***Technology and Telecommunication
Master Plan***

for the

YUBA COMMUNITY COLLEGE DISTRICT

2008/2009 through 2011/2012

Developed by:
The Technology Committee

Annual Update - August 2011

Members of the Technology Committee 2008-2013

Member	Term
Beatriz Espinoza (Sponsor)	Fall 2008 – Continuous
Karen Trimble (Co-Chair)	Continuous
Kevin Ferns (Co-Chair)	2008-2011
Jim Schulte	2008-2011
Anita Mann	2008-2011
Richard Rountree	2009-2012
John Langston	2009-2012 (replacing G Kemble)
Chris Mejia	2009-2012
Erik Cooper	2010-2013
DSPS representative	2010-2013 currently unfilled
John Thoo	2010-2013

Resource Members
Martha Mills
Michael Plant
Scott Snelgrove

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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.

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.

Introduction

This document includes the following:

- Applies the Yuba Community College District Board of Trustees strategic direction as a guiding framework.
- Incorporates the Facilities Master Plan goals.
- In 2011-2012, will incorporate the Educational Master Plan goals of each college now that they are complete.
- Provides standards, guidelines and procedures needed to effectively implement and support information technology within the District as appendices.

The Technology Committee purpose statement is clarified in Appendix B.

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.

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 C).

A technology self-study was conducted as part of both Yuba College and Woodland Community College accreditation studies. Those studies and the recommendations from them are available in Appendices D & E of this document.

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 Internet economy. The District needs to provide technology resources to support existing and new academic programs, 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, and operate on a 24/7 schedule with required power 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 support services, and expansion of traditional service approaches
- Faculty – desiring enhancements to learning, discipline specific trends, greater research capabilities, and collegial interfaces regarding best practices
- 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 obtain 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 these needs.

Strategic Direction from the Yuba Community College District Board of Trustees

The direction of the Yuba Community College Board of Trustees is used as the basis for both Yuba College and Woodland Community College strategic plans.

1. Student Retention and Success, Student Learning Outcomes and Institutional Accountability
   1.1. Ensure student retention and success
   1.2. Develop Student Learning Outcomes
   1.3. Refine student success metrics for continuous improvement and to support accountability

2. The Basic Skills Initiative
   2.1. Embrace the statewide basic skills initiative
   2.2. Integrate and implement strategies across Yuba Community College District programs and services

3. Transformative Change and Innovation
   3.1. Design and implement initiatives to make measurable improvements in student success and organizational effectiveness
   3.2. Initiate and encourage participation in innovation
   3.3. Create an inclusive environment that values diversity
   3.4. Infuse innovation into facilities modernization (Measure J)

4. Resource Development and Alignment
   4.1. Align budget with District priorities
   4.2. Seek alternative resources
   4.3. Strengthen the Foundation's role in resource development

5. Student Access and Response to Changing Needs
   5.1. Identify and anticipate changing demographics
   5.2. Enhance student access
   5.3. Design programs and services to support new and diverse populations

6. Community Engagement and Institutional Heritage
   6.1. Enhance each college's position and image in the community
   6.2. Preserve and build on our legacy and heritage

7. Accreditation
   7.1. Support the Woodland Community College accreditation process
   7.2. Support the Yuba College accreditation process

8. Safety and Security
   8.1. Support emergency preparedness

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. Measure J will continue to provide funding toward technology beyond 2011. It is currently anticipated that we will not complete bond funded technology projects until 2014. Efficiency and innovation together with the Board of Trustees strategic direction are the driving force behind these measures.

2008-2009 Accomplishments

- Upgrade the On-line Application including multi college options
- Implement AlertU, providing mobile alert messaging. AlertU is a hosted emergency mass notification system that provides text messaging during an emergency.
- Create IT Standards to be used in all new buildings and remodel projects
- Standardize Scheduling And Reporting System (SARS) software to aid in the collection of valid Management Information Systems (MIS) data used to track student contacts

- Build on ImageNow, a document storage and workflow solution, to include the curriculum committee approval process (Yuba).
- Phase 2 multi college – continue the process of separating Woodland Community College from Yuba College in Colleague
  - o Registration module started
- Installation of security cameras (Clearlake and WCC)
- Upgrade the internet connection to DS3 (WCC) provided by the state Chancellors office to increase our access to the World Wide Web.
- Campus Police – Added Jeanne Clery Reporting module (in-house development)
- WebAdvisor upgrades
  - o My Restrictions
  - o Faculty Census Certification & Drop process
- BookNow interface built to purchase textbooks
- Build on ImageNow to include Veterans Affairs

Measure J
- Implement VMware, a server virtualization solution. This solution will reduce total cost of ownership by reducing the number of physical servers as well as save on electrical costs.
- Phase 2 VOIP – implement the new phone system at WCC.
- Phase 1 Blackboard - Perform the conversion of WebCT to Blackboard including the enhanced functionality of Colleague integration.
- Prepare building for occupancy following remodel – 1000 Yuba
- Expand wireless access points – building 1000 and the surrounding area (Yuba)

This year Woodland Community College became the 110th College in the state. Phase 2 of the multi college plan was essential to providing the proper reporting at the end of this first year. Also accomplished was the implementation of the new phone system and improved access to the internet at WCC. In addition, a VMware solution was put into operation for the District servers. This solution reduced the number of physical servers from 30 down to 3 resulting in a cost savings of both replacement hardware as well as energy savings. For this energy savings we received a PG&E rebate check. The implementation of an emergency messaging system, AlertU, was also accomplished providing the ability to notify groups of an emergency or urgent situation.

2009-2010 Accomplishments

- Create new websites for WCC and Yuba College
- WebAdvisor upgrades
  - o My Degrees
  - o Total Compensation
- Booklook interface built to preview books for E-Follett (law requirement)
- Phase 3 multi college – continue the process of separating Woodland Community College from Yuba College in Colleague
  - o Registration module in-progress
  - o Financial Aid module started
  - o ImageNow redesign of Registration setup
- Basic Skills Initiative – MIS Component completed
- Build on ImageNow for HR department setup & trained
- IT Project/WorK Order system built in-house

Measure J
- Phase 2 infrastructure (Yuba) - Continue backbone infrastructure upgrade
- Install a generator to support power outages in the server room
- Replace individual batteries in the server room with an enterprise solution

- Update wire management and equipment racks in the server room
- Update cooling system in the server room
- Phase 3 VOIP - Complete the VOIP installation
- Phase 1 Portal – purchase, install and configure the system which will eventually provide a personalized, secure and customized gateway for all campus constituents.
- Build on ImageNow to include the capabilities of web access and document control
- Install, setup and train users in Colleague Advancement, a software solution for the Foundation
- Phase 1 Reporting - Install initial Business Objects software for reporting capabilities and dashboards
- Phase 2 Blackboard - Blackboard live for all on-line classes

These projects have resulted in immediate increase in efficiencies and effectiveness in a number of areas, replacing the backbone switches, antiquated battery solution, and the updated cooling system all result in direct savings on our electrical bills. The VOIP conversion is the most noted cost savings, currently at over $50,000 annually and projected to almost double that once the final cleanup in completed. In addition to the cost savings there is additional functionality in the phone system, 4 digit dialing to all campus locations and the ability to send alert messages. Other noteworthy projects are moving to a supported version of Blackboard for our on-line students and the preparation of Business Objects that will be used for reporting purposes.

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.
- Upgrade the internet connection 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 In Progress/Plans

- Phase 4 VOIP - Complete the cleanup of old Centrex phone lines.
- Phase 4 MyCampus – Continue to integrate software into the portal and to add useful features.
- Move all remaining desktops to the Active Directory environment in order to facilitate remote desktop access.
- Install VOIP phones in the classrooms and setup call groups for emergency notification purposes.
- Work with Smart Energy Options, a state funded contractor, to setup auto shut-down of PC's for energy savings.
- Continue working 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.
- Implement TracDat, an assessment management solution. Provides a complete process application for managing continuous improvement.
- Implement a new parking decal provisioning program.
- Phase 2 Board Docs - Provide information and support to Board Docs for implementation and act as a single point of reference for technical input.
- Design new websites for Clearlake Campus and the District offices.
- Phase 1 – Begin discovery of a content management system providing the tools to build and maintain department/faculty web pages

Measure J
- Prepare buildings for occupancy following remodels – 100, 300, and 400 WCC, 1200 Yuba, Health/Public Safety Yuba
- Relocate Yuba Library personnel and services for remodel
- 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
- 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.
- Examine security camera solution for all sites

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.

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, provides training opportunities, and
- Participation on the Datatel User Group (DUG) Board. This Board is at the national level and represents all clients in collaboration between and among the membership and Datatel.
- Annual faculty PC replacement, currently our only funded total cost of ownership (TCO) project.
- Encourage student participation/input through forums sponsored by the Technology Committee 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 Officers, of which I am a member.

