Crafton Hills College

Technology Planning Committee Meetings

2003 – 2004

Meeting Dates:

04/09/2004

02/27/2004

01/28/2004

Technology Planning Committee

Crafton Hills College

Friday, April 9th, 2004

Agenda

- Work Groups to Present Draft Goals
- Discussion of Draft Goals
- Next Steps

Infrastructure Work Group

Goal 1:

Crafton Hills College will increase level of connectivity with DCS

Goal 2:

Crafton Hills College will continue to keep internet connectivity state of the art

Goal 3:

Crafton Hills College will Install improved phone system

Goal 4:

Crafton Hills College will Increase “vertical” fiber runs in key buildings

Infrastructure Work Group

Goal 1:

Crafton Hills College will increase level of connectivity with DCS

- 18GHz wireless system is currently out to bid
- expected award date June 10th, 2004
- Money in place

Infrastructure Work Group

Goal 2:

Crafton Hills College will continue to keep internet connectivity state of the art

- DS3 installation is now fully funded
- Purchase Order is in place
- Upgrade wiring closets as needed
- Investigate wireless connectivity

Infrastructure Work Group

Goal 3:

Crafton Hills College will Install improved phone system

- Purchase Order should be generated next week
- Money is in place
- System will support video links and add phones to classrooms

Infrastructure Work Group

Goal 4:

Crafton Hills College will Increase “vertical” fiber runs in key buildings

- Library run from pit to 3rd floor
  - Funds identified
    - LADM

Online Resources Work Group

Goal 1:

Crafton Hills College will provide basic online functionality to students, employees and the community.

Goal 2:

Crafton Hills College will provide a user friendly online environment.

Goal 3:

Crafton Hills College will provide the support necessary to ensure that end-users can function effectively in the online environment

Goal 4:

Crafton Hills College will establish norms, guidelines, and processes for end-user use of the online environment

Online Resources Work Group

Goal 1:

Crafton Hills College will provide basic online functionality to students, employees and the community.

- Quick and easy access to the web (on campus work stations)
- Adequate # of workstations / consistently configured
- Email is a fundamental, automatic
- Permissions on Day 1 (student or staff)
- Digitize forms other hard copy content
- Accessibility (ADA) adhered to

Online Resources Work Group

Goal 2:

Crafton Hills College will provide a user friendly online environment.

- Seamless interface between areas of the web site
- Get feedback from students
- Usability testing
- Ensure Accuracy of Content
- Funding

Online Resources Work Group

Goal 3:

Crafton Hills College will provide the support necessary to ensure that end-users can function effectively in the online environment.

- Extended End-User support
- Online equivalent to any/all F2F services
- Training

Online Resources Work Group

Goal 4:

Crafton Hills College will establish norms, guidelines, and processes for end-user use of the online environment.

- Establish Norms/Guidelines
- Identification of Campus versus DCS responsibilities
- Communication of Priorities

Workstations and Work Flow Work Group

Goal 1:

Crafton Hills College will develop, implement & maintain a migration plan for replacement and purchase cycle of workstations

Goal 2:

Crafton Hills College will expand student and staff access to computer labs.

Goal 3:

Crafton Hills College will explore more cost efficient printer and photocopier solutions.

Workstations and Work Flow Work Group

Goal 4:

Crafton Hills College will promote campus-wide understanding of key terms relevant to campus technology (*e.g.*, workstation, student labs, TCO).

Goal 5:

Crafton Hills College will develop training programs for end-users

Goal 6:

Crafton Hills College will develop and implement an integrated plan for asset management

Workstations and Work Flow Work Group

Goal 1:

Crafton Hills College will develop, implement & maintain a migration plan for replacement and purchase cycle of workstations

- Hardware
- Software
- Redeployment
- Exceptions

Workstations and Work Flow Work Group

Goal 2:

Crafton Hills College will expand student and staff access to computer labs.

- Develop media center
  - Meet the needs of all students

Workstations and Work Flow Work Group

Goal 3:

Crafton Hills College will explore more cost efficient printer and photocopier solutions.

More discussion required

Goal 4:

Crafton Hills College will promote campus-wide understanding of key terms relevant to campus technology (*e.g.*, workstation, student labs, TCO).

More discussion required

Workstations and Work Flow Work Group

Goal 5:

Crafton Hills College will develop training programs for end-users

- New staff training and introduction materials
- Update training on new software and systems

Workstations and Work Flow Work Group

Goal 6:

Crafton Hills College will develop and implement a more effective asset management plan.

- Overall system costs
- Tracking of inventory
- Furniture

Funding and Decision Making Work Group

Goal 1:

Crafton Hills College will collaborate with other District entities to establish and maintain a single technology infrastructure for the District.

Goal 2:

Crafton Hills College will ensure ongoing funding and an equitable decision-making process for the College's technology infrastructure.

Goal 3:

Crafton Hills College will develop comprehensive plans for the College's technology infrastructure.

Funding and Decision Making Work Group

Goal 1:

Crafton Hills College will collaborate with other District entities to establish and maintain a single technology infrastructure for the District.

Define respective roles and responsibilities of District entities relevant to fundamental systems and shared software, including but not limited to: MS Office, Datatel, innovative systems (library), antivirus software, SARS, Financial 2000, ATI filer, a CMS, an optical scanning system, student ID card system, shared servers, *etc.*

Design, implement, and evaluate an ongoing process for communicating College technology needs to Central Services that ensures all District entities have equitable and meaningful involvement in technology-related decisions of the District.

Funding and Decision Making Work Group

Goal 2:

Crafton Hills College will ensure ongoing funding and an equitable decision-making process for the College's technology infrastructure.

Establish a budget account code for technology-related expenditures that impact the College.

Establish, implement, evaluate, and amend as necessary a means to fund that technology account in a way that is equitable across all College programs and service areas.

Establish, implement, evaluate, and amend as necessary equitable procedures for deriving recommendations about new technology acquisitions proposed in annual unit-level planning documents.

Funding and Decision Making Work Group

Goal 3:

Crafton Hills College will develop comprehensive plans for the College's technology infrastructure.

Develop, implement, evaluate, and support an obsolescence plan for College workstations.

Develop, implement, evaluate, and support a migration plan for College networks and systems.

Next Steps

Work Groups continue to Refine Goals

Workgroups develop objectives for goals

Have Goals and Objectives firm enough to present at the May 13th Board meeting

TECHNOLOGY PLANNING WORKSHOP
FRIDAY, 02/24/2004, 1:00PM TO 4:30PM
CRAFTON CENTER

AGENDA

Welcome/Introductions	1:00pm – 1:10pm
Update – Status of Technology @ CHC	
Communications Infrastructure	1:10pm – 1:20pm
Online Environment	1:20pm – 1:40pm
Campus Systems & Workstations	1:40pm – 2:10pm
BREAK	2:10pm – 2:20pm
Funding Structure & Decision-Making Processes	2:20pm – 2:50pm
Small Group Activity: Principles of Decision-Making	2:50pm – 3:30pm
Coming Together & Spending Stars	3:30pm – 4:00pm
Forming Workgroups & Setting Strategies	4:00pm – 4:30pm

Technology Planning 2004 - 2006

Crafton Hills College

Yucaipa, California

February 27, 2003

Why are we here today?

