

***Technology and Telecommunication  
Master Plan***  
  
***for the***  
  
***YUBA COMMUNITY COLLEGE DISTRICT***

Developed by:  
The Technology Committee



***Annual Update - August 2013***

## Members of the Technology Committee 2013-2014

<b>Member</b>	<b>Term</b>
Dr. Kayleigh Carabajal (Sponsor)	Continuous
Karen Trimble (Co-Chair)	Continuous
Julie Brown (Co-Chair)	2011-2014
Sandra Magnan	2012-2015
Denise McLain	2012-2015
Todd Sasano	2012-2015
Julia Green	2011-2014
Armand Brunhoeber	2011-2014
Bill Heidbreder	2010-2013
Erik Cooper	2010-2013
John Thoo	2010-2013

### **Resource Members**

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## Background

The Technology Committee was established for the coordination of district-wide technology. The committee is comprised of management, faculty, and staff each appointed by their various constituency groups. The Technology Committee's original charge was to produce a five-year comprehensive Technology Master Plan. In the Fall of 2008 the committee recommended changing this to a four-year plan that would align with the Yuba Community College District Board of Trustees strategic direction.

During the Spring of 2013, Yuba College developed a college technology committee. Woodland Community College has elected to have their existing committee, the Communication Resource Committee serve the same purpose. The District Technology Committee acknowledges that as these committees develop their goals and objectives, the work of this committee will probably change. One of the first things we will do is include a report out from each of these committees on our monthly agenda. This will provide information sharing as well as an opportunity for assistance and collaboration to take place between all 3 groups.

Another change coming next year will be the format of this document. We will begin using a format that more closely aligns with our accreditation self study and will include all phases of the institutional effectiveness model.

## MISSION of Technology Committee

The Technology Committee is responsible for researching, planning, and recommending implementation and maintenance of technology needs for the Yuba Community College District. Instructional and administrative technology resources are central to both the District's mission and its ongoing operation.

## Value Statement

YCCD Technology Committee is committed to many partners and has a passion for technology. The Technology Committee is committed to providing results that help us strive for the highest quality infrastructure, applications, remote access, and services that support teaching, learning, research, and professional development.

- Students-quality access to administration, instructional, and support services.
- Faculty-enhanced learning using best practices and research capabilities.
- Staff-provide access to technology enabling staff to achieve their goals.
- Administration-fast information gathering with the ability to respond to other parties.
- Policymakers-access to fast reliable information.
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## Introduction

This document includes the following:

- Incorporates goals and plans to support Yuba College Technology Committee and Woodland Community College Communication Resource Committee.
- Incorporates the Program Reviews from both colleges and the District offices.
- Incorporates the Facilities Master Plan goals.
- Incorporates the Educational Master Plan goals of each college.
- Provides standards, guidelines and procedures needed to effectively implement and support information technology within the District as appendices.

### **Technology Committee Purpose Statement**

The Technology Committee is responsible for researching, planning, and recommending implementation and maintenance of technology needs for the Yuba Community College District.

In specific, the Technology Committee serves the following purposes:

1. Manage the Technology Plan for the District, a living document. This plan will use the Education Master Plan from each college for its basis.
2. Provide a “think tank” where all areas in the district can come together to discuss new and emerging technologies, assess how that technology might be used in the District and it's feasibility.
3. Monitor Section 508 compliance and assist in its implementation.
4. Provide a complete cost analysis, total cost of ownership (TCO), for the implementation/use of new technology purchases. Create a plan for the implementation of any new technology.

### **The Planning Model**

The Technology Plan is based on four guiding principles for information technology which were developed by the planning team. These principles are:

- Information technology is a vital service;
- Information technology is an essential resource for learning, teaching, research, and community partnerships;
- Technology is essential for data and information management;
- Information technology is a strategic District asset.

A technology self-study was conducted as part of both Yuba College and Woodland Community College accreditation studies. Those studies and the recommendations from the accrediting team were also used as input to the plan.

In Fall 2004, the Technology Committee adopted the Total Cost of Ownership (TCO) model. The TCO model provides a structure that identifies the relationship between student access and information technology. It also identifies faculty and staff access, training, and support (see Appendix B).