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

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

Other areas of interest:
- ✓ The Director of 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.
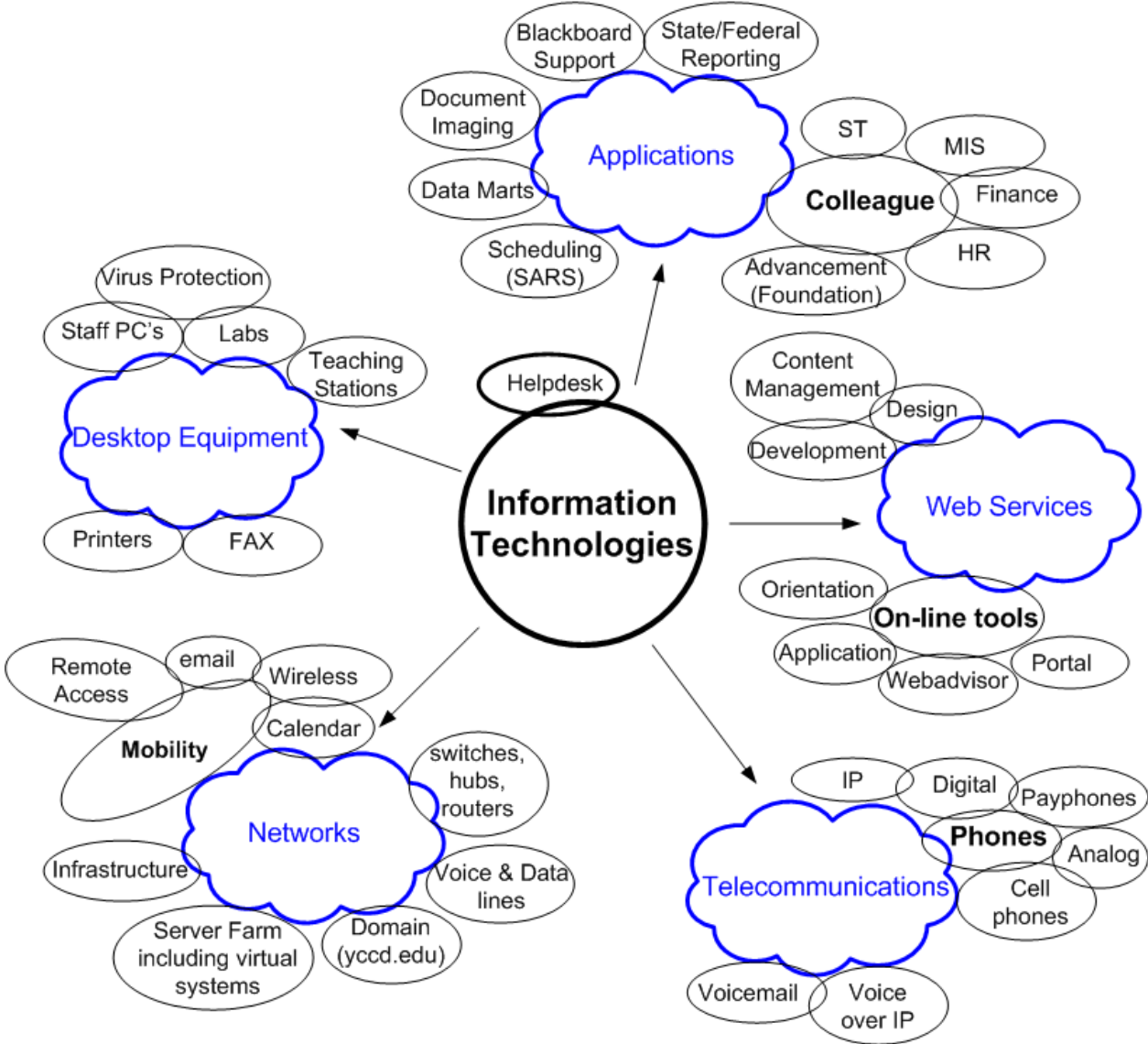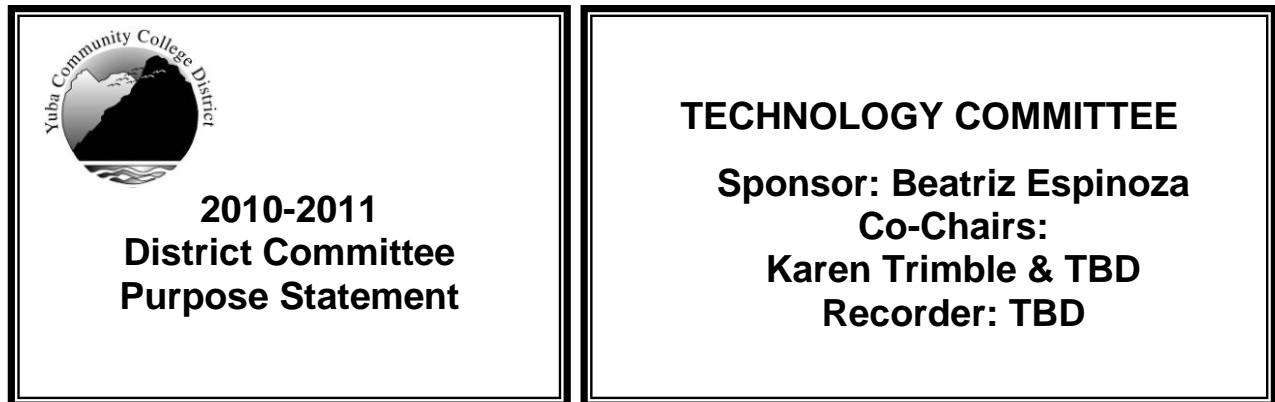
Information Technologies
Products and Services

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 – Technology Committee Purpose Statement

2010-2011 District Committee Purpose Statement	**TECHNOLOGY COMMITTEE** **Sponsor: Beatriz Espinoza** **Co-Chairs:** **Karen Trimble & TBD** **Recorder: TBD**

Committee Purpose:
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 Four Year 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. Create and maintain software and hardware District Standards.
4. Monitor Section 508 compliance and assist in its implementation.
5. 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.

Special Guidelines, Parameters, and/or Resources:
1. Agenda to be distributed 3 days in advance of meeting.
2. Minutes to be distributed 5 days following each meeting.
3. Membership from each campus group, and gender and ethnic diversity will be sought.
4. Issues outside of the Technology Committee purpose shall be referred to the appropriate manager, team, or committee.
5. Sponsor, Committee Chair(s) and members will carry out responsibilities identified in the "Guidelines for YCCD Teams and Committees".
6. The Director Information Technologies shall be an ongoing Co-chair of the committee. Appointed members will serve 3 year staggered terms.

Meeting Schedule:
The committee will meet on the third Thursday of the month during the academic year at 12:00 in Room 1159, with additional meetings scheduled as necessary for a specific plan/project. Other sites will have access via teleconferencing and/or video conferencing.

How Work Is Communicated:

1. Agendas and minutes will be posted to the YCCD web site.
2. Proposed agendas will be emailed to all members prior to the meeting to allow additional items to be placed on the agenda.

Recommendations Go To:

1. Technology training recommendations will be available for viewing.
2. College Councils for recommendations to the Presidents.
3. Issues for further study and/or action referred to the appropriate team or committee.

Finalized 6/17/03
Updated 8/8/07
Updated 6/30/08
Updated 10/17/09
Updated 5/27/10

Appendix C – Total Cost of Ownership

Background
In 2002, the State Board of Governors adopted the Technology II plan for the partial funding of technology in the California Community College system. The plan was built on a study provided by the Gartner Group. This adoption came at a time when state financial resources were not adequate to fund the proposal, yet it stands as the current Technology Plan for the California Community College System. In March 2008 the Technical Support Baseline Standards were updated as shown below. The plan takes into account all associated cost 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.

	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.) and software including servers, peripherals (excluding labs) and assistive technologies. Maintains network connectivity and provides staff and faculty support.	4.5	5.5	12.5
S2	Lab/classrooms Technical Assistants 1/75	Provides simple technology maintenance and assists faculty & students during and out of class with technology issues. *Note: Due to departmental reductions and IT has a centralized service much of this has been transferred to IT technicians.*	3	0	7
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.	1	1	1.5
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	4

S6	Technical Training Specialist 1/300 FTE Faculty and Staff	Trains staff and faculty. May runs a technology training center.	0	1	2
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	1.5
S12	Technical Manager 1 /10 technical staff	Manages technical personnel & sub-functions	1	0	0
S13	Higher level manager who supports instructional systems	Manages overall technology function. Acts as liaison with academic administration.	1	0	0
	Programmer/Analyst	Performs analysis and programming duties in the development, implementation, and support of IT	3	1	
	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.	.5	.5	

Appendix D – Yuba College Self Study 2005

Accreditation Self Study, Technology Resources

The following excerpt is from the 2005 Accreditation Self-Study, Standard 3 C, Technology Resources. Technology resources are used to support student-learning programs and to improve institutional effectiveness. Technology planning is integrated with institutional planning.

C1 Technology meets Teaching/Learning Needs

The institution assures that any technology support it provides is designed to meet the needs of learning, teaching, college-wide communications, research and operational systems.

C1a Technology Enhances Institutional Effectiveness

Technology services, professional support, facilities, hardware and software are designed to enhance the operation and effectiveness of the institution.

Descriptive Summary

Information Systems at Yuba College has become increasingly centralized as the requirements for budgetary efficiency have become more critical. At this point, the IS office, located at the Marysville Campus, is the primary unit responsible for planning, implementation and evaluation of IS infrastructure and day-to-day operations. A small unit of IS personnel, operating independently from this corps, is located at the Learning Resource Center at Marysville, and is responsible largely for audio-visual and limited computing support of academic programs. Some individuals, who have assumed IS roles on various campuses and centers, provide occasional services in support of the District's IS operation. These units cooperate where their jurisdictions inevitably overlap.

Instructional Needs: Instructional needs are identified through the recently adopted Educational Master Plan. This plan documents the needs and direction of all educational and student support service programs. The Plan outlines specific timelines and expectations in the acquisition and use of technological resources, delegating these to the Technology Subcommittee, which is a subcommittee of the District Council. This subcommittee is also tasked with defining and prioritizing the details of the technology goals defined in the EMP. Instructional equipment needs are identified and prioritized through a joint process involving both the Curriculum Committee and the Technology Subcommittee. The Director of Information Systems is a resource to the District Council as well as a chair of the Technology Subcommittee.

The District also uses data from the Chancellor's office, Technology II Plan which sets minimum standards for various elements of the computing infrastructure. The standards include hardware, access, service level, security and disaster recovery, staffing, training and support. Yuba Community College District is continually working towards meeting the goals of Tech II.

Administrative Needs: Administrative system needs are identified by the departments using the software. Because administrators and staff rely heavily upon Datatel Colleague for data gathering, storage, categorization and analysis, considerable training in identifying and meeting their IS needs is achieved through the District's membership in California Community Colleges Datatel Users Group. The Datatel Users Group has workshops at least three times a year to share information, concerns, issues and problem resolutions.

Individual Needs: In addition to the items above, the Information Systems Department also receives direct requests for service from all areas including requests directly from students. Depending on the nature of the request, items may be directed to various committees for further review or dealt with

immediately by the department. Requests may also require that a cost analysis be completed and budget allocated.

Ethics and Technology: Overall, the YCCD Board of Trustees, by delegating authority to the Superintendent/President, mandates that technology throughout the District be utilized for educational and professional purposes. According to the Board Policy Manual (2004);

> "The Superintendent/President shall establish procedures that provide guidelines to students and staff for the appropriate use of information technologies. The procedures shall include that users must respect software copyrights and licenses, respect the integrity of computer-based information resources, refrain from seeking to gain unauthorized access, and respect the rights of other computer users".

Self Evaluation

The Office of Information Systems faces serious infrastructure challenges in meeting the operational and effectiveness needs of the District. Like most districts, YCCD is faced with growing needs for technology, similarly growing needs for technology training, and declining financial support to meet these needs.

Information Systems has worked toward responding to these challenges through several strategies. First, IS served in a lead role in working to develop the Educational Master Plan, the document critical to the identification and prioritization of district-wide goals, objectives and outcomes. Secondly, IS has been a key player in the development of the District's Technology Plan, a document designed to, wherever possible, prioritize those services that lead directly to student learning. Third, IS has been instrumental in attempting to tie technology planning in with the facilities assessment and the corresponding plan that was developed during the period of the 2002 and 2003 fiscal years. Finally, where dollars have been limited, IS has made every effort to establish priorities that most directly impact students.

The Office of Information Systems is aware of the systemic nature of the services and support provided by this office. At no time, has the District been immersed in a planning process as broad-based and systemic as that currently in its latter phases.   We are confident that, more than ever, the inter-related nature of services, support, facilities, hardware and software is understood and addressed as we plan for the future.

In order to meet faculty, staff and student needs, IS staff members have increasingly been called upon to work evenings and weekends in addition to the normal workload. While much of this has been done voluntarily, the need for a long-term solution to the financial shortfalls in this area must be addressed.

The Educational Master Plan provides some assurance that the District will embrace a consensus-based set of priorities, but the backlog of need dictates that either more resources be located or that some long-term needs remain unmet.

Planning Agenda

Current planning processes must be tied to financial prioritization at District level. These issues are addressed, in more detail, in the Educational Master Plan.

C1b Information Technology – Professional/Student Development

The institution provides quality training in the effective application of its information technology to students and personnel.

Descriptive Summary

The Office of Information Systems has developed a draft plan designed to review the training needs of all users, develop a curricular response, and evaluate the results. This plan is competency-based and, to that extent, outcomes driven. It is designed with the understanding that technology is changing at a tremendously rapid rate, that resources are limited, and that not all end users have similar needs. Some aspects of this plan, though still in draft form, are being implemented while other aspects await internal and/or external financial support.

Self Evaluation

The Office of Information Systems has categorized its end users into three distinct groups for purposes of training. The needs of each group are unique as well as many of the individuals within each group.

Faculty and Staff: The first group, faculty and staff (and administration), has needs related to job performance. Faculty and staff are generally given a menu of workshops in which they can enroll and are encouraged to engage in this form of professional development. All workshops are competency-based with the specific competencies highlighted in the referenced plan.

Students: Student training consists of both formal and informal components. Formally, students need to access both the telecommunications infrastructure and the computing services that support the instructional mission of the District. Informally, day-to-day questions that inevitably arise among students need to be addressed by student assistants. Overall, the competencies to be addressed when training such students have been defined by the (statewide) Intersegmental Committee of the Academic Senate (ICAS).

Technology Support Staff: Perhaps the most critical of all training needs is that provided on behalf of the Technical Support Staff. In a climate of rapid technological evolution, those employed by IS and by the various campus laboratories need to remain at the forefront in providing training throughout the District. The training plan for this group is still in its preliminary phases of development owing, primarily, to the extensive costs involved with such training.

Professional development for faculty, staff and technology support personnel is difficult because of the high costs associated with its implementation. The thumbnail summary of the plan for such professional development (and the referenced plan) are only being implemented where resources have been defined for doing so. The fact that the plan has never been formally approved is moot since many of its elements are understood to be base necessities.

The staff of the Office of Information Systems is a highly utilized group that is very dedicated to the development and service of the systems needed throughout the District. Their staffing levels meet basic needs, but extending beyond this level will continue to pose difficulties.

Planning Agenda

The training plan needs to be finalized resources found for its support.

Timeline: 2005-2007
Responsible Party: Director of Information Systems (supported by President's Executive Staff)

C1c Technology – Equipment Maintenance & Upgrades

The institution systematically plans, acquires, maintains, and upgrades or replaces technology infrastructure and equipment to meet institutional needs.

Descriptive Summary

In 2002, Yuba Community College District developed a five-year Technology Master Plan as part of the current administration's effort to establish a formalized, systemic planning process. This plan, which continues to evolve, sets forth (in the bullets below) the vision for the District's:

- Technology Infrastructure
- Its technology goals (hardware, access, service level, security and disaster recovery, staffing training, support, development of instructional materials, web portal and web services)
- Its vision of distance/distributive education, and
- Its phased plan for network infrastructure improvements
- The overall recommendation that equipment be replaced on a four-year cycle

Additionally, the current administration established a Technology Subcommittee whose purpose was to be "responsible for accessing, coordinating and planning the implementation and maintenance of technology needs for the YCC District". Specific purposes for the Technology Subcommittee have been defined as:

- Create and manage the 5 Year Technology Plan for the District, a living document.
- Create and maintain software and hardware District standards.
- Monitor ADA compliance and assist in its implementation.
- Make recommendations for the training of technical staff.
- Oversee the distribution/redistribution of existing computer equipment to meet the needs of a program or area.
- Provide a "think tank" where all areas in the District can come together to discuss new and emerging technologies, access how that technology might be used in the District and its feasibility.
- Create a plan for the implementation of any new technology.
- Make recommendations related to TTIP expenditure.

Within this organizational framework, the Office of Information Systems utilizes three principal sources for establishing and maintaining the technology infrastructure, equipment, and software.

General Operating Fund: During the annual budget development process, needs are assessed, the progress of previous plans reviewed, priorities are reconsidered, and allotments are made vis-à-vis other competing interests within the District.

Technology Infrastructure Grant (TTIP): Through this annual (though recently constricted) funding source, infrastructure needs can be upgraded under an approved plan on an annual basis.

Sponsored Program Support: This refers to program-specific funding provided through grants/categoricals. Program directors, when applying for external support, are encouraged to carefully consider the entire gamut of technology needs to relieve the district of supplemental expenditures in support of such programs. This has resulted, in many cases in the addition of considerable technology.

The Office of Information Systems is responsible for establishing and maintaining the District's technology infrastructure. IT is assisted, as well, by departmental classified staff, who are assigned to various computer labs throughout the district's campuses.

Self Evaluation

The Information Systems department performs in a capable manner although insufficient staffing levels are problematic. With only three full-time desktop technicians and 1200 desktop units, spread over a 4,000 square mile district, tasks are often reactionary rather than proactive.

One of the primary means of maintaining the "pulse" of the District's computing system and user needs is the YCCD "Help Desk."   This service is the portal through which emergency needs are addressed. Because desk-top computing is still, after 20 years, in its historical infancy, emergencies continue to consume an inordinate portion of Information Systems' staffing time. The Computer Help Desk provides 24-hour assistance via telephone, and email. Access to the Help Desk is also provided through the use

of our network by means of a web-browser interface. Users can input a request directly through this interface and are able to check on a case as it progresses. The goal is to provide assistance quickly, to minimize the frustration and loss of efficiency caused by hardware or software problems. Tracking of such problems is also a function of the Help Desk. Appropriate software is utilized to record help desk and service requests to provide data regarding common problems and solutions, as well as provide analysis of response time.

At present the college has almost no resources devoted to help desk functions. While this may seem like a cost saving approach, it may well carry extensive costs in lost employee efficiency, and loss of students due to frustration. Efficiency suggests the provision of the service from a single location that can be staffed many hours per day and seven days per week.

As web-based distance education grows in importance to the college, twenty-four hours per day, seven days per week (24x7) help desk operation will be required. YCCD's website should include a FAQ page with easy navigation to provide help whenever possible. This would also ease the load on the help desk.

Systems considered mission critical to the Yuba College district are built and maintained to provide a high level of system reliability and availability. These systems can be broken down to four distinct areas; Colleague system, distance education systems, networking systems and components, support servers.

Colleague System: The Colleague system provides the records management function for all student, financial, and human resource data accumulated by the district. The Colleague system has a very high level of system reliability. In 2004 the system hardware was replaced with a new HP AlphaServer ES45. The system has several layers of hardware redundancy to ensure system reliability and availability. The system is on a scheduled backup with tapes verified for reliability. Weekly backup tapes are stored off-site in case of an on-site disaster. The system utilizes quad processors should any one fail the system could still operate. Remaining components of the system that have a single point of failure are protected with support contracts with HP. HP contracts dictate a technician will be on-site within 4 hours of our call. A redundant server provides the capacity to have Colleague back on-line within one business day.

Distance Education: Backups – System backup is maintained daily. The system is backed up, as a whole, once each day. Data backups are performed on a scheduled basis, the scheduled times varying from server to server depending on how often the data changes on them. For example, owing to extensive utilization of the WebCT server, backup is performed twice daily (projected for every two hours by fall, 2005), while the Distance Education server is backed up weekly.

Backups are stored in multiple servers/locations. At the end of each semester, backups that are determined to be important are backed up to DVD's and place in secure storage (fire proof). Backup copies of each of these are stored, as well, in off-site locations.

Networking Systems & Components: Mission critical networking systems would include devices and servers required to make connections both inside and outside the campus private networks. Routers, switches and firewalls make up these devices. For these types of devices Information Systems has "hot spares" on the shelf which can be easily configured to replace failing electronics. The district Domain Name Server (DNS) would be considered a mission critical network server. To ensure reliability of the DNS use of redundant disk arrays (RAID) provide redundancy in case of physical disk failure. The system has a routine scheduled backup to tape drive, backups are verified for reliability. Alternate off-site DNS entries are used on client workstations in case of on-site DNS failure.

Support Servers: Support servers are numerous at Yuba College a sample of systems would include; CommuniGate Email system, WebAdvisor, Sun Calendar server, YCCD Windows domain controller, T-Reg, MSSQL server, YCCD web server. Systems all employ RAID technology for protection of physical disk failures. Most systems are equipped with high capacity tape backup drives to ensure system can be restored. All systems are protected with an uninterruptible power supply in case of power failure. Each administrator employs slightly different methods for daily backup and verification of backup jobs. Systems are of various ages and have differing levels of hardware warranty and vendor support.

Media Services: In addition to the maintenance program devised by the Office of Information Systems, the Office of Media Services has developed a five-year cycle through which all audio-visual equipment reviewed. The criteria for investing resources in an item are threefold:

- Availability of parts for repair
- An item's age and usage
- Is the item still manufactured

In all cases, systems are monitored in real-time by an application called What's up Gold. When a system goes offline, the system administrator is immediately paged as to the status of the device or system.

All systems are maintained by qualified Systems Administrators. Systems Administrators perform routine system maintenance to ensure the overall health of the system. Administrators monitor log files and network resources to detect unusual or unstable system activity.

Although the Technology plan specifies that desktop equipment should be on a four-year replacement cycle, lack of dedicated budget to accomplish this task has led to some desktop equipment that exceeds the recommendations. In the 2005-2006 budget, a general fund line item has been added to begin addressing this problem. Although it is not yet fully funded, this gesture indicates progressive intent by the District. All the goals of the Technology Plan are, in fact, dependent upon available and/or enhanced funding. To elevate such support, the Technology Subcommittee will serve in an advocacy role.

Planning Agenda

Update, finalize and implement (where possible) the District's Technology Plan. This is the directive given to the Technology Subcommittee in the Educational Master Plan.

C1d Distribution & Utilization of Technology

The distribution and utilization of technology resources support the development, maintenance, and enhancement of its programs and services.

Descriptive Summary

YCCD has created a technology infrastructure that supports the development and delivery of instruction and services to students throughout the district. The technology infrastructure provides all students, faculty and staff with access to appropriate technology to implement the instructional and service goals of the college. This goal has required major overhauls to several systems within the District, on an ongoing basis, in the past and will continue to do so in the future.

Where possible, The District is providing hardware, software, and physical access for those with disabilities. As new laboratories and classrooms are designed, staff knowledgeable of ADA requirements are consulted to make sure that consideration is given to those with varying disabilities.

Self Evaluation

A critical component of the programming capability of the District resides in its ability to develop, maintain and grow its networking infrastructure. Consequently, in the past two years many portions of the outdated networking infrastructure were updated or replaced.

Firewalls Replaced: In January 2002 aging DOS-based Internet gateways were replaced with medium-capacity firewalls at the Marysville and Woodland Campuses. In the summer of 2005 the main firewall for the District was replaced with a high-end unit, while a medium-capacity firewall was installed at the Clear Lake Center. The firewalls dramatically increased the security as well as network availability. The firewall also provides a high level of security based on policy. Activities such as denial of service attacks, syn floods, and other suspicious activities are blocked by the firewall system.   With the supplied tools of the

firewall, it is easier for administrators to identify problem systems within the local network. Systems sending large volumes of mail are flagged as being likely infected with virus or spyware. The District has a spare firewall that can be used in any of the three locations, in case of a failure, until the original unit can be repaired or replaced. In addition, in the spring of 2005, an electronic device was installed to reduce spam and to provide virus protection to the entire district.

Building Connectivity Improved: In 2002 older 10Mbps based switches located in the: Library, Information Systems Office, Student Services and Main Administration Building, Business Division were replaced. The main switch in the data center was also replaced. The main switch was a blade based technology which was outdated and without vendor support. A total of 6 new layer 3 switches replaced blade based system. All new switches have 10/100Mbps port speeds with 1000Mbps fiber optic uplink ports that connect back to the two 16 port optical switches that provide building-to-building connectivity.

Internet Upgrades Completed: In November 2003 the YCCD Internet connection was upgraded from two bonded T1 connections to a DS3.   The Data Center required several upgrades including; overhead ladder racking, additional power, and approximately 90' of 4" conduit to connect to the provider network.

Woodland Campus WAN Redesigned: In December 2003, the Woodland Campus Wide-Area Network (WAN) was redesigned. A new router, main switch, and firewall were installed. In the spring of 2005, an additional T1 line was bonded to the existing T1 line. This redesign allowed for distribution of the public IP addresses to the Woodland Campus, which was a requirement for IP-based video conferencing and improvement in the distributive education courses provided at that campus.

Distance education provides the ability for students to complete a variety of classes without coming to the origination site through televised courses via local cable companies, interactive real-time internet courses, and streamed classes for on demand viewing. The program has continued to grow since its inception with a constant infusion of funding. The district realizes that this is a potential area for continued growth.

ITV1 courses are ADA compliant and all use close captioning. ITV2 is not compliant, but currently is utilized only for nursing courses, which are exempt from such compliance.

The Office of Information Systems has done a commendable job in balancing the varying and highly expensive needs of its constituencies. A problem in doing so is that of having enough back-up staff, cross-trained to meet district-wide needs during periods of an individual's absence. Not all individuals agree, for example, as to whether the campus's Web CT system for distributive education has staff capable of maintaining the equipment and software during the absences of its operator.

Planning Agenda

Review needs for cross-training and work with the District to make professional development in these areas possible.

Timeline: 2005-2007
Responsible Party: Director of Information Systems

C2 Technology Resources – Assessment

Technology planning is integrated with institutional planning. The institution systematically assesses the effective use of technology resources and uses the results of evaluation as the basis for improvement.

Descriptive Summary

The specific purposes of the Technology Subcommittee are outlined in the District Council Handbook. These include:

- Create and manage the Five Year Technology Plan for the District, a living document. This plan will use the Educational Master Plan for its basis.
- Provide a "think tank" where all areas in the District can come together to discuss new and emerging technologies, access how that technology might be used in the District and it's feasibility.
- Create and maintain district wide standards for software and hardware.
- Monitor Section 508 compliance and assist in its implementation.
- Make recommendations to the Staff Development Committee for the training of technical staff.
- 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

Additionally, one of the implied purposes of the Technology Subcommittee is that of integrating technology planning with that of the District as a whole. This is manifest in its mission to "monitor ADA compliance," to "oversee the distribution/redistribution of existing computer equipment to meet the needs of a program area," to "create a plan for the implementation of any new technology," and to "make recommendations related to TTIP expenditures". All of these tasks call for members of the technology "community" to engage in dialog with multiple interests ranging from programming to the facilities within which such programs are to be implemented.

To ensure that these areas continue to operate cross-functionally, the President's Executive Staff has assigned the Director of Information Systems to play a key role in the development of several plans including (a) the Educational Master Plan, (b) the Multi-College District Plan, (c) the Technology Master Plan, and in an advisory capacity to (d) the District Facilities Plan. As the following example illustrates, technology planning and functions are today highly interconnected throughout YCCD's planning process. The Educational Master Plan (EMP), the Technology Plan and the District Facilities Plan are intertwined documents.

Within the interconnected framework within which the District conducts technology planning, needs of various units are differentiated according to needs and priorities. The paragraphs below indicate that institutional technology needs have been categorized and are reviewed cyclically:

Administrative Systems: The administrative system software maintenance agreement is renewed annually. The hardware does not exceed the recommended age of the equipment.

Instructional Hardware: Two main factors are taken into consideration; the age of the equipment and the technological needs of the program. Some programs, while they have newer equipment are still first in the queue for new equipment. These programs require the newest technology either to run their software or to provide students access to equipment that will allow them to complete their course satisfactorily. The replaced computers are then rolled down to the next prioritized classroom on the list. Due to reduced funding the items on the bottom of the list often receive equipment that is in excess of four years of age. Even given the reduced funding and older equipment, the District has been successful in continuing to provide the curriculum and to provide the students an opportunity to complete their coursework.

Instructional Software/Infrastructure: Operating systems, office software tools, virus protection, internet access and email are provided to all staff. The District also provides for distance education software, hardware to provide distance education coursework via the web, television broadcasts and streaming video. Owing to the changing needs of users and the evolving capacity of software systems, there is little choice but to review these on an ongoing basis.

Self Evaluation

Overall, the functions that fall directly or indirectly under the umbrella of the Office of Information Systems do well for an under-funded rural community college system. There is a lot of interest in technology and there are a number of individuals, not formally affiliated with Information Systems, who frequently assist (usually positively) in various operations – as well as in overall planning.

In general, the survey conducted by the Educational Master Planning Subcommittee indicated that all YCCD constituencies "agreed somewhat" with the statement that "My campus . . . has well equipped classrooms and laboratories" (3.60/5.00). Yet when asked the comparative importance of community colleges supporting technology (vis-à-vis other functions), these same constituencies ranked computer (2.81/3.00), internet access (2.81/3.00) and equipment (2.76/3.00) as among the most important of a college's priorities.

An additional issue surrounds the support of distance/distributive education. While Distance/Distributive Education has been a leader in improving enrollments (FTES) over the past ten years, this has not been manifest in budgetary support for materials, personnel and professional development in this area. Distance Education is critical to rural districts and needs to achieve a higher prioritization for the overall betterment and balance of YCCD's educational offerings. Where Distance/Distributive Education has been implemented, it has been successful.

In summary, the planning process, which has definitely integrated technology planning with other aspects of District planning, has improved over the past several years almost to a fault. Program directors and those involved in the day-to-day operations of technology hope that the immense amount of time spent in planning will eventually realize gains in budgeting and the things that go with improved budgeting; staffing, professional development, equipment, and materials.

Planning Agenda

Review Distributive/Distance Education programming to assess further investments in human and material resources, utilizing program review process.

Timeline: 2006-07
Responsible Party: Vice President, Instruction

Accreditation Evaluation for Technology Resources – General Observations

The self study report report is thorough and frank in addressing this standard. The Office of Information Systems at Yuba College is to be commended for providing extensive help in producing the college's Educational Master Plan and subsequent Technology Plan, both of which speak to goals, acquisition, use, and replacement of technology. The Institutional Information Systems Training Plan (in draft format) identifies necessary levels of technology training for faculty and staff. The Intersegmental Committee of the Academic Senate developed both an essential and desirable list of information competencies for students.

Findings and Evidence

The self study report confirms that the college meets this standard. The Office of Information Systems is the responsible unit, and the director works through the Technology Subcommittee developing a plan initiated by the Educational Master Plan. The caveat is that there are serious infrastructure challenges resulting from lack of funding and extensive district needs. Another concern is whether or not there is adequate staff to meet the needs of the institution, given that there are only three full-time desktop technicians and the Help Desk in the computer lab is staffed only intermittently. (III.C.1)

The Institutional Information Systems Training Plan divides users into three categories: faculty and staff, students, and technology support staff. Students and technology support staff are the most challenged for training. Students have to rely on student assistants, and because of costs, the plan for training staff is still in its preliminary phase. (III.C.1)

It was not readily apparent to the team the extent to which the results of assessment of technology resources are used for improvement. (III.C.2) Therefore, it is not clear if the college meets this part of Standard III.C.

Conclusions

The college meets most of Standard III.C, but it is weak in assessing the effective use of technology resources, particularly staff, and using the results of evaluation as a basis for improvement. The team suggests that the college consider enhancing its technology training program for faculty and staff.

Standard III.C. Recommendations

See **Major Standards Recommendations 2, 3, and 4** in the Summary section at the beginning of this report.

Standards Recommendation 15. The college should ensure that quality training in the use of technology is provided for faculty, staff, and students. (III.C.1)

Standards Recommendation 16. The college should review its staffing resources in Information Systems in order to ensure adequate service throughout the district. (III.C.1)

Appendix E – Woodland Community College Self Study 2008

Accreditation Self Study, Technology Resources

The following excerpt is from the 2008 Accreditation Self-Study, Standard 3 C, Technology Resources. Technology resources are used to support student-learning programs and to improve institutional effectiveness. Technology planning is integrated with institutional planning. Not all Tables are included, view complete documentation at wcc-acc.yccd.edu.

IIIC-1 Technology meets Teaching/Learning Needs

The institution assures that any technology support it provides is designed to meet the needs of learning, teaching, college-wide communications, research and operational systems.

IIIC-1a Technology Enhances Institutional Effectiveness

Technology services, professional support, facilities, hardware and software are designed to enhance the operation and effectiveness of the institution.

Descriptive Summary

Information Technologies at Woodland Community College is a centralized operation for both Academic and Administrative services. At this point, the IT District office, located at the Yuba College (Marysville) campus, is the primary unit responsible for planning, implementation and evaluation of IT infrastructure and day-to-day operations. The Technology Committee, as the District transitions toward a multi-college formulation, will remain a District Committee, reporting to the Chancellor"s Executive Staff.

Woodland Community College has been an experimental location for numerous IT projects over the past few years. Owing to the construction of two modern structures, IT has had the opportunity to provide leading edge solutions to student and faculty needs at WCC. Some of these include:

- A campus surveillance system with cameras that can scan the external parking, entrance and exit areas. The system monitors two internal locations that include critical points of interaction involving cash flow and areas (the library) that are subject to occasional theft.

- Installment of a voice over IP project that will manage all phones at WCC (October 2007) and integrate these with computing. This system has been pre-installed in the two newest buildings and is being retrofitted into the older buildings.

- The development of wireless campus capacity, the first YCCD campus to achieve this capability (August 2007).

Additionally, individuals working in support of media and audio-visuals (for the LRC) assist in the operation and maintenance of computing labs in that complex. Some other individuals (reporting to other offices and largely volunteer in nature), who have assumed IT roles on various campuses and centers, provide occasional services in support of the District"s IT operation.

As the table on the following page indicates, staffing for the technologies at WCC has grown substantially over the past three years and is anticipated to continue in this manner.

TABLE 71
Woodland CC Service Area
Recently Added IT Personnel for Multi-College
2003-04 – 2006-07

POSITION	BASIC DESCRIPTION / RESPONSIBILITIES
IT Position	Introduced on half-time basis in 2003. Enlarged to full-time status in 2006. Supports administrative and faculty (office) computing and infrastructure. Reports to Assistant Director of IT at District level.
Instructional (Lab) Assistants	1.5 positions service all tech-related labs (except that in library). These individuals support student labs and instruction and will assume open lab responsibilities in new LRC.
Audio-visual and Media	1 full-time position. Is assisted by ½-time person affiliated with the library. New library media specialist position anticipated in 2007-08 (pending approval). Also supports some computer laboratories affiliated with library.*

Instructional Needs: Instructional needs are identified through the Academic Program Review and Student Services Review process, as well as through separate processes to allocate funds for purchase of instructional and student support services equipment. The Educational Resource Planning Committee, through 2006-07, allocates a portion of the money available for computers and related technology to the Technology Committee to address the needs identified by programs and services.

This Committee is also tasked with defining and prioritizing the details of the technology goals defined in the EMP. WCC employees have provided input into technology planning at WCC. The Director of Information Technologies is a resource to the College Councils as well as a chair of the Technology Committee.

The District IT office also intends to participate in the Tech III Plan, which will tie system-wide IT planning to the California Community Colleges System Strategic Plan. The District formerly used data from the State Chancellor"s office, *Technology II Plan* which set minimum standards for various elements of the computing infrastructure. The standards included hardware, access, service level, security and disaster recovery, staffing, training and support.

Administrative Needs: Administrative system needs are identified by the departments using the software. Because administrators and staff rely heavily upon Datatel *Colleague* for data gathering, storage, categorization and analysis, considerable training in identifying and meeting their IT needs is achieved through the Districts membership in California Community Colleges Datatel Users Group. The Datatel Users Group has workshops at least three times a year to share information, concerns, issues and problem resolutions.

Individual Needs: In addition to the items above, the Information Technologies Department also receives direct requests for service from all areas including requests directly from students. Depending on the nature of the request, items may be directed to various committees for further review or dealt with immediately by the department. Requests may also require that a cost analysis be completed and budget allocated.

Ethics and Technology: Overall, the YCCD Board of Trustees, by delegating authority to the Chancellor, mandates that technology throughout the District be utilized for educational and professional purposes. According to the Board Policy Manual (2006);

"The Chancellor shall establish procedures that provide guidelines to students and staff for the appropriate use of information technologies. The procedures shall include that users must respect software copyrights and licenses, respect the integrity of computer-based information resources, refrain from seeking to gain unauthorized access, and respect the rights of other computer users.

Distance Education and Media: Distance Education and media, while working closely at WCC with the Office of Information Technology, are part of academic support. Distance Education is an emerging service providing an increasing number of online and ITV courses to Yolo and Colusa County residents. With the increase in construction and the development of a dedicated facility in Colusa County, these services will increase during the five-year period on the immediate horizon.

Self Evaluation
The Office of Information Technologies faces serious infrastructure challenges in meeting the operational and effectiveness needs of Woodland Community College and the District, as a whole. Like most colleges, WCC is faced with growing needs for technology, similarly growing needs for technology training, and declining financial support to meet these needs. In addition, it has been difficult for IT to

keep up with more recent technology innovations, such as introducing wireless to WCC"s campus.

Strategies for Addressing Issues: Information Technologies has worked toward responding to these challenges through several strategies. First, IT participated in the development of the *Educational Master Plan*, the document critical to the identification and prioritization of goals shared by Woodland Community College and the District at large. Secondly, IT has been the key player in the implementation of the

District"s *Technology Plans*, documents designed to prioritize those services that lead directly to student learning. Third, IT has been instrumental in attempting to tie technology planning in with the District Facilities Plan that was developed during the 2006 fiscal year and is updated annually. Finally, where dollars have been limited, IT has made every effort to establish and balance priorities (that most directly impact students) across the campuses and centers that comprise the District.

Distance Education: Distance Education"s expansion to Woodland Community College and to the Colusa area are have been initiated and continue to enlarge. While several WCC faculty have enthusiastically participated in learning DE, the younger faculty will need to complement traditional delivery methods by getting training and materials in online and ITV course delivery. The new facilities,

both in WCC"s LRC and those slated for installation at Colusa, will encourage such professional development.

Nonetheless, more IT support is clearly needed for providing new and replacement equipment to a rapidly

growing Woodland Community College. The College supports the District"s Information Technology Office in "lobbying" for more financial support and staffing to enhance this vital function. With both real growth, and anticipated future growth immediately on the horizon, WCC will need to provide these new

populations of students and employees with the best opportunity to succeed in today"s high tech arena.

Planning Agenda
To equip new and remodeled buildings, Woodland Community College is getting support (and District

cooperation) in attaining Group II Funds from the Chancellor"s Office. There is, additionally, the pressing need to bring wireless technology to WCC.
1. Increased on-site IT staffing for Woodland Community College and

Timeline: Tentatively 2008-09 Academic Year (See Five-Year Fiscal Plan & Allocation Model)
Responsible Party: President, Chancellor, Board of Trustees

2. Support to replace aging equipment in areas not benefiting from Group II funding.

Timeline: Short-term infusion in 2007-08 and 2008-09 years needed with ongoing replacement plan
Responsible Party: President WCC, in negotiations with District IT and Board of Trustees

3. Include wireless Internet technology in the site-specific WCC Technology Plan and implement this goal within the next two academic years.

Timeline: 2009-10
Responsible Party: WCC Dean of Instruction, Director of IT (District)

IIIC-1b The institution provides quality training in the effective application of its information technology to students and personnel.

Descriptive Summary
The Office of Information Technologies developed a draft plan designed to review the training needs of all users, develop a curricular response, and evaluate the results. This plan is competency-based and, to that extent, outcomes driven. It is designed with the understanding that technology is changing at a tremendously rapid rate, that resources are limited, and that not all end users have similar needs. Some aspects of this plan, though still in draft form, are being implemented while other aspects await internal and/or external financial support.

Specific (especially software) training of WCC staff has been available periodically through personnel from the District-based IT department. Training of this type has been done to assist staff in learning

Datatel Colleague, the District"s database software. Additionally, with the launch of iCampus, a trainer spent an entire day providing group training to students as to how to access and utilize this program.

Self Evaluation
Woodland Community College, as part of the recent development of a Learning Resource Center, has dedicated a room in the Center for training. The Office of Information Technologies has categorized

Woodland Community College"s end-users into three distinct groups for purposes of training. The needs of each group are unique as well as many of the individuals within each group.

Faculty and Staff: The first group, faculty and staff (and administration), has needs related to job performance. Faculty and staff are generally given a menu of workshops in which they can enroll and are encouraged to engage in this form of professional development. All workshops are competency-based with the specific competencies highlighted in the referenced plan. Unfortunately, application software is not available within this "menu of workshops" and could assist greatly with the efficiency of college employees.

Students: Student training consists of both formal and informal components. Formally, students need to access both the telecommunications infrastructure and the computing services that support the instructional mission of the District. Informally, day-to-day questions that inevitably arise among students need to be addressed by student assistants. Overall, the competencies to be addressed when training such students have been defined by the (statewide) Inter-segmental Committee of the Academic Senate (ICAS).

Technology Support Staff: Perhaps the most critical of all training needs is that provided on behalf of the Technical Support Staff. In a climate of rapid technological evolution, those employed by IT and by the various campus laboratories need to remain at the forefront in providing training at WCC and throughout the District. The training plan for this group is still in its preliminary phases of development owing, primarily, to the extensive costs involved with such training.

Professional development for faculty, staff and technology support personnel is difficult because of the high costs associated with its implementation. The thumbnail summary of the plan for such professional development is only being implemented where resources have been defined for doing so.
The staff of the Office of Information Technologies is a highly utilized group that is very dedicated to the development and service of the systems needed throughout the District. Their staffing levels meet basic needs, but extending beyond this level will continue to pose difficulties.

Planning Agenda
1. The training plan needs to be finalized and resources found for its support. An alternative would be for WCC to develop its own Training Plan.
Timeline: 2007-2009

Responsible Party: Director Information Technologies (supported by Chancellors"s Executive Staff)

2. Play advocacy role in assisting the Office of Human Resources (and Information Technologies) to get a "Staff Training" position so that application software workshops can be provided to college employees
Timeline: 2008-2010
Responsible Party: Director of Human Resources, College President, College Council

IIIC-1c The institution systematically plans, acquires, maintains, and upgrades or replaces technology infrastructure and equipment to meet institutional needs.

Descriptive Summary

Technology Planning: In 2005, Yuba Community College District developed a five-year *Technology Master Plan* as part of the current administration's effort to establish a formalized, systemic planning

process. This plan, which is updated annually, sets forth the vision for the District"s:
- Technology Infrastructure
- Technology goals (hardware, access, service level, security and disaster recovery, staffing

Training, support, development of instructional materials, web portal and web services)
- Vision of distance/distributive education, and
- Phased plan for network infrastructure improvements
- Overall recommendation that equipment be replaced on a five-year cycle

The Chancellor"s Executive Staff (CHEX) has studied the *Technology Plan* and worked with the Director of IT in prioritizing its components. The purpose of this effort has been to prioritize the funding support needed for the plan and to locate additional funds to support as many of its components as is possible.

Technology Committee: Additionally, the current administration established a Technology Subcommittee whose purpose has been to be "responsible for researching, planning and recommending implementation and maintenance of technology needs for the YCC District" **(**WCC College Council Handbook, p. 99). Specific purposes for the Technology Subcommittee have been defined as:
- Create and manage the 5 Year Technology Plan for the District, a living document. This plan will use the Education Master Plan for its basis.

- Provide a "think tank" where all areas in the District can come together to discuss new and emerging technologies, access how that technology might be used in the District and it"s feasibility.

- Create and maintain software and hardware per District Standards.

- Monitor Section 508 compliance and assist in its implementation.

- Make recommendations to the Staff Development Committee for the training of technical staff.

- Total Cost of Ownership: 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.

Under a multi-college formulation, the Technology Committee will remain a district-wide entity (See Multi-

College Committee Structure). As such, this committee will report to the Chancellor"s Executive (CHEX) Staff, where its formal "sponsor" resides. Recommendations from Woodland Community College will be

brought forth through WCC"s College"s Council, which will field and prioritize requests.
Technology Funding Sources: Cooperating with the Office of Information Technology, Woodland Community College has access to four principal sources for establishing and maintaining the technology infrastructure, equipment, and software at the WCC campus:

- General Operating Fund: During the annual budget development process, needs are assessed, the progress of previous plans reviewed, priorities are reconsidered, and allotments are made vis-à-vis other competing interests within the District.

- Technology Infrastructure Grant (TTIP): Through this annual funding source, infrastructure needs can be upgraded under an approved plan on an annual basis.

- Group II Funding: Funding made available by the Chancellor"s Office to support the development of technology infrastructure and hardware in new buildings.

- Sponsored Program Support: This refers to program-specific funding provided through grants/categoricals. Program directors, when applying for external support, are encouraged to carefully consider the gamut of technology needs to relieve the college of supplemental expenditures in support of such programs. This has resulted, in many cases in the addition of considerable technology.

- Measure J Funding: The District"s successful Bond campaign in November of 2006 has made available approximately $1 million dollars for development of IT infrastructure, hardware and software at Woodland Community College. Because Measure J funding can be used to secure a proportion of construction matching costs, Measure J funding can serve to increase Group II funding as well

T**echnology Systems:** Systems considered mission critical to the Woodland Community College are built and maintained to provide a high level of system reliability and availability. These systems can be broken down to four distinct areas; Colleague system, distance education systems, networking systems and components, support servers.

- Colleague System: The Colleague system provides the records management function for all student, financial, and human resource data accumulated by the District. The Colleague system has a very high level of system reliability. The core HP server was replaced as recently as 2007. The system has several layers of hardware redundancy to ensure system reliability and availability. The system is on a scheduled backup with tapes verified for reliability. Weekly backup tapes are stored off-site in case of an on-site disaster. The system utilizes quad processors should any one fail the system could still operate. Remaining components of the system that have a single point of failure are protected with support contracts with HP. HP contracts dictate a technician will be on-site within 4 hours of a call from appropriate personnel. A redundant server provides the capacity to have Colleague back on-line within one business day.

- Distance Education: Backups – System backup is maintained daily. The system is backed up, as a whole, once each day. Data backups are performed on a scheduled basis, the scheduled times varying from server to server depending on how often the data changes on them. For example, owing to extensive utilization of the WebCT server, backup is performed twice daily, while the Distance Education server is backed up weekly.

- Backups are stored in multiple servers/locations. At the end of each semester, backups that are determined to be important are backed up to DVD"s and place in secure storage (fire proof). Backup copies of each of these are stored, as well, in off-site locations.

- Networking Systems & Components: Mission critical networking systems would include devices and servers required to make connections both inside and outside the campus private networks. Routers, switches and firewalls make up these devices. For these types of devices Information Technologies has "hot spares" on the shelf which can be easily configured to replace failing electronics. The District Domain Name Server (DNS) would be considered a mission critical network server. To ensure reliability of the DNS use of redundant disk arrays (RAID) provide redundancy in case of physical disk failure. The system has a routine scheduled backup to tape drive, backups are verified for reliability. Alternate off-site DNS entries are used on client workstations in case of on-site DNS failure.

- Support Servers: Support servers are numerous at Woodland Community College a sample of systems would include; CommuniGate Email system, WebAdvisor, Sun Calendar server, YCCD Windows domain controller, T-Reg, MSSQL server, YCCD web server, and the new iCampus portal. Systems all employ RAID technology for protection of physical disk failures. Most systems are equipped with high capacity tape backup drives to ensure system can be restored. All systems are protected with a uninterruptible power supply in case of power failure. Each administrator employs slightly different methods for daily backup and verification of backup jobs. Systems are of various ages and have differing levels of hardware warranty and vendor support

Monitoring of Systems: In all cases, systems are monitored in real-time by an application called *What's up Gold*. When a system goes offline, the system administrator is immediately paged as to the status of the device or system. All systems are maintained by qualified Systems Administrators. Systems Administrators perform routine system maintenance to ensure the overall health of the system. Administrators monitor log files and network resources to detect unusual or unstable system activity.

Media Services: In addition to the maintenance program devised by the Office of Information Technologies, the Office of Media Services has developed a five-year cycle through which all audio-visual equipment reviewed. The criteria for investing resources in an item are threefold:
- Availability of parts for repair
- An item"s age and usage
- Is the item still manufactured

Help Desk: Faculty, staff and administration at Woodland Community College have access to a "Help Desk," available by email or telephone. This District-based service tracks the nature of IT-related problems, quickly provides the user with assistance, and tracks the types of problems common to users throughout the District.

Instructional Software/Infrastructure: Operating systems, office software tools, virus protection, internet access and email are provided to all staff. The District also provides for distance education software, hardware to provide distance education coursework via the web, television broadcasts and streaming video. Owing to the changing needs of users and the evolving capacity of software systems, these are reviewed on an ongoing basis.

Replacement Cycle Planning: WCC faculty and laboratory computers have been replaced cyclically since 2005. This system was developed as a result of an audit conducted by the District"s IT staff. Administrative and staff equipment is not a part of this system and is paid for out of departmental budgets.

Self Evaluation
By and large, both WCC and the District have been pleased with the progress, growth and support in the area of Technology. A very limited but committed coterie of staff has been able to build and maintain systems that have achieved the educational goals of the institution. However, several areas of concern, both real and potential, are provided below.

Staffing: Woodland Community College maintains one full-time technician, while District-based technicians move among the campuses. The WCC technician works closely with the YCCD Information Technology office, and certainly the scope of that position"s work is driven by the IT office. Owing to understaffing, both at the campus and District levels, these positions are primarily reactive.

Distance Education: WCC"s Distance Education capacity is slated to expand considerably as part of its emergence as a formal college. Currently, at both the campus and District levels, staffing is insufficient to meet the growing demands upon infrastructure, hardware and software.

Help Desk: While the Help Desk is effective in identifying and responding to WCC"s IT needs, there are very few resources devoted to the Help Desk functions. This can result in a back-log of service requests and the frustrations and inefficiencies that result. It is important that staffing be gradually infused into this area to maintain quality and efficiency in IT operations. Additionally, as web-based distance education grows in importance to WCC and the District, the Help Desk will need to be staffed on a 24 hour/day basis.

Funding: Under the circumstances through which technology (and equipment) funding is provided, planning for equipment acquisition and maintenance is oft-times nebulous. The amount of money allocated has varied tremendously over the years, with part of the allocation being on-going and the remainder ferreted out on an opportunistic or one-time basis.

Within this funding framework, the expanding needs associated with the addition of new staffing positions has been integrated into the funding equation. Added to the personnel cost of any position is the additional cost of the technology to support that position. By this means, new positions at WCC have available to them upon arrival the hardware and software they need to perform effectively.

Replacement Cycle Funding: Replacement cycle funding has worked well with faculty and laboratories. It needs to be extended for administrative and staff computing as well.

Planning Agenda
1. Improve IT staffing in general throughout the District and provide on-site staffing to address daily routine problems and implementation issues at Woodland Community College. Emphasis should also be given to Help Desk staffing at the District level.

Timeline: 2008-2009
Responsible Party: President WCC and Director, Information Technology

2. Ensure that Replacement Cycle Funding continues to elevate and support additional categories of employees in anticipation of increased usage at WCC and throughout the District

Timeline: 2008-2009 and ongoing
Responsible Party: President WCC, Technology Subcommittee, Director of Information Technology

3. WCC will need to develop campus-specific Technology Plan. This plan should benefit from a needs assessment and local input.
Timeline: 2008-2009
Responsible Party: Dean of Instruction, Technical Staff, District IT Representative

IIIC-1d The distribution and utilization of technology resources support the development, maintenance, and enhancement of its programs and services.

Descriptive Summary
YCCD has created a technology infrastructure that supports the development and delivery of instruction and services to students throughout the District. The technology infrastructure provides all students, faculty and staff with access to appropriate technology to implement the instructional and service goals of the college. This goal has required major overhauls to several systems within the District, on an ongoing basis, in the past and will continue to do so in the future.
Self Evaluation

Addressing ADA: Woodland Community College benefits from the District"s efforts to continue providing hardware, software, and physical access for those with disabilities. As new laboratories and classrooms are designed at WCC, staff knowledgeable of ADA requirements are consulted to make sure that consideration is given to those with varying disabilities. As course delivery through distance education continues to grow, ITV1 courses are ADA compliant and all use close captioning.

NOTE: ITV2 is not currently compliant, but is utilized only for nursing courses, which are exempt from such compliance.

The technology component of Woodland Community College adequately meets the current programming and service needs of the College. The District continues to assess the personnel, equipment and infrastructure requirements of the campus as the current pace of building, renovation and technological change threatens to outpace the College"s ability to keep current.

Ensuring Infrastructure Support: A critical component of the programming capability of the District resides in its ability to develop, maintain and grow its networking infrastructure. Consequently, in the past two years many portions of the outdated networking infrastructure were updated or replaced.

- Firewalls Replaced: In January 2002, aging DOS-based Internet gateways were replaced with a medium-capacity firewall at the WCC campus. In the summer of 2005 the main firewall for the District was replaced with a high-end unit. The firewalls dramatically increased the security as well as network availability. They have also provided a high level of security based on policy. Activities such as denial of service attacks, syn floods, and other suspicious activities are blocked by the firewall system. With the supplied tools of the firewall, it is easier for administrators to identify problem systems within the local network. Systems sending large volumes of mail are flagged as being likely infected with virus or spyware. The District has a spare firewall that can be used, in case of a failure, until the original
- unit can be repaired or replaced. In addition, in the spring of 2005, an electronic device was installed to reduce spam and to provide virus protection to the entire District.

- Internet Upgrades Completed: In November 2003 the YCCD Internet connection was upgraded from two bonded T1 connections to a DS3. The Data Center required several upgrades including; overhead ladder racking, additional power, and approximately 90" of 4" conduit to connect to the provider network.

- WCC campus WAN Redesigned**:** In December 2003, the WCC campus Wide-Area Network (WAN) was redesigned. A new router, main switch, and firewall were installed. In the spring of 2005, an additional T1 line was bonded to the existing T1 line. This redesign allowed for distribution of the public IP addresses to the Woodland Community College, which was a requirement for IP-based video conferencing and improvement in the distributive education courses provided at that campus. In spring of 2007, two additional T1 lines were added, one to address security concerns and a second dedicated to distance education.

Distance Education: Distance education provides the ability for students to complete a variety of classes without coming to the origination site, through televised courses via local cable companies, interactive real-time Internet courses, and streamed classes for on demand viewing. The program has continued to grow since its inception. The District realizes that this is a potential area for enhanced response to community needs.

Several problems, alluded to or even addressed in previous sections, will be here reiterated:
1. Staffing specific to Woodland will be necessary as will staffing to District IT efforts as a whole.
2. Additional training of IT staff for purposes of cross-training is currently only nominally available.
4. Equipment in older areas of WCC needs to benefit from a Replacement Cycle of annual funding.
5. Training of end users is critical to their competency and to the time demands on IT staff members.

A problem in doing so is that of having enough back-up staff, cross-trained to meet District-wide needs during periods of an individual"s absence.

Planning Agenda
Repeat planning agendas of IIIC-1c

IIIC-2 Technology planning is integrated with institutional planning. The institution systematically assesses the effective use of technology resources and uses the results of evaluation as the basis for improvement.

Descriptive Summary

WCC"s technology planning, as highlighted and detailed in Section IIIC-1c, is thoroughly integrated into

institutional planning as a whole. A driving component of all such planning has been the District"s *Educational Master Plan* (2004), which started from a curricular base in the process of planning facilities, technology, budget, and all related services. Part of the *Educational Master Plan's* "Annual Update" has been a review of the progress and directions of its technology component (See EMP Annual Update 2006 and EMP Annual Update 2007). Through this evaluation process, the most recent Technology Plan (2005-2010) was developed and implemented.

Measure J Planning: In light of the District"s recent (November 2006) passage of a $190 million dollar bond measure, technology is given high priority in the planning and implementation processes. The Director of Information Technologies, as well as appropriate WCC academic personnel, sits on the various committees that provide input into the planning and design of these projects.
Self Evaluation

IT Staff Integrated into Planning Processes: On an individual level, the Chancellor has assigned the Director of Information Technologies to serve on every major District planning committee that has operated over the past six years. As such she has played a key role in the development of several plans including (a) the *Educational Master Plan*, (b) the *Multi-College District Plan*, (c) the *Technology Master Plan*, and in an advisory capacity to (d) the *District Facilities Plan*. As the following example illustrates,

technology planning and functions are today highly interconnected throughout YCCD"s planning process. The *Educational Master Plan* (EMP), the *Technology Plan* and the *District Facilities Plan* are intertwined documents.

Within the interconnected framework within which the District conducts technology planning needs of various units are differentiated according to needs and priorities. The paragraphs below indicate that institutional technology needs have been categorized and are reviewed cyclically:

- Administrative Systems: The administrative system software maintenance agreement is renewed annually. The hardware does not exceed the recommended age of the equipment.

- Instructional Hardware: Two main factors are taken into consideration; the age of the equipment and the technological needs of the program. Some programs, while they have newer equipment are still first in the queue for new equipment. These programs require the newest technology either to run their software or to provide students access to equipment that will allow them to complete their course satisfactorily. The replaced computers are then rolled down to the next prioritized classroom on the list. Due to reduced funding the items on the bottom of the list often receive equipment that is in excess of four years of age. Even given the reduced funding and older equipment, the District has been successful in continuing to provide the curriculum and to provide the students an opportunity to complete their coursework.

But to provide closing emphasis, both the Director of IT and her assistant are regularly involved in the planning processes associated with the construction or renovation of any structure. With technology funding built in to the successful bond measure campaign, such system-based planning is now routine, has been verbally evaluated, and improves with each construction/renovation project.

Planning at Woodland Community College, and throughout the District, is a systemic process that brings all parties to the table. This process is driven by the *Educational Master Plan*, the *Multi-College District Plan,* and the various Policy Manuals that guide District and College governance.

Until recently, distance has been a concern in the involvement of Woodland leadership, faculty and staff in the overall planning process. However, in the three years that have announced a new District organization, involvement by Woodland staff has been intense, almost to the point of exhaustion. WCC

has attempted to develop expertise in all areas of its operation, development and programming and is looking at technology as a key to such growth.

Technology Subcommittee: Part of the purpose of the Technology Subcommittee, which has operated (and will continue to operate) at a District level, has been to integrate tech planning with that of the campuses and with other major planning committees.

The enabling documentation of the Technology Subcommittee makes manifest its catalytic role in systemic planning. For example, parts of its mission charge the committee with the responsibilities to "monitor ADA compliance," to "oversee the distribution/redistribution of existing computer equipment to meet the needs of a program area," to "create a plan for the implementation of any new technology," and to "make recommendations related to TTIP expenditures". All of these tasks call for members of the technology "community" to engage in dialog with multiple interests ranging from programming to the facilities within which such programs are to be implemented.

Distance Education at WCC: One area that has perhaps not been as involved in the holistic planning process as others has been Distance Education. DE has played a key role in elevating enrollments at WCC but has not been quite as central to planning processes as has the Office on Information

Technology (District). As WCC"s staffing and programming in DE grow, this growth should take place within the context of larger plans. Several measures, including increased budgetary support (2006), the approval of a Staff Development position (2007), and the hiring of a Dean of Distributive Education and

Media Services, will help to develop Woodland"s future programming in Distance Education.

Planning Agenda
1. Review Distributive/Distance Education programming to assess further investments in human and material resources, utilizing program review process.
Timeline: 2007-08
Responsible Party: Dean of Instruction & Learning Resources

2. Conduct an annual assessment of the Technology Plan (and its WCC companion plan) to evaluate progress, review changing circumstances, and adjust priorities to meet these circumstances
Timeline: 2008-09 and annual thereafter
Responsible Party: Dean of Instruction, College Council, appropriate IT staff