- To update everyone on the state of our technology infrastructure.
- To afford everyone an opportunity to share his/her voice as the future of campus technology begins to take shape.
- To begin the establishment of a basic value structure upon which technology decisions can be made.

Today's Agenda

- Updates on various aspects of our technology infrastructure (*what's working, what's not*).
  - ✓ *Communications Infrastructure*
    - ✓ *Online Environments (college website and distributed education)*
      - ✓ *Campus Systems & Workstations*
        - ✓ *Funding Structure & Decision-Making Processes*

Today's Agenda

- Updates on various aspects of our technology infrastructure (*what's working, what's not*).
- Hands-on activity to identify shared guiding principles.
- Description of next steps/request for volunteers & their homework assignment.

The Big Picture

What external forces will impact our future?

- Continued population growth.
- Inland Empire has been job creation leader in So Cal—particularly, tech-related jobs.
- Employers will continue to demand technical as well as “soft skills.”

The Big Picture

What does all that mean for us?

- District has identified several planning imperatives which the campuses must address, including this one related to technology:

Design, implement, evaluate, and maintain technological currency in education and training.

The Big Picture

What does all that mean for us?

- We will need to leverage all our strengths to insure that…
  - ✓ *our programs & services are of the highest quality,*
  - ✓ *are relevant to the needs of the community,*
  - ✓ *and are responsive to marketplace demands.*
- In addition, we must continue to serve as responsible stewards of the resources with which we are entrusted.

The Big Picture

Our task today as we prepare for the future…

- Gain a better understanding of the current state of our technology infrastructure.
- Gain a better understanding of what possibilities exist.
- Identify what the chief principles should be that drive our technology decisions.

Communications: Current Status

- Definition – This aspect of the plan includes the design, implementation, and maintenance of the physical and electronic plant, allowing the flow of voice and data within and outside the campus.

Communications: Current Status

- Areas of Strength
  - ✓ ***Fiber and copper plant update in 1999***
  - ✓ ***Upgraded server farm (multiple servers with specific roles)***
  - ✓ ***Stable platform***
  - ✓ ***Knowledgeable support staff @ District***

Communications: Current Status

- Areas of Strength
  - ✓ ***Active directory/Exchange 2000***
  - ✓ ***Desktop base fax system***

Communications: Current Status

- Areas to Improve
  - ✓ ***Central core and edge switches***
  - ✓ ***PBX***
  - ✓ ***Vertical and horizontal cabling***
  - ✓ ***Server replacement policy***
  - ✓ ***Maintenance agreements and funding stream***
  - ✓ ***Growth policy***

Communications: Recommendations

- Installation of new core and edge switches
- Voice over Internet protocol
- Cabling upgrades where needed
- Wireless

Communications: Recommendations

- Funding for licensing and maintenance agreements
- Develop replacement policies with appropriate funding
- Realistic estimates of total cost of ownership (TCO)

Online Environment: Current Status

- Definition – This aspect of the plan relates to the CHC website as well as technology needs related to the CHC distributed education program.

Online Environment: Current Status

- Areas of Strength
  - ✓ ***Redesigned CHC website implemented Summer 2002.***
  - ✓ ***Training sessions in web-based tech skills well-attended by CHC faculty & staff.***
  - ✓ ***Integration of usability testing in website development.***
  - ✓ ***Continued expansion of website functionality & some content.***

Online Environment: Current Status

- Areas to Improve
  - ✓ ***Absence of on-site web developers.***
  - ✓ ***Absence of funding for web development personnel.***
  - ✓ ***Absence of formalized strategy for evaluating student needs/desires for content***

Online Environment: Current Status

- Areas to Improve
  - ✓ ***Gaps exist in content & resources in terms of…***

    Digitizing content

    Department-specific pages

    Forms, reports, queryable access to EIS (data warehouse)

  - ✓ ***Absence of a comprehensive distributed education plan.***

Online Environment: Recommendations

- Develop strategies for soliciting student needs/desires for content.
- Strategy for providing guidance to web development.
- Elevate priorities for online content across & within departments/service areas.

Online Environment: Recommendations

- Continued support of web development personnel, e.g…

  Maintaining intern program/classes

  Funding for short-term hourly or interns

  Continued support for faculty & staff (training, software, helpdesk)

  Funding for web development software

Online Environment: Recommendations

- Develop a comprehensive plan for distributed education that addresses…

  Student support systems (technological and instructional)

  Faculty support systems (technological and instructional)

  Ongoing evaluation and assessment

Online Environment-District Update

- Overview of Distributed Education (DE)

Online

Telecourses

Teleconferencing

Streaming Video/Video on Demand

Hybrids

Online Environment-District Update

- Current DE-related Technologies

  CCC Sat
  CCC Confer
  Polycom System
  Course Management System

- Future Direction of DE

Campus Systems & Workflow: Current Status

- Definition – This aspect of the plan includes audiovisual equipment, as well as personal computers attached to the campus network and any personal computers needed to fully participate in appropriate academic and administrative functions.

Campus Systems & Workflow: Current Status

- Areas of Strength
  - ✓ ***Uptime on equipment network access***
  - ✓ ***Majority of new PCs for student locations***
  - ✓ ***Limited resources used to best advantage***
  - ✓ ***Cooperation***
  - ✓ ***Security***
  - ✓ ***Deployment standards***
  - ✓ ***AV coverage***

Campus Systems & Workflow: Current Status

- Areas to Improve
  - ✓ ***Line item on budget***
  - ✓ ***Replacement cycle***
  - ✓ ***Optimize utilization of all computers***
  - ✓ ***No central working lab***

Campus Systems & Workflow: Current Status

- Areas to Improve
  - ✓ ***Unclear policies***
  - ✓ ***Lack of training budget***
  - ✓ ***Cost factors***
  - ✓ ***Central department control***

Campus Systems & Workflow: Recommendations

- Each new faculty member should have a computer on his/her desk on first day.
- Laboratories need to be kept current with priorities appropriate to needs.
- Obsolete computers need to be replaced.

Campus Systems & Workflow: Recommendations

- Setup an acquisition policy
- Purchase plan
- Replacement cycle
- Redeployment/Disposal Policy
- Better use of assets
- Working laboratory (aka “Kinko’s Center”)
- Central point of support

Funding & Decision-Making: Current Status

- Definition – This aspect of the plan involves how we prioritize and fund technology, including communicating our needs and clarifying responsibilities.