### **Infrastructure Plan**

YCCD is faced with the challenge of upgrading and maintaining a data communications network to keep pace with the demands of instructional and administrative technology requirements. This technology must support and offer new methods to increase productivity and efficiency, both in the instructional programs and campus administrative computing. Utilizing technology to enhance the way information is communicated and accessed provides a more optimum learning experience for students and more efficient tools and resources for faculty, staff and administrators. Part of this challenge is providing adequate staffing and financial resources to deliver and maintain the needed communications networks and technical support.

This is particularly important to attract students and prepare them to learn and work in today's digital economy. The District needs to provide technology resources to support existing and new academic modes of delivery, which include on-line learning, Distance Education, Web access, on-line tools for students and faculty, streaming media, Library resources, etc. All of these services require a robust, high speed, wide bandwidth, communications network infrastructure that includes quality of service. The network must have the capability to provide sufficient bandwidth for present and future requirements, both wired and wireless, capable of being accessed in a variety of ways from both on and off campus, and operate on a 24/7 schedule with required power, data back-up, and technical support services.

## Goals and Strategies

Higher education institutions are facing dramatic changes being fueled by rapid advancements in information technology. The changes impact both the academic and administrative portions of the institution. Areas of influence include the following:

- Students – desiring greater access to administrative and instructional support services, and expansion of traditional service approaches
- Faculty – desiring enhancements to learning, discipline specific trends, greater research capabilities, a means of communicating (email, file sharing), and collegial interfaces regarding best practices
- Staff – desiring innovative solutions and technology support to aid them in their work
- Administrators – desiring faster and greater information regarding enrollment, performance, and budgets in order to analyze efficiencies and effectiveness, as well as to respond to policy entities, such as boards and elected officials
- Policymakers – desiring greater, faster, and more reliable information for use in developing funding levels, and realistic and feasible policies

In another area, educational technology is quickly eroding traditional boundaries between institutions and the colleges are facing competition from “virtual” universities. Technology is enabling students to seek an education at nontraditional times and locations. The current student population is the first for whom computers are as common as television. This has important implications for how and where teaching and learning take place.

With a dramatic rise in Distance Education and the opportunities for expanded growth in this area, educational technology needs rise to the top as a priority. The District also currently lacks adequate educational technology in the traditional classrooms. Due to a lack of resources, modernization and upgrades to the District infrastructure to accommodate changing educational technology needs, and the basic utility requirements for this technology have been slow and inadequate. On a positive note, the passage of the Measure J Bond is providing us with the resources necessary to address some of these needs.

### Governing Board Vision Statement

The vision of the Yuba Community College District Board of Trustees is to ensure student success by:

- Providing an innovative, world-class learning environment;
- Building and maintaining an atmosphere of trust within the college district and with our communities;
- Developing and maintaining programs and facilities that best meet the needs of our students and communities;
- Stewarding resources strategically to meet the diverse needs of our communities and region;
- Providing educational, economic, cultural, and civic leadership for our communities and region.

### Accomplishments and Future Plans

This section is a project summary that describes technology accomplishments and future plans. This document is updated annually and this area is the primary section where changes take place. The activities described below are primarily performed at a District level and impact both colleges. Where there is only one college/campus affected it will be noted. The passage of the Measure J bond in 2006 has provided the necessary funding to carry out many of these proposals. It is currently anticipated that we will not complete bond funded technology projects until sometime in 2014.

## 2010-2011 Accomplishments

- Phase 3 MyCampus - Integrate the MyCampus portal with WebAdvisor and email, and train staff and faculty in its use.
- Train users in the new technologies offered through Flex, special workshops, and meeting presentations.
- Prepare systems to provide Colleague's Webadvisor as a mobile application for cell phones.
- Build on ImageNow to include fiscal documents.
- Work with the District Curriculum committee to support installation and deployment of Curricunet, a curriculum development and workflow software package.
- Convert our email system to Live@edu which is a free, web based, hosted system offered by Microsoft.
- Upgrade the internet connection to GigaMAN services (Yuba) provided by the state Chancellors office to increase our access to the World Wide Web.
- Began the upgrade to DS3 (Clearlake Campus) provided by the state Chancellors office to increase our access to the World Wide Web.
- Upgrade our Colleague interface to UI Web. This will keep our software on the current supported version.
- Phase 1 Board Docs - Provide information and support to Board Docs for implementation and act as a single point of reference for technical input.
- Phase 4 multi college – continue the process of separating Woodland Community College from Yuba College in Colleague.
  - Registration module complete
  - Financial Aid module complete
- WebAdvisor Upgrades
  - Transcript Requests
  - Waitlist functionality for late adds

