook/tablets |
| Fast technology that works at a high level. |

| Statistic | Value |
|---|---|
| Total Responses | 48 |

| 23. What technology issues are important to your students? |
|---|
| Text Response |
| Access and speed |
| They want technology that works, and works easily - so up to date browsers and lab computers are important, usable browsers that don't boot you out of Canvas are helpful. They need tablets/laptops/wireless networks that are strong and fast and available to check out. And they need everything in one place - they think everything is accessible in MySolano, and it isn't for 4-5 clicks before they find out it is on the web instead. There should just be one place, for most things. |
| Online access to course content and information. |
| easy access to My Solano and online study course materials |
| Access to devices with reliable internet; ability to navigate and use online resources successfully |
| same as above |
| easy Wi-Fi access |
| You will need to ask them! |
| Reliable Wi-Fi/ better access to printers |
| being able to get online, being able to access files and info on MySolano, being able to register, being able to access scholarly articles. |
| Computer literacy and keyboarding are vital. Many students do not use the computers here; they write on their smartphones with poor editing skills. |
| You should ask them. |
| Whatever technology is being implemented and made available and is accessible to all students who may need it to excel at their academics. |
| How about AdBlock on browsers? |
| I assume ease and satisfying use of MySolano. |
| Access to current software programs and tech support are necessary. |
| understanding how to access the resources available... many do not know about many of the resources available and I do not think I know of all the resources either! |
| Same as for me if they want to pass! |
| Same as above; strong wireless signal; reliable wireless |
| speed, compatibility with their home/mobile system and campus |
| having access--library is closed --especially for students taking night classes |
| Reliable email with easy access. Computers to use on campus, with printing available. |
| access to online supplemental materials |
| Technology is important to my students, however, the students at the CSPS program have no access to technology. |
| Having a functional laptop. Seems like these could be lent/rented for those who do not have access. ALSO, access to low cost printing of papers ALL the time. Library is often closed and there are no other printers available. |
| Constant access. Easier main campus website (more graphic, image driven navigation). |
| Up to date and fast computers |
| Not all students have a computer to use. |
| Ease of access. Working computers, projectors etc. |
| mobile technology, easy to use and frequently updated |
| Accessing online resources from the library, online classroom, access to computers with the programs they need, more hours for computer labs |
| Access and reliable modalities...lack of basic I T skills |
| Access to electronic education plans and degree audits |
| Easy wifi access. |
| Same |
| website |
| access to computers and printers, Microsoft Word |
| fast internet, fast computers, easy interface for MySolano and website |
| Accessibility |
| The same as faculty members? |

| |
|---|
| They use them all, especially students w/disabilities like JAWS, Kurzweil and Dragon |
| Internet |
| navigating online, access to canvas companion, access to computer labs to print papers even in the night hours, free or low cost printing |

| Statistic | Value |
|---|---|
| Total Responses | 44 |

**24. Please indicate how much you agree or disagree with the following tech support and training related statements.**

| # | Question | No Opinion | Strongly Disagree | Disagree | Agree | Strongly Agree | Total Responses | Mean |
|---|---|---|---|---|---|---|---|---|
| 1 | I know how to contact IT for technology issues. | 1 | 4 | 7 | 82 | 82 | 176 | 3.36 |
| 2 | My Technical issues are resolved in a timely manner. | 7 | 9 | 14 | 68 | 78 | 176 | 3.14 |
| 3 | IT staff members are helpful. | 7 | 5 | 7 | 70 | 87 | 176 | 3.28 |
| 4 | I am satisfied with the technology training that is offered to me | 25 | 31 | 59 | 39 | 21 | 175 | 2.00 |
| 5 | I am satisfied with the technical assistance I receive | 10 | 7 | 18 | 81 | 60 | 176 | 2.99 |
| 6 | The College's technology systems are reliable | 10 | 23 | 49 | 74 | 20 | 176 | 2.40 |
| 7 | I find IT staff friendly and approachable | 13 | 5 | 6 | 72 | 79 | 175 | 3.14 |