Funding & Decision-Making: Current Status

- Areas of Strength
  - ✓ ***Purchase decisions have been guided by unit-level planning documents.***
  - ✓ ***Group purchases = cost savings, more efficient implementations, maintenance, etc.***
  - ✓ ***Leverage expertise of Technology Services personnel for quotes, areas of need etc.***

Funding & Decision-Making: Current Status

- Areas to Improve
  - ✓ ***CHC v. District funding responsibilities not clear.***
  - ✓ ***Lack of line item for technology purchases.***
  - ✓ ***Purchases not guided by a larger campus plan.***

Funding & Decision-Making: Current Status

- Areas to Improve
  - ✓ ***Still have scattered purchasing requests.***
  - ✓ ***Absence of comprehensive obsolescence plan.***
  - ✓ ***Historical equity imbalance in distribution of technology across campus.***

Funding & Decision-Making: Recommendations

- Clarify CHC v. District responsibilities for servers, software, support, etc.
- Establish a budget line item budget for technology purchases.
- Maintain twice-a-year purchasing cycle.

Funding & Decision-Making: Recommendations

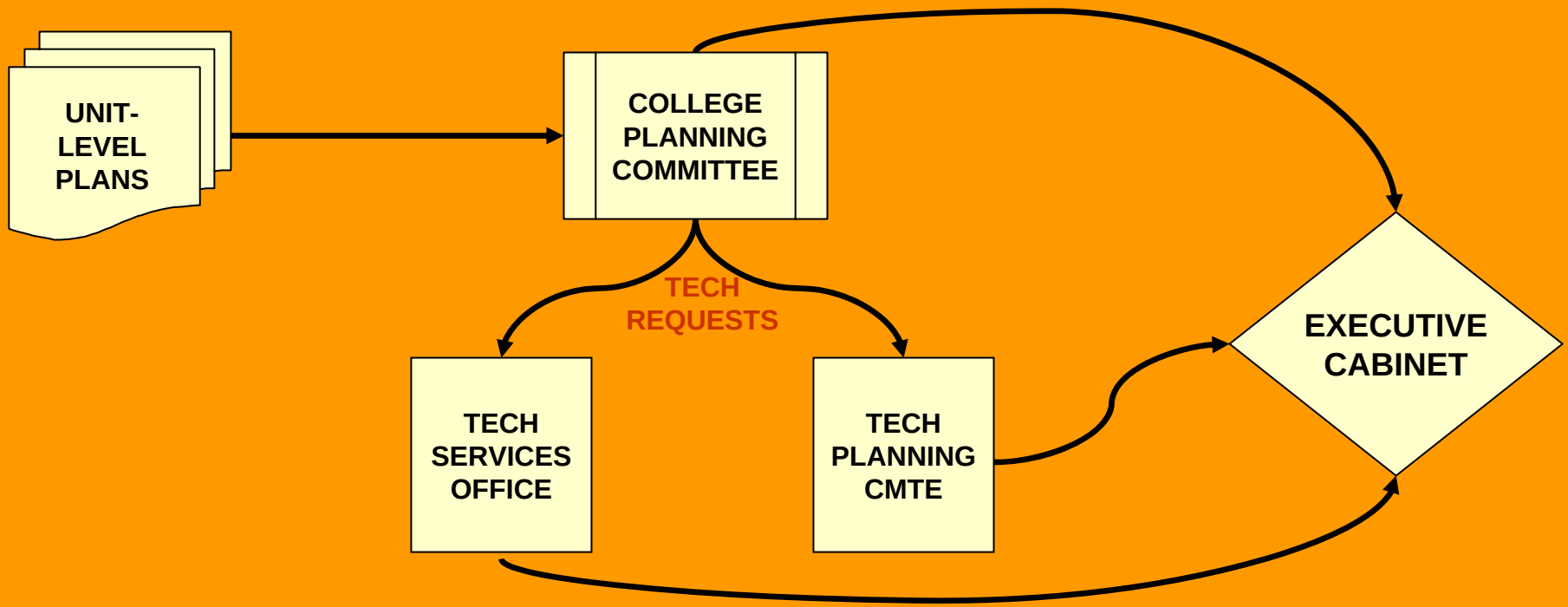
- Ensure technology purchases are guided by a larger, comprehensive campus plan that includes…
  - ✓ ***Clear obsolescence strategy***
  - ✓ ***Campus-wide commitment to equitable distribution, replacement, etc.***
  - ✓ ***Campus-wide commitment to universal access***

Funding & Decision-Making: Recommendations

- Establish role/responsibilities of Technology Services Office.
- Develop a fair process for prioritizing technology requests based on the campus plan.

Funding & Decision-Making: Recommendations

- Pursuant to College Planning Committee's recommendations...



Basic Planning Strategies

- Lines of communication will remain open (*All documents related to this effort will be available on the website).*
- Technology Committee is charged with development of a 2-year plan for our technology infrastructure.
- Today we will identify some commonly held principles. Technology Committee will coordinate the consultation process for campus-wide adoption of a final set of principles that will be used to guide decisions about how technology resources are allocated.
- Separate work groups will be formed to specify details for each component of the technology plan.

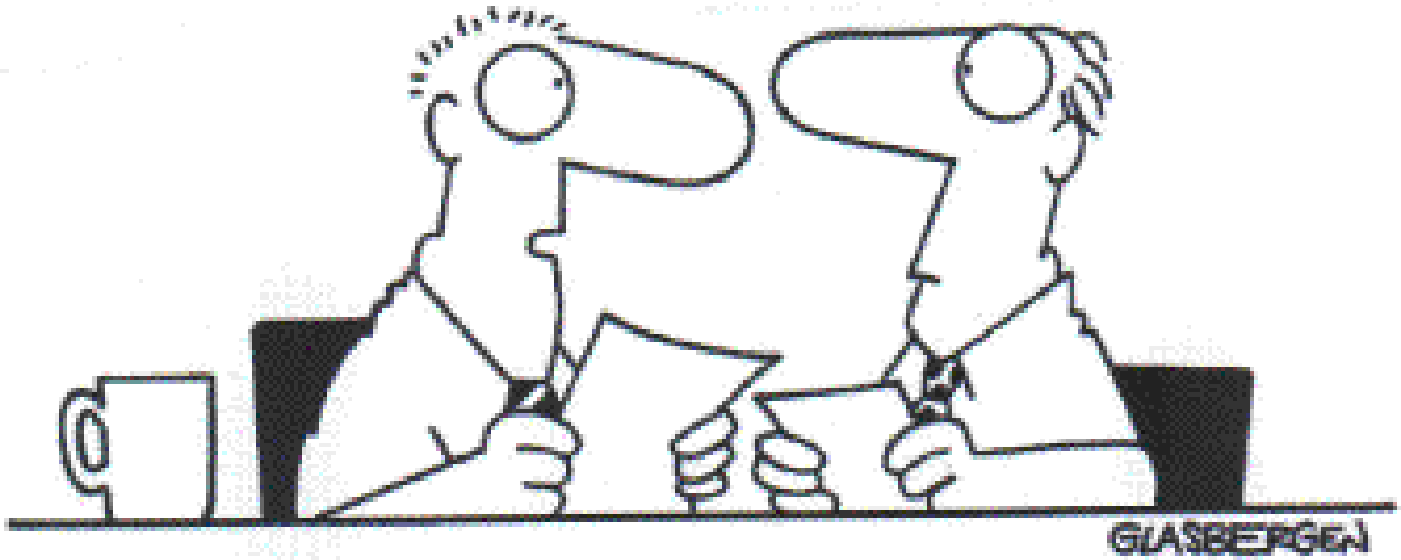
Small Group Work

- With a clearer understanding of the current state of our technology infrastructure & possibilities for the future, answer this question:

What is THE MOST IMPORTANT PRINCIPLE that should guide our decisions about where to direct our technology resources?