## Measure J

- Prepare buildings for occupancy following remodels – 700 WCC, 400 Yuba, 3000 Yuba
- Expand wireless access points – 700 WCC, 400 Yuba, 600 Yuba
- Wireless deployment at Clearlake Campus and the Colusa County Outreach Facility. This encompasses the entire campus at both locations.
- Phase 2 Portal – setup team sites for classes and started filling key web parts with relevant data.
- Phase 2 Reporting – began creating reports and dashboards for both public and business purposes.
- Performed Library software system conversion from Sirsi to Polaris to provide enhanced functionality to students and more reliable service to the Clearlake campus.

These projects resulted in wireless access for the first time on the Clearlake campus. In addition, the state agreed to upgrade the Clearlake internet access to a high speed connection. This results not only in increased speed for the students but a reduced cost for the District as we no longer have to pay monthly charges for the two current business connections. The portal project is becoming a tangible asset and the library system software was upgraded to enhance both function and service. The new Colusa County Outreach Facility was built and is complete with full wireless access, both inside and outside the building. Laptop computers and appropriate furniture provide a flexible teaching environment in the new facility. The new mobile phone application (MOX) for the District is fully integrated with Colleague and has infinite possibilities.

## 2011-2012 Accomplishments

- Phase 4 MyCampus – Upgraded to ACP 3.1 and SP 2010, moved internal web pages to the portal, setup enhanced workflow in class sites (drop off for students), and created site wide committee structure for governance committee(s).
- Moved most remaining desktops to the Active Directory environment in order to facilitate remote desktop access. The last 5%, less than 100 computers, will be moved in 2012/2013.
- Install VOIP phones in classrooms for new buildings and began setup call groups for emergency notification purposes.
- Completed the internet connection upgrade to DS3 (Clearlake Campus).
- Continued to work with the District Curriculum committee to support installation and deployment of Curricunet, a curriculum development and workflow software package
- Begin the use of the Technology Project Request form which supplies information including a graphical display for priority purposes.
- Implemented TracDat, an assessment management solution. Provides a complete process application for managing continuous improvement.
- Implemented Credentials, a new parking decal provisioning system.
- Phase 2 Board Docs - Provide information and support to Board Docs, the Board of Trustees, and the Chancellors staff for implementation.
- Implemented E-Commerce 4.1, providing a secure and reliable way to accept payments.
- Designed, or redesigned the following websites:
  - Clearlake Campus
  - District pages
  - Student orientation site
  - Nursing
  - Rad Tech
  - Distributive Education
  - Vet Tech
- Implemented Nelnet, a payment plan solution, to provide payment plan options. This will allow the District to reduce the unpaid receivables account. In conjunction with this implementation, automatic deregistration was implemented in Colleague for students who did not pay and did not setup a payment plan with Nelnet.
- Automated Colleagues wait list process.
- Full implementation of Web UI for Colleague access.
- Phase 1 “One” Card system – Begin discovery of a “one” card system for students and staff to facilitate easy access to library, printer/copiers, Financial Aid funds, and more.

#### **Measure J**

- Prepare buildings for occupancy following remodels and new construction – 100, 300, and 400 WCC, 1200 Yuba, Health/Public Safety Yuba
- Relocate Yuba Library personnel and services for remodel
- Implement a backup system using data deduplication using an Exagrid solution which stores data on disk drives. The data is then replicated nightly to WCC as offsite storage.
- Expand wireless access points – 100 WCC, 1200 Yuba, Health/Public Safety Yuba
- Phase 3 Reporting – Moving reports and dashboards to web sites and the portal
- Phase 2 Colleague conversion to SQL – A mandatory conversion of the underlying platform for our administrative software. The system is currently running on Unidata and must be moved to SQL or Oracle. We chose SQL as it has lower total cost of ownership in our IT department primarily because we have other SQL servers so the skill set is already there. This is a large project which will take the entire year to complete.