| Statistic | I know how to contact IT for technology issues. | My Technical issues are resolved in a timely manner. | IT staff members are helpful. | I am satisfied with the technology training that is offered to me | I am satisfied with the technical assistance I receive | The College's technology systems are reliable | I find IT staff friendly and approachable |
|---|---|---|---|---|---|---|---|
| Min Value | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Value | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Mean | 3.36 | 3.14 | 3.28 | 2.00 | 2.99 | 2.40 | 3.14 |
| Variance | 0.52 | 1.07 | 0.93 | 1.46 | 1.12 | 1.08 | 1.26 |
| Standard Deviation | 0.72 | 1.03 | 0.97 | 1.21 | 1.06 | 1.04 | 1.12 |
| Total Responses | 176 | 176 | 176 | 175 | 176 | 176 | 175 |

| 25. Where do you get technology training (check all that apply) | | | | |
|---|---|---|---|---|
| # | Answer | | Response | % |
| 1 | SCC provided | | 75 | 43% |
| 2 | Formalized online training (e.g. lynda.com) | | 27 | 16% |
| 3 | Printed & online manuals | | 61 | 35% |
| 4 | Peers | | 109 | 63% |
| 5 | Informal online (e.g. Google searches) | | 108 | 62% |
| 6 | Other | | 37 | 21% |

| Other |
|---|
| Take classes |
| none offered |
| Unsure where to find training |
| went to school at SCC |
| College level courses |
| My family |
| was trained in Canvas by staff and online assistance |
| very little |
| I get little training |
| Military, school |
| Ellucian |
| u-tube |
| I'm the IT Director at my full time teaching job. |
| on my own online and from other institutions with similar set-ups |
| I am a former IT professional. |
| carol zadnick |
| never had any training at SCC |
| My husband assists me with technological issues. |
| my students |
| on my own |
| IT staff |
| Self taught |
| Consultant |
| Myself |
| My previous knowledge |
| IT Staff |
| other colleges where I teach part time. |
| SIG (Strata Info Group) Fin Aid Consultant |
| self taught |
| YouTube |
| Flex workshops |
| learned elsewhere |
| Taught myself as we've often done here at this district |
| Flex cal |

| Statistic | Value |
|---|---|
| Min Value | 1 |
| Max Value | 6 |
| Total Responses | 173 |

| 26. Do you have any other comments related to tech support and training? |
|---|
| Text Response |
| The helpdesk are superb in dealing with queries promptly, there was some variability between techs but some of the worst offenders are gone and the new guys are great |
| It is my strong opinion that for a campus this size with various locations, that this department is extremely understaffed, and under paid for their expertise. |
| I took classes here at SCC for the major part of my computer training, but for certain programs such as banner and sars I was trained at the job. |
| I haven't had any training - you get a new laptop, which is great, but it has a new version of windows and different operating instructions and no training. As an example.Tech support is great, they have improved this semester to something really responsive and professional. |
| None. |
| Need more faculty professional development in this area |
| Problems with slow computers in classrooms are significant. Projectors fail too often. Screens are sometimes installed unprofessionally - at wrong angle. Lack of control for partially descending screen is a real concern. |
| It would be really nice to have a Tech Center where IT staff are readily available (e.g. "office hours") to help faculty with IT issues. |
| Need more specific to our job needs |
| Hire more female techs. This would encourage students to pursue a career in technology! |
| WE NEED TRAINING....PERIOD!!! |
| No |
| I never heard of lynda.com. I'll look it up. |
| "I have left-in lies and unlikely stories on the assumption that the lies a man tells tell more truth about him -- when analyzed -- than does the truth." -Robert Anson Heinlein, Time Enough for Love |
| More techs overall. They work hard and sometimes there's no one to cover when one is out. More Mac savvy would be nice. |
| Yes technology training needs to be more in flex cal as options and using that time to inform and train us on technology at Solano. |
| It is essential in this day and age that SCC train and stay current with the varied tech programs. Certainly dollars could be allocated for savvy consultant/trainers to educate faculty and staff for ongoing learning and assessment. |
| IT management is resistive to providing assistance, particularly in a timely manner if it is not one of their perceived priorities. Also do not have training or protocols to provide user modifications of even mundane website revisions. This should be done to allow IT staff more time for the critical technical revisions, rather than absolute control of every technology issue. |
| would like training |
| Offering a workshop/short course to employees in basic computer/technology would be helpful in troubleshooting |
| Perhaps it can be included as an orientation for all employees. Thanks for asking! |
| Should have an ongoing drop in lab for faculty, full and part time. |
| Some of the IT staff is very approachable but not all. |
| We need more formal technical training |
| The only training I've been informed of is for CANVAS. I strongly recommend Banner training for all employees, but especially for every new employee |
| Banner training should be offered quarterly on a continuing basis so as you go through the cycle, if you need a refresher, then you could get it. |
| The IT technicians and staff are so helpful and very responsive to our requests. They are outstanding!!!! |
| I recall one SCC provided online training done by Fiscal. |
| GET some stinking badges with photo i.d. and "Recycle the equipment to Faculty and Staff WAREHOUSE sales!" |
| The IT people are great. It is the lack of security that is troublesome. I want longer passwords |
| They need additional staff, they have trouble keeping up w/demands so they are cutting corners and often appear rude and impatient thank you for asking |
| we could definitely use more hands on training....the classes teach us a lot but then when we go to use it we need follow up--- |