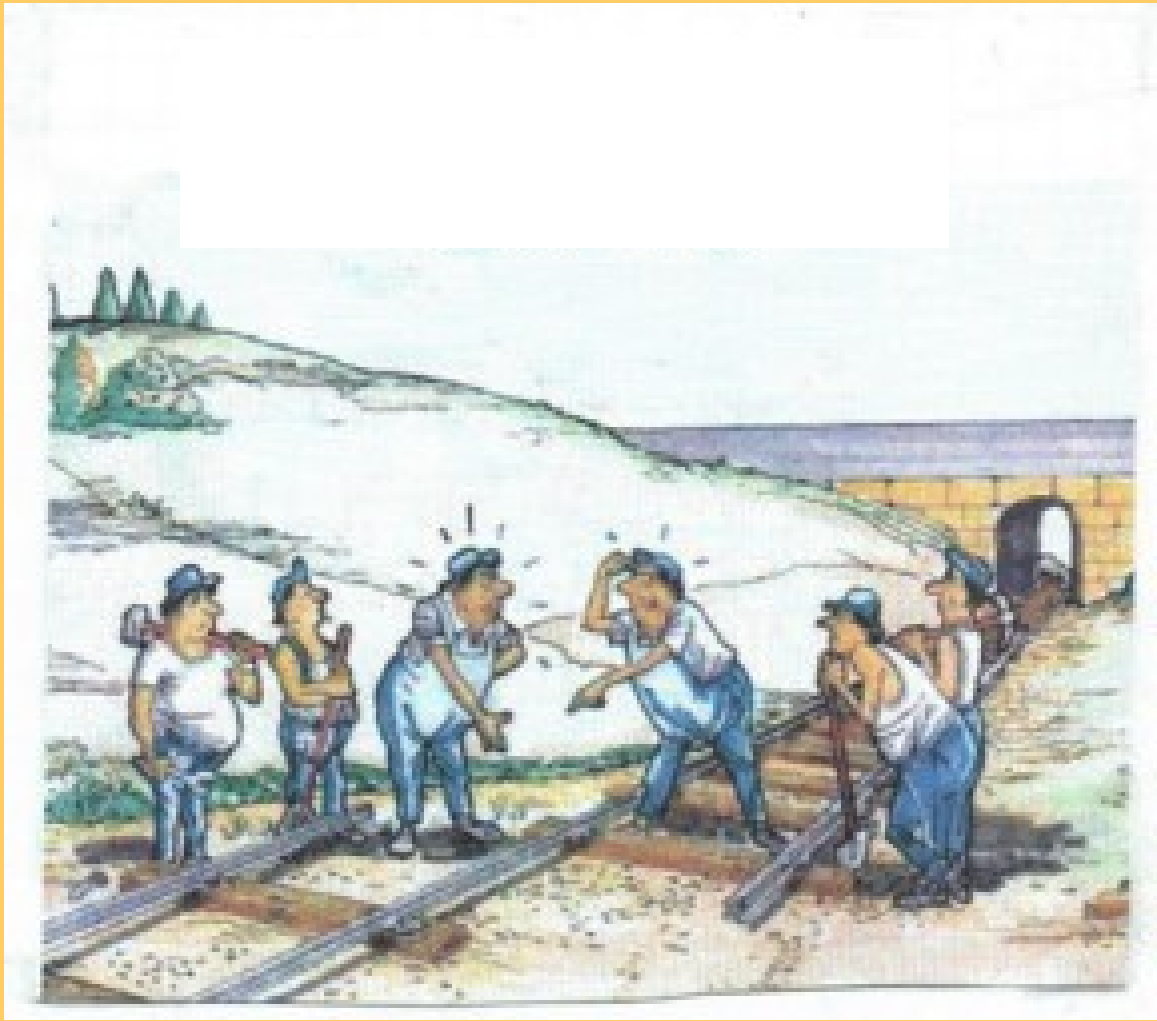
Some things for all of us to keep in mind…

Small Group Work



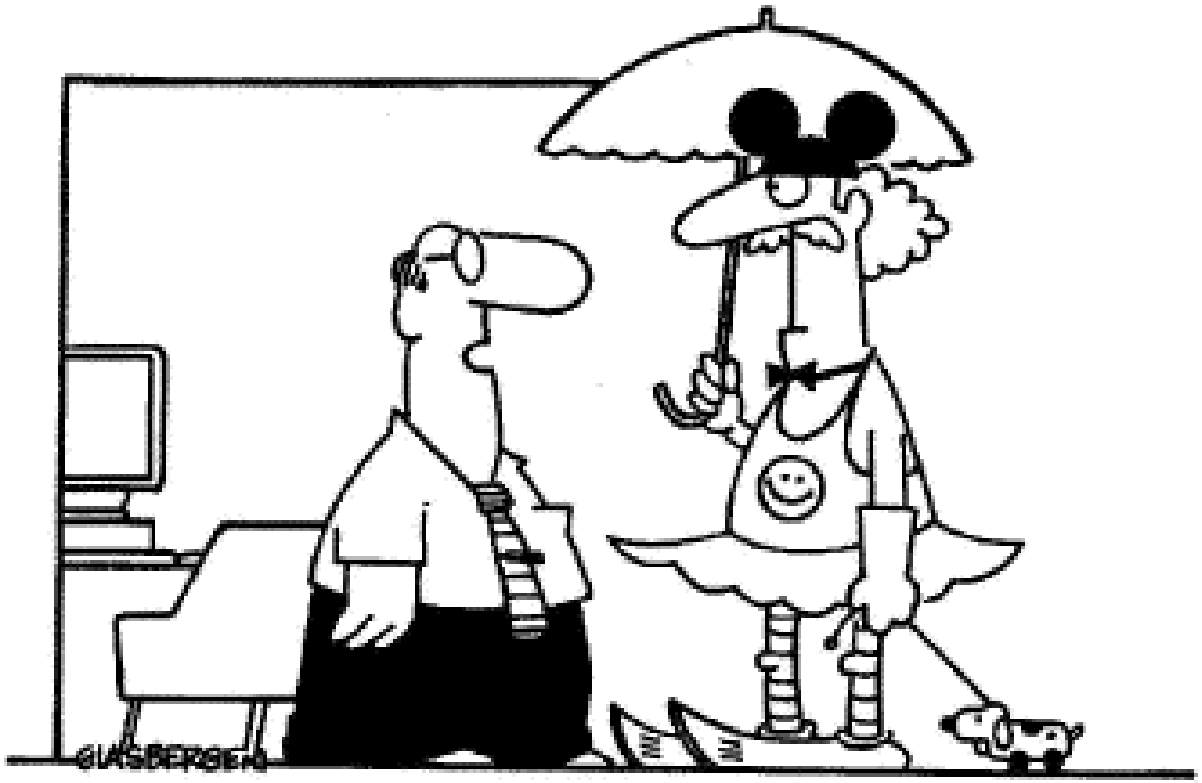
"My new approach to effective team development will take a bit longer. In my plan, we raise them from birth."

Small Group Work



Small Group Work

Small Group Work



"What some people fail to grasp, Larry, is the difference between 'thinking outside of the box' and just being a weirdo."

Small Group Work

"Let's form a committee to create a task force to develop a team to determine the fastest way to deal with the problem."

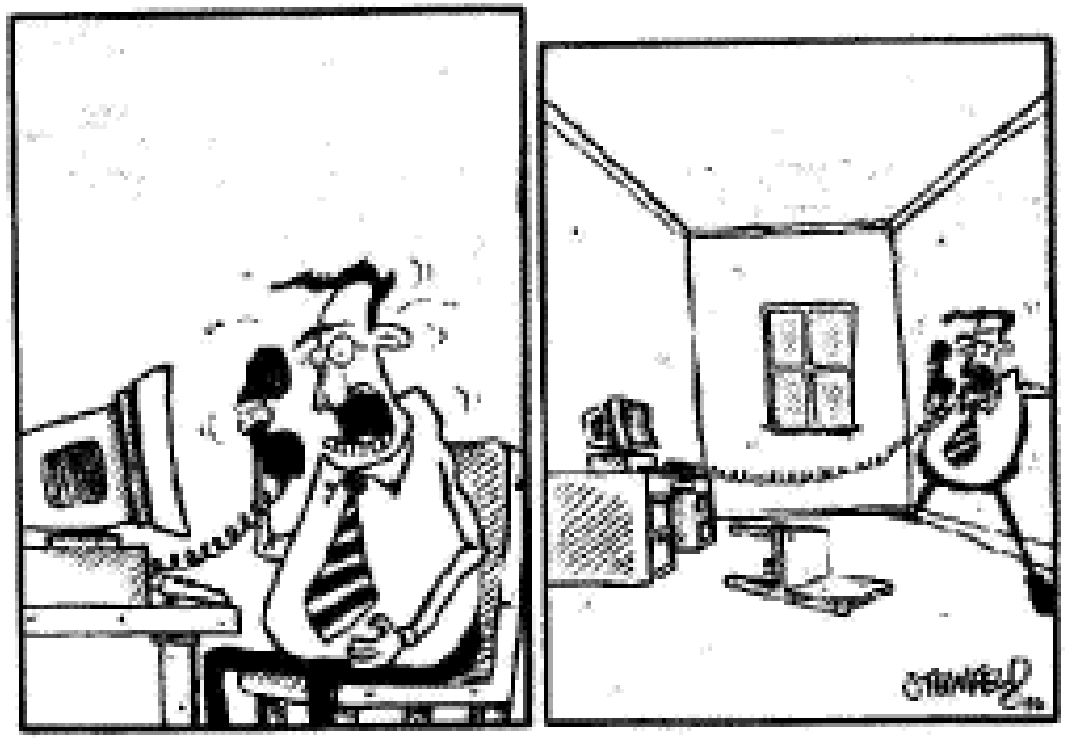
Small Group Work

WERE YOU THERE WHEN BAGLEY PRESENTED THE LIST OF COMPANY GOALS?
SORT OF. SOMETIME DURING THE THIRD HOUR, MY SPIRIT LEFT MY BODY AND WENT TO THE BEACH.

Small Group Work

Small Group Work

Small Group Work



AS JOHN GOT CLOSER AND CLOSER TO FINDING THE SOURCE OF ALL LIFE IN THE UNIVERSE, HE WAS SHOCKED TO FIND OUT IT WAS NOT HIM.

Small Group Work

IF YOU ARE CALLING TO COMPLIMENT SOMETHING I SAID, PRESS 1.

IF YOU ARE CALLING TO COMPLIMENT SOMETHING I DID, PRESS 2.

IF YOU ARE CALLING TO MAKE A COMPLAINT, CALL DR. SUSAN SHODAHL AT 389-3202.

Where do we go from here?

This is where…

- Separate work groups are needed in for each key area of planning. Please volunteer for one of the following:

Communications Infrastructure

Online Environments (college website and distributed education)

Campus Systems & Workstations

Funding Structure & Decision-Making Processes

Thank you for your participation

Technology Planning Committee - Guiding Principles
Developed at 2/27/04 meeting

In priority order

1. Infrastructure Functionality
2. Impact upon the greatest number of students and staff
3. Student Access – High-Tech / High-Touch
4. Consideration of Total Cost of Ownership in proposals
5. Impact upon existing programs and department

Communications Infrastructure Workgroup

Workgroup:

Laurens Thurman (co-lead)
Wayne Bogh (co-lead)
Glen Kuck
Miriam Williams
Joe Cabrales

Definition:

This aspect of the plan involves the design, implementation, and maintenance of the physical and electronic plant, allowing the flow of voice and data within and outside the campus.

Areas of Strength:

Fiber and Copper plant updated in 1999.
300 pair → 1650 pair copper
34 stands → 224 strands fiber

Upgraded server farm (multiple servers with specific roles)

Stable platform

Central core and edge switches

PBX

Knowledgeable support staff at DCS

Active Directory / Exchange 2000

Desktop base Fax system

Areas to Improve:

Central core and edge switches

Unable to support future VoIP and Video demands

PBX

- 1980's technology
- Approaching design limits
- No maintenance contracts

Vertical and Horizontal cabling

Multiple building IDFs copper fed
Some areas unable to support Voice Over Internet Protocol (VoIP)

Server Replacement policy

Maintenance agreements and funding stream

Growth policy

Recommendations:

Installation of new core and edge switches. (Cisco Solution)

Voice Over Internet Protocol (VoIP)

Cabling upgrades where needed

Wireless

Funding for licensing and maintenance agreements

Develop replacement policies with appropriate funding

Realistic conceptions of total cost of ownership (TOC)

Tasks:

To identify goals and present to Technology Planning committee for adoption (draft by early April, 2004; final version by end of April, 2004).

Develop action plans for achieving adopted goals (activities, responsibility center, timeline, anticipated outcomes)

Online Environment

Workgroup:

Ted Phillips (lead)

Glen Kuck

Kirsten Colvey

Rick Hogrefe

T.L. Brink

Miriam Williams

Definition:

This aspect of the plan relates to the CHC website as well as technology needs related to the CHC distributed education program.

Areas of Strength:

Redisgned CHC website implemented Summer 2002

Training sessions in web-based technology skills well-attended by CHC faculty & staff

Integration of usability testing in website development

Continued expansion of website functionality & some content

Areas to Improve:

Absence of on-site web developers

Absence of funding for web development personnel

Absence of formalized strategy for evaluating student needs/desires for content

Gaps exist in content & resources in terms of

Digitizing content

Department-specific pages

Forms, reports, queryable access to EIS (local data warehouse)

Recommendations:

Develop strategies for soliciting student needs/desires for content

Strategy for providing guidance to web development

Elevate priorities for online content across & within departments/service areas

Continued support of web development personnel, e.g….

Maintaining intern program/classes

Funding for short-term hourly or interns

Continued support for faculty & staff (training, software, helpdesk)

Funding for web development software

Tasks:

To identify goals and present to Technology Planning committee for adoption (draft by early April, 2004; final version by end of April, 2004).

Develop action plans for achieving adopted goals (activities, responsibility center, timeline, anticipated outcomes)

Campus Systems & Workstations

Workgroup:

Gino Barabani (lead)

Wayne Bogh

Ted Phillips

Catherine Pace-Pequeño

Joshua Heilman

Miriam Williams

Shane Veloni

Ginnie Moran

Definition:

This aspect of the plan includes audio visual equipment, and personal computers attached to the campus network and any personal computers needed to fully participate in appropriate academic and administrative functions.

Areas of Strength:

Uptime on equipment network access

Majority of new PCs for student locations

Limited resources used to best advantage

Cooperation

Security

Deployment standards

Audiovisual coverage

Areas to Improve:

Line item on budget

Replacement cycle

Optimize utilization of all computers

No central working lab for faculty

Unclear policies

Lack of training budget

Cost factors

Central department control

Recommendations:

Each new faculty member should have a computer on his/her desk on first day

Laboratories need to be kept current with priorities appropriate to needs

Obsolete computers need to be replaced

Set-up an acquisition policy

Purchase plan

Replacement cycle

Redeployment/Disposal Policy

Better use of assets

Working laboratory (a/k/a "Kinko's Center")

Central point of support

Tasks:

To identify goals and present to Technology Planning committee for adoption (draft by early April, 2004; final version by end of April, 2004).

Develop action plans for achieving adopted goals (activities, responsibility center, timeline, anticipated outcomes).

Funding & Decision-Making Workgroup

Workgroup:

Ted Phillips (lead)

Damaris Matthews

Kirsten Colvey

Catherine Pace-Pequeño

Daniel Bahner

Susan Shodahl

Wayne Bogh

Donna Ferracone

Frances Southerland

Definition:

This aspect of the plan involves

Areas of Strength:

Purchase decisions have been guided by unit-level planning documents

Group purchases = cost savings, more efficient implementations, maintenance, etc.

Leverage expertise of Technology Services personnel for quotes, areas of need, etc.

Areas to Improve:

CHC v. District funding responsibilities not clear

Lack of line item for technology purchases

Purchases not guided by a larger campus plan

Still have scattered purchasing requests

Absence of comprehensive obsolescence plan

Historical equity imbalance in distribution of technology across campus

Recommendations:

Clarify CHC v. District responsibilities for servers, software, support, etc.

Establish a budget line item for technology purchases

Maintain twice-a-year purchasing cycle

Ensure technology purchases are guided by a larger, comprehensive campus plan that includes…

Clear obsolescence strategy

Campus-wide commitment to equitable distribution, replacement, etc.

Develop a fair process for prioritizing technology requests based on the cam7pus plan

Tasks:

To identify goals and present to Technology Planning committee for adoption (draft by early April, 2004; final version by end of April, 2004).

Develop action plans for achieving adopted goals (activities, responsibility center, timeline, anticipated outcomes).

To identify goals and present to Technology Planning committee for adoption (draft by early April, 2004; final version by end of April, 2004).

Develop action plans for achieving adopted goals (activities, responsibility center, timeline, anticipated outcomes)

Develop process for prioritizing requests from the P.R.O.P. Reports for computers and technology.

Make annual recommendations to Executive Cabinet for essential technology acquisitions based on the prioritized list.

TECHNOLOGY PLANNING WORKSHOP
FRIDAY, FEBRUARY 27, 2004
1:00PM TO 4:00PM, CRAFTON CENTER

ATTENDEES

Committee Members

1. Barabani, Gino
2. Bogh, Wayne D
3. Brink, T.L.
4. Cabrales, Joe
5. Colvey, Kirsten
6. Heilman, Joshua
7. Hogrefe, Richard
8. Keith, Ron (Absent)
9. Kuck, Glen
10. Matthews, Damaris
11. Pace-Pequeno, Catherine
12. Phillips, Ted
13. Shodahl, Dr. Susan
14. Thurman, Laurens
15. Williams, Miriam

Special Invitees

16. Harrison, Gloria
17. Bahner, Daniel
18. Southerland, Frances (Absent)
19. Yamamoto, June

Campus Community Members

20. Cole, Edith
21. Moody, Janice
22. Ferracone, Donna
23. Wilson, Sherri
24. Gibson, Kathy
25. Ramirez, Steve
26. Crise, Bob

Crafton Hills College Technology Planning Committee
January 28, 2004, 3:00PM, OE-2

Agenda

I. Charge: This committee is charged by President Harrison as follows (proposed timeline in parentheses):
(1) Develop 3 to 5 year technology plan for campus (Spring 2004)
(2) Periodically monitor plan implementation (Spring 2005 and forward)
(3) Serve as standing committee charged with reviewing technology requests and developing recommendations for technology acquisitions based on the campus technology plan (ongoing practice)

II. Membership:
Faculty members (3 year term) – T.L. Brink, Richard Hogrefe, Damaris Matthews, Catherine Pace-Pequeno, Ted Phillips (Chair)
Classified members (3 year term) – Gino Barabani, Wayne Bogh, Miriam Williams
Administrators ("other duties as assigned") – Joe Cabrales, Kirsten Colvey, Susan Shodahl, Laurens Thurman
District Representative – Glen Kuck
Collegis Representative – Ron Keith
Student Representative – Josh Heilman
Ex Oficio – President Harrison
Resource – Virginia Moran and Debbie DeSalliers (co-chairs, College Planning Committee)

Given charge and current membership, are there others who may need to be named as standing committee members and/or other resources from which we should draw?

III. Immediate Tasks:

a. SCAN & ANALYZE – Analysis of gaps between…

i. previous plan (*What did we say then?*)
1. CHC's Plan (excerpt attached; for full document download from http://doclib.sbccd.net/Files/CHC/InformationTechnology/Crafton%20Hills%20ITSP%20final%209.21.01.doc)
2. District's Plan (Executive Summary attached; for full document download from http://doclib.sbccd.net/Files/District/District_Computing_Services/Information_Technology/SBCCD%20Information%20Technology%20Strategic%20Plan%20.doc)

ii. current state (What do we know now?)
iii. future state (Where do we really want to be in 5/10/n years?)

b. DEBATE & EVALUATE - Clarification and articulation of value structure (consistent with district planning imperatives, college mission, educational philosophy) and of technology decision-making process (current practice versus recommended per Planning Committee; both internal and at district-level)

c. INTENDED OUTCOME – A formal document that communicates what we envision as the future state of technology on our campus, to include the following components: statement of value structure; communications infrastructure; online environment; workstations; funding structure. Document should afford development of clear processes for making decisions about technology acquisitions that serve the college mission/benefit the campus as a whole.

TIME ADOURNED:

CRAFTON HILLS COLLEGE
INFORMATION TECHNOLOGY
STRATEGIC PLAN

2001-2004

September 2001

CRAFTON HILLS COLLEGE

INFORMATION TECHNOLOGY STRATEGIC PLAN
2001-2004

TABLE OF CONTENTS

I.	BACKGROUND AND INTRODUCTION ……..	1
II.	A VISION FOR INFORMATION TECHNOLOGY AT CRAFTON HILLS COLLEGE …….	2
III.	CURRENT CONDITIONS AND PLANNING ASSUMPTIONS ..…	3
	A. Student Related Assumptions……..	3
	B. Faculty / Staff Related Assumptions ……	4
	C. Community Related Assumptions …….. …….	4
	D. Technology Related Assumptions …….	4
	E. Technology Support Assumptions ……	5
	F. Resources / Facilities Assumptions ……	5
IV.	INFORMATION TECHNOLOGY GUIDING PRINCIPLES……..	6
V.	ALIGNMENT OF INFORMATION TECHNOLOGY WITH CRAFTON HILLS COLLEGE'S MISSION AND PLANNING ASSUMPTIONS AND THE CALIFORNIA TECHNOLOGY II PLAN ……	7
VI.	ONGOING REVIEW PROCESS ……..	11
VII.	COLLEGE-WIDE INFORMATION TECHNOLOGY GOALS AND STRATEGIES -- 2001-2004 ……	12
Appendix A.	Participants in the 2001 Crafton Hills College Information Technology Strategic Planning Meetings ……..	31

I. BACKGROUND AND INTRODUCTION

In the spring of 2001, Crafton Hills College began developing its Information Technology Strategic Plan for 2001 - 2004 using a cross-functional team of college faculty, staff, and administrators, working together to develop a "future state" vision for the use of information technology within the institution. The draft document was then circulated among additional faculty and staff for further comment and refinement. This document is a result of that effort.

A Senior Consultant from COLLEGIS, Inc., who adopted a methodology using the following steps, facilitated the planning approach utilized in the development of this document:

- Development of a vision for the use of information technology within the college;
- Development of planning assumptions detailing the environment in which the College currently exists;
- Development of key value statements or guiding principles that should govern the decisions and actions of the organization and are aligned with the Crafton Hills College vision, mission and goals;
- Development of goals and strategies to enable the organization to move forward toward its desired "future state" in accordance with the guiding principles; and
- Draft of a yearly operational plan (with measurable objectives to be developed by owners of each strategy) for implementation of the strategic plan.

The Crafton Hills College Information Technology Strategic Plan is meant to reflect the vision, planning assumptions, guiding principles, goals and strategies for the use of information technology throughout the college. As such, its adoption has implications for many academic and administrative departments within the college.

Since different people often use the terms involved in strategic planning differently, the following is a clarification of how strategic planning terms are used within the Crafton Hills College Information Technology Strategic Plan.

- Information Technology Vision – The desired "future state" for the use of information technology across the institution.

- Information Technology Guiding Principles – Key value statements that should govern the decisions and actions of the organization with regard to acquisition and use of information technology throughout the college.

- Information Technology Goals – Long-term, major targets or end results related to the survival, value and growth of the institution.

- Information Technology Strategies – The particular actions or means that will make it possible to achieve the goals.

- Information Technology Objectives – Short-term action items for which measurable results can be obtained toward the achievement of information technology goals.

II. A VISION FOR INFORMATION TECHNOLOGY AT CRAFTON HILLS COLLEGE

Crafton Hills College envisions a "future state" when the use of information technology permeates the entire institution providing for collaborative teaching and learning activities. It is a time when students, faculty and staff have access to information and services using technology regardless of time of day or location. This desired future state includes a faculty that is well trained in the use of information technology tools, which they apply to their individual pedagogical approaches to improve teaching and learning. It also includes an administration and staff who use information technology to operate the institution more effectively and efficiently. It is a time when information technology supports collaboration, extending the reach of the college beyond the boundaries of its campus.

Crafton Hills College has developed the following Mission Statement:

> "The mission of Crafton Hills College is to promote the discovery and application of knowledge, the acquisition of skills, and the development of intellect and character in a manner which prepares students to contribute effectively and ethically as citizens of a rapidly changing and increasingly technological world.
>
> This mission is achieved by providing to the students and communities we serve high quality, effective and accountable instructional programs and services in the following areas:

- Transfer educational programs that ensure the greatest possibility of success in baccalaureate programs.
- General education designed to give students a substantial and coherent exposure to the major broad domains of higher education.
- Vocational/Technical education programs that offer opportunities in training, retraining, and skill building to provide business, industry and government with a qualified work force and that support economic development.
- Economic development programs that promote partnerships with corporate and commercial enterprise as well as government agencies to enhance the economic base of the community served.
- Comprehensive support services, enhanced by matriculation, that provide for counseling and guidance to encourage student growth and development through assessment, academic planning, career planning and personal development.
- A developmental program that provides under-prepared students with the skills they need to enter transfer, general education or vocational/technical programs.
- Programs and services that provide disabled and disadvantaged students the opportunity for equitable access to the educational offerings of the college.
- A Workforce Development Program of fee-based classes that provides an opportunity for individuals to develop occupational skills in preparation for

employment or to improve or upgrade job skills to enhance performance in current employment.
- A variety of delivery methods to meet the needs of a diverse student population.

This mission is carried out in an environment which encourages intellectual development, enhances personal growth, and fosters an openness to a wide range of ideas, culture and people."

With this scenario in mind, the vision for the use of Information Technology at Crafton Hills College is:

"In an ever-changing world, Crafton Hills College uses information technology to support the college's mission; to provide a quality education that empowers the members of the community to reach their unique potential; and to provide accessibility that allows life-long learning opportunities for students, faculty, staff, and community."

III. CURRENT CONDITIONS AND PLANNING ASSUMPTIONS

The following is a list of current conditions and planning assumptions about the environment in which Crafton Hills College exists, the direction of technology, the students, faculty, staff and community, and the organization of information technology resources and personnel within the college. These assumptions were derived from discussions with Crafton Hills College administrators, faculty, and staff; from a review of other planning documents already developed by the College; and in planning sessions with the Technology Strategic Planning Task Force. The College should provide the leadership to review and update these assumptions on an annual basis so that they will reflect internal and external environmental factors that have a bearing on the development and implementation of an Information Technology Strategic Plan for Crafton Hills College. (Note: There is no priority attributed to the order in which the assumptions are listed.)

A. Student Related Assumptions

a) Students are primarily from the local area.
b) Student's technology literacy is diverse.
c) Most students are employed either full-time or part-time.
d) Community and Crafton Hills College growth will continue.
e) A low percentage of the local population attends college.
f) Students will need more services supported by technology.
g) Students will need more technology accessible to them.
h) Students are increasingly aware of technology.
i) Students will increasingly expect relevant hands-on training that will be valuable in the job market.

B. Faculty / Staff Related Assumptions

a) Policy, procedures, planning and implementation will continue to proceed in accordance with the principles of shared governance.
b) Crafton Hills College will have an increase in new faculty in the near future due to retirements.
c) Faculty and staff need on going technology training using up-to-date technology.
d) Faculty need training and support on the development of online courses.
e) Applicants for open positions, both faculty and staff, should have minimum IT knowledge and qualifications (relevant to discipline or areas) and new faculty should be familiar with instructional technologies.
f) Faculty need to assess the effectiveness of the technology they use.
g) Policies need to be developed to provide a foundation upon which technology use can be expanded.

C. Community Assumptions

a) The area is increasing in population and becoming more diverse.
b) The area is, to a great extent, a commuter and bedroom community.
c) There is a great interest in developing marketable skills in shorter time frames
d) New job opportunities are emerging.
e) There is a growing interest in information technology and global communication.
f) Residents of the community are becoming more computer literate and making greater use of e-mail, the web and new devices for communication.
g) There is more awareness of distance education.
h) More partnerships between community agencies and the college will need to be forged in order to expand services and access to technology.

D. Technology Related Assumptions

a) We can expect a quantum leap in technology within the next five years similar to the advent of the web.
b) Wireless or mobile technology will become more prevalent.
c) Cost of technologies for the typical user will remain static; the cost of current leading edge technology will decrease over time.
d) Technology will become more sophisticated and integrated, resulting in trends such as real time video, dramatically increased storage capabilities, and a decrease in physical size.
e) The burden on an educational institution to broaden the use of technology will increase.
f) More technical support services will be needed for both administrative and instructional technologies.
g) “Digital divide” will be an ongoing challenge in our community and in our student body.
h) Advanced technology on campus is an equity issue and will need to be accessible to all of our students.
i) Security and privacy issues will become more difficult to solve.

E. Technology Support Assumptions

a) Technology support on campus is currently inadequate and as demands increase, it will get worse.
b) Salary structure needs to be reviewed to attract and retain high quality staff
c) Expansion of technology will require expansion of technical support.
d) Support staff need ongoing training to keep current and maintain appropriate skill levels.
e) Support needs will increase with the introduction of technology-enabled courses.
f) When planning new technology purchases, the impact on personnel support needs must be considered.
g) User technology support should include communication and training.
h) Coordination is needed so technical staff understand the role and function of the people they serve.

F. Resources / Facilities Assumptions

a) For the next few years, state funding is likely to decrease.
b) Space on campus is very limited.
c) There is limited funding for all technology needs, therefore prioritization will be required.
d) Acquiring grants is necessary to help fund physical and human resources.
e) All students, including those with disabilities, should have access to computer technology.
f) Crafton Hills College needs facilities and rooms with appropriate equipment and technologies.
g) Some academic disciplines are more technology intensive than others.
h) New alliances are needed with businesses and agencies for funding and equipment

IV. INFORMATION TECHNOLOGY GUIDING PRINCIPLES

If Crafton Hills College is to be truly successful in achieving its vision and accomplishing its mission and goals, it is not sufficient to do things right; the College must do the right things. In their book *Paradigm Shift: The New Promise of Information Technology*, Don Tapscott and Art Caston state that a useful technique for making certain that the information technology organization is "doing the right thing" is to establish a set of guiding principles, with "principles" being defined as "simple, direct statements that describe what is determined to be good practice. . . . Principles are extremely valuable because they eliminate recurring arguments and alternative evaluations regarding key planning decisions." (*Paradigm Shift*, p. 204).

The following is a list of the Crafton Hills College Information Technology Guiding Principles:

1. Crafton Hills College should use information technology to promote student learning.

2. Crafton Hills College should pervasively use advanced technological tools for information processing, measurements, decision-making and communication.

3. Crafton Hills College should honor the principles and practices of universal access.

4. Crafton Hills College should use information technology to provide learning opportunities independent of time and space.

5. Crafton Hills College should use information technology to provide student support functions independent of time and space.

6. Crafton Hills College should provide its faculty and staff with the resources and training to use appropriate technologies.

7. Crafton Hills College should respect the adopted academic freedom policy.

8. Crafton Hills College, while insuring security and appropriate usage, should protect the privacy and rights of individuals.

V. ALIGNMENT OF INFORMATION TECHNOLOGY WITH CRAFTON HILLS COLLEGE'S MISSION AND PLANNING ASSUMPTIONS AND THE CALIFORNIA TECHNOLOGY II PLAN

In order for the Crafton Hills College Information Technology Strategic Plan to be a truly effective tool for directing the use of information technology within the institution, it must be aligned with the overall strategic planning efforts of the college, the district and the state. It should reflect the role of information technology in helping the college to achieve its vision and to accomplish its mission, goals and objectives.

The information technology goals for Crafton Hills College are the following:

GOAL #1: To determine the appropriate level of technology use for individual job functions or disciplines.

GOAL #2: To provide information technology support during all open campus hours.

GOAL #3: To provide accessible information technology training for faculty and staff.

GOAL #4: To provide instructional technology design training and support for faculty.

GOAL #5: To establish on-going funding for technology hardware and software.

GOAL #6: To provide the appropriate information technology to support college operations.

GOAL #7: To equip all classrooms with technology to meet the instructional needs of faculty.

GOAL #8: To ensure compliance with all applicable aspects of the American's with Disabilities Act and other applicable federal and state requirements.

GOAL #9: To offer distributed education to as broad a community as possible.

GOAL #10: To increase the information technology skills of Crafton Hills College students and thus their marketability.

GOAL #11: To provide technology-training opportunities to the community, including local business and industry.

GOAL #12: To provide students with access to all information and complete all transactions from any location

GOAL #13: To make effective use of the web for instruction, operations, communications and marketing.

GOAL #14: To provide an efficient and effective information technology advisory and decision-making process.

GOAL #15: To use information technology to make data available for decision-making, problem solving and to streamline college operations.

The Crafton Hills College Information Technology Strategic Plan was developed in direct response to the Crafton Hills College Mission Statement (see Page 2). The Information Technology Strategic plan has also been developed in such a way that its goals and strategies will further the Crafton Hills College Planning Categories. These are:

1. To offer a broad range of instructional programs.

   See Information Technology Goals # 9, 10 and 11

2. To offer support services designed to help students succeed.

   See Information Technology Goals # 1, 6, 12, 13, and 15

3. To make progress in maintaining facilities and equipment.

   See Information Technology Goals # 5, 6 and 7

4. To enhance and add functional buildings and equipment.

   See Information Technology Goals # 5, 6 and 7

5. To improve support services for adjunct faculty.

   See Information Technology Goals # 1, 2, 3 and 4

6. To provide programs and services responsive to the unique needs of an increasingly diverse population.

   See Information Technology Goals # 9, 10 and 11

7. To evaluate all programs and services, using an ongoing and consistent process.

   See Information Technology Goal # 1, 14 and 15

8. To establish budget, program, and services procedures consistent with the college's mission statement.

   See Information Technology Goals # 5, 14 and 15

9. To develop and maintain an administrative structure that is responsive to the needs of all programs and staff.

See Information Technology Goals # 6, 12, 13, 14 and 15

10. To support full compliance with the intent, spirit, and regulations of the Americans with Disabilities Act.

    See Information Technology Goal # 8

11. To develop