These projects include keeping us current on Datatel, a required move in order to obtain new software releases. In addition, the portal project has become a tangible asset and continuous improvement is needed to increase functionality.

#### **2012-2013 Accomplishments**

- Work with IT to address backup power issues at WCC that caused problems in December. The solution ensures when an electrical surge occurs all mission critical switch gear is protected.
- Phase 4 VOIP - Complete the cleanup of old Centrex phone lines.
- Begin using the Active Directory environment to facilitate remote desktop uploads and management.
- Work with Fiscal Services as they implement a solution for providing refunds and Financial Aid checks to students via a debit card, Higher One.
- 
- Phase 1 Office 365 – begin discussions on how the committee can assist with the move to Office 365, a requirement of Microsoft in order to continue providing the free services and tool sets to our students.
- Continue working with the District Curriculum committee to support installation and deployment of Curricunet, a curriculum development and workflow software package
- Implement a new parking decal provisioning program with added functionality for citation management.
- 
- Phase 1 Student Planning – investigate the solutions available to provide students a tool for long range planning.
  - Implement Degree Audit- Yuba College
- Phase 3 Board Docs – Continue to expand/enhance the experience.
- Phase 1 Content Management System – Begin discovery of a content management system providing the tools to build and maintain department/faculty web pages
- Phase 2 One Card system – Continue the research into the use of a “one” card system for students which would include ID cards for staff. See how other institutions address getting all students to participate.
- Create a program to track positive attendance addressing an issue raised by our auditors.
- Implement TutorTrack – currently used only by Yuba College but the licensing is such that WCC has access if/when they chose so.
- Create an email use usage Policy/Procedure.
- Phase 1 eLearning – investigate new eLearning systems; chose one using a collaborative approach
- Phase 1 Video conference assessment – provide an assessment of video equipment used for both conferencing and classrooms.
- Phase 1 accreditation responses – discuss and begin planning what the Technology Committee can do to help address and resolve accreditation issues.

#### **Measure J**

- Phase 1 virtual labs – create a virtual lab beta site at WCC in the registration area
- Prepare buildings for occupancy following remodels – Clearlake Campus project, Sutter Center
- Work with contractors and user group to ensure that the Library project (Yuba) remains on track..
- Phase 3 Colleague conversion to SQL – the project is complete providing a contemporary database layer. The movement to SQL delivers benefits that include reduced hardware costs (virtualized), and a wide variety of inexpensive tool sets for reporting needs and system management.

The computer replacement plan was provided additional funding for the first time since its inception 5 years ago. Until now funding for the plan only covered faculty computers. All others were driven by departmental budgets. This year an additional \$90,000 was added to the budget to enable the District to replace a majority of those computers that met the criteria of older than 5 years. Our systems have a 5 year warranty.

#### **2013-2014 In Progress/Plans**

- Phase 2 Video conference assessment – share results with various committees
- Phase 2 eLearning - Implement the chosen eLearning system.
- Merge 2 existing Active Directory environments in preparation for Office 365 and other additional features.
- Work with Admissions and Records as they implement an eTranscript solution
- Phase 2 Office 365 – Continue sharing updates and providing assistance where possible as the conversion takes place.
- Work with the Financial Aid offices on an improved Scholarship Application solution
- Phase 1 FAQs – participate on the project team implementing a new on-line FAQ solution
- Provide an online tracking, approval process, and storage solution faculty Flex
- Phase 2 Student Planning -
  - Implement Degree Audit – WCC
  - Find funding and implement Colleagues Student Planning solution
- Phase 5 MyCampus –
  - Create login/password page including options to change/delete password and to retrieve login information.
  - Provide Microsoft Office integration
- Phase 2 Content Management System – share the discoveries of the various solutions available and take the next steps to see if this is a project that the colleges are interested in.
- Phase 2 accreditation responses – work on ensuring that the Technology Committee decisions and actions are shared with stakeholders.
- Phase 1 Mass Communication – Begin research into alternative mass communication solutions as our current system has been sold to another company and higher costs are expected in the near future.

#### **Measure J**

- Prepare building for occupancy following remodels – Library - 1100 (Marysville)
- Phase 2 virtual labs – Create a virtual lab environment in the new Library (Yuba College)
- Work with contractors and user group to ensure that the Library project (Yuba) remains on track.
- Expand wireless access points to include any areas not covered at WCC, Yuba College, and the Sutter Center.
- Phase 4 Reporting – Moving reports and dashboards to web sites and the portal
- Phase 3 Colleague conversion to SQL – Complete the process.

The portal project has become a tangible asset and continuous improvement is needed to increase functionality.

#### **On Going Projects**

- Submission of Management Information Systems (MIS) data to the state Chancellors office. This data is used to provide data to the Federal and State agencies, provide a data warehouse for all Districts, provide ad-hoc data querying services, and used in decision making for state support systems.
- Participation in California Community Colleges Datatel Users Group (3CDUG). This group drives the direction of Datatel software needs for our community colleges, and provides training opportunities.
- Encourage student participation/input through surveys sponsored by the Research departments of each college and incorporate that input into the technology plan.
- Participate on the Telecommunication and Technology Advisory Committee (TTAC) as requested. This is a state Chancellors office committee and has representatives on it from the state wide Chief Technology Officer.

Participation in these groups ensures that the Yuba Community College District is known as an active member in addition to providing the District a direct voice in the decision making process.



## Appendix A – Role of Information Technologies

**Mission Statement:** To provide quality access to technology, guidance in the making of technology decisions, and technical expertise to support our customers.

Information Technologies (IT) supports the mission of Yuba CCD by promoting excellence in information technology and providing expert assistance in technology services. We are responsible for ensuring that all technology investments be aligned with the institutional mission, information technology planning, and other institutional planning initiatives.

### Administrative Services

- Colleague support for:
  - Payroll
  - General Ledger
  - Accounts Payable
  - Human Resources
  - Fixed Assets
  - Advancement (Foundation)
  - Data marts
  - Federal/State Reporting including MIS
- Email
- Voicemail
- Document Imaging
- PC Installation/Repairs
- Phones, PDA's, and calendars
- Portal Access (Intranet)
- Printers/Faxes

### Instructional and Student Services

- Colleague support for:
  - Admissions and Records
  - Financial Aid
  - Accounts Receivable
  - Campus Organizations
  - Curriculum Management/Program Review
  - Degree Audit
  - Federal and State Reporting including MIS
  - Faculty Information
- Email for students
- Portal access (MyCampus)
- WebCT/Blackboard support
- SARS scheduling software
- PC Installation/Repairs

### Other areas of interest:

- ✓ The Director Information Technologies is the standing co-chair of the Technology Committee which is responsible for researching, planning, and recommending the implementation and maintenance of technology needs for the Yuba Community College District.
- ✓ Various members of the IT department serve on the state and national boards of the Datatel Users' Group, representing California Community Colleges using our administrative software Colleague.

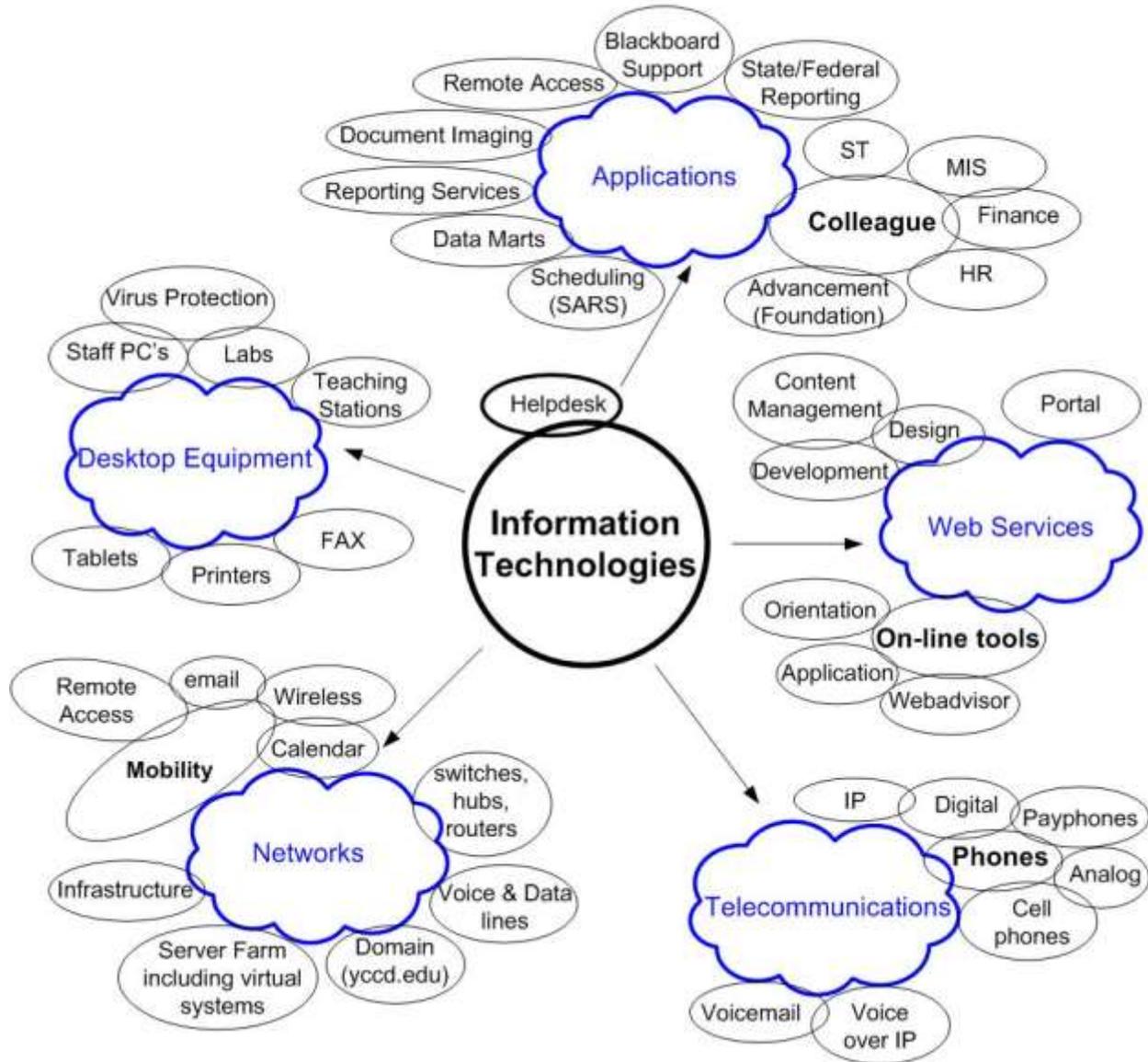
### Web Services

- Event Calendar
- Content Management
- Design/Development
- On-line application
- Web Advisor tools:
  - Registration
  - Financial Aid Information and forms
  - Schedules
  - Rosters (including Drop rosters and Positive attendance tracking)
  - Grades
  - Transcripts
  - Ed Plan
  - Time card entry and approval
  - Stipend and total compensation information
  - W-2 Statements
- On-line Orientation
- Purchase textbook
- Purchase parking stickers
- Library services

### Network Services

- WAN/LAN – wide and local area networks
- Server farm
- Voice and data lines
- Peripheral equipment (switches/hubs/routers)
- Technology Infrastructure and Backbone
- Domain services
- Active Directory
- Voice over Internet Protocol

## Information Technologies Products and Services



We view technology as a tool to support the Yuba Community College District's teaching and learning mission. We welcome both questions and criticism. We appreciate your business, as well as, your assistance in improving the quality of our services.

IT is committed to providing support services in a timely manner.

## Appendix B – Total Cost of Ownership

### Background

In March 2008 the State Board of Governors updated the Technical Support Baseline Standards as shown below. The plan was built on a study provided by the Gartner Group. The plan takes into account the associated personnel costs required to fund technology into a model called the Total Cost of Ownership, (TCO) model.

### Technical Support Baseline Standards

In the TCO model the need for technical support staff is based on the number of computers serviced, employees, and full-time equivalent students (FTES). While there have been some staff increases over the years, the District has not yet reached the levels proposed by state plan. The District had adopted a five year staffing plan which included positions to help achieve the proposed levels. Due to current state and local budget that plan has been discarded. IT staffing issues are currently documented only within this review.

These standards are based on Monday-Friday, 8 hours a day (5X8). Note that this is not sufficient to support most colleges' requirements for IT support.

The table below shows our current and projected staffing needs. These needs are drastically reduced given the current budget environment.

	Position	Description	Current	IT Proposed Increase	State Suggested Increase
S1	Computer/Network Technician 1 / 100 computers (for all college / District computers)	Installs, configures, repairs, & maintains computer hardware, including portable and handheld devices (laptops, PDAs, etc.), telecommunications, servers, peripherals, and assistive technologies. Maintains network connectivity and provides staff and faculty support.	3.5	3.5 (may be able to do this with 2.5 with appropriate software)	12
S2	Lab/classrooms Technical Assistants 1/75	Provides simple technology maintenance and assists faculty & students during and out of class with technology issues. <b>Not part of IT staff.</b> <i>Note: Due to departmental reductions and IT as a centralized service, most of the break/repair work has been transferred to IT technicians.</i>	2 (non IT)	0	8
S3	Network Engineer/Technician 1/3000 FTES	Designs, installs, configures, repairs, & maintains campus backbone(s), wired and wireless networks, WANs, and telecommunications systems (e.g. VOIP) and wiring.	2	0	0
S4	Webmaster / Web Designer 2 per District or Institution plus 1 for each additional site	Designs and maintains the district's / college's Web software infrastructure and Web site	1	2	5 (includes Sutter)
S5	Instructional Designer	Assists faculty with integrating content, using technology, into curriculum (Martha?)	1	0	0

S6	Technical Training Specialist 1/300 FTE Faculty and Staff	Trains staff and faculty. May runs a technology training center.	0	1 (position would reside in HR)	2
S7	Broadcast Technician 1/300 FTE faculty (PT&FT)	Installs, configures, repairs, & maintains broadcasting equipment, including IP and broadcast HD	1	0	.5
S8	Multi-media Production Specialist 1/200 FTE faculty (PT&FT)	Supports faculty with multimedia production, delivery, and operations	2	0	0
S9	Instructional Application Developer/Administrator 1/3000 FTES (PT&FT)	Designs, installs, configures, repairs, maintains software applications to support instruction (course management, library, newsfeeds)	1	0	1
S10	Helpdesk (Skill set equivalent to S1) 1/3000 FTES	Provides a central point of contact to receive reports of technical problems from students, faculty, and staff. Provides technical answers and solutions. .	1	0	1
S11	Technical Manager 1 /10 technical staff	Manages technical personnel & sub-functions and performs high level technical support.	1	0	0
S13	Higher level manager who supports instructional systems	Manages overall technology function. Acts as liaison with academic administration.	1	0	0
	Network Security	Monitors computer networks for security threats, identify compromised machines, analyze risks, and develop response procedures.	0	1	1
	Programmer/Analyst	Performs analysis and programming duties in the development, implementation, and support of IT	3	1	Depends on software needs
	User Liaison	Coordinates the activities between the end user and technical staff. Note: This request is to fully fund the position in the IT budget. It is currently shared with Financial Aid.	1	0	Depends on need
	Database Administrator (DBA)	Responsible for the performance, integrity, and security of the database(s). Install, configure, and manage the VMWare infrastructure/software.	1	0	0
	Software Manager	Manages software personnel and performs systems administration.	1	0	0
	Admin Support	Provide support services for 3 managers, maintain inventories, and licenses	0	1	1
		Note: S5, S7, and S8 all currently reside in media services. S9 duties are shared by IT and DE. S12 no longer exists.			