| |
|---|
| Received very little training. |
| As a new employee, I have not received any computer training from IT, only from other employees. |
| Need to increase storage for outlook, and Z drive storage. As a member of a hiring committee, I am shocked at the lack of support for video conferencing. We have flat screen tvs in our conference room that no one has used or has been trained to use. This should be used for video conferencing, at the minimum. More support is needed to bring us up to date-both personnel and equipment. |

| Statistic | Value |
|---|---|
| Total Responses | 35 |

## Appendix E

## Strategic Technology Advisory Committee (STAC)

**Committee Purpose:**

The Information Technology Advisory Committee serves as an oversight committee on matters of Information Technology and is responsible for setting the information technology strategic direction of the college. The committee recommends college wide information technology policies, procedures and standards; reviews and recommends priorities for the development of applications and for capital requests; and serves as an information-sharing forum.

The Committee serves as an advisory panel to the Chief Technology Officer in areas of policy recommendations and technology plans that are to be processed through the colleges shared governance processes.

**Strategic Technology Advisory Committee Membership**:
In establishing the membership of the Strategic Technology Advisory Committee (STAC), the committee members are selected according to the principle of shared governance so as to assure an equitable representation across all areas of the district.

The composition of the Strategic Technology Advisory Committee (STAC) shall include representatives from each of the following groups:

- 1 - ALG
- 1 - ASSC
- 2 - CTA
- 3 - Academic Senate
- 1 - CSEA
- 1 - Local 39

The Strategic Technology Advisory Committee is chaired by the Chief Technology Officer (CTO) and Co-Chaired by the Director/Manager of Technology Services and Support.

Additional resources/guests may be asked to participate based on their area of expertise on as as-needed basis. These resources can be members of any department of the campus community as well as consultants/contractors from outside the campus community.

**2016 Membership**

Kimo Calilan - Chair - Interim CTO
Justin Howell - Co-Chair - Interim Manager, Tech. Services
Corrine Kirkbride - CTA
Erin Duane - CTA
Irene Camins - Local 39
Kevin Anderson - CTA
Matthew Heartsick - ASSC
Ruth Fuller - CTA
Shawn Carney - CTA
Carol Zadnik - Distance Ed
Carla Maguire - CSEA
Casey Hentzen - CSEA
Peter Cammish – ALG

**STAC Charge:**

- Review, update and maintain Solano's existing Strategic Technology Plan.
- Review and evaluate new and existing technologies.
- Analyze implementation strategies and make recommendations that will optimize the value and effectiveness of the District's technology infrastructure.
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- Review and evaluate new and existing technologies.
- Analyze implementation strategies and make recommendations that willoptimize the value and effectiveness of the District's technology infrastructure.
- Advise the College on budget impact and needs related to the committee's work.
- Encourage and facilitate sharing of resources by departments.
- Reviews proposals to upgrade and expand the infrastructure, network servers and workstations, helpdesk software and support staff.
- Advise on new services that should be offered.
- Develop technology standards and periodically review and recommend revisions.
- Review and recommend policies and procedures.
- Recommend programs to stimulate innovation in the use of technology.
- Create Working Groups to analyze and develop recommendations for specific questions or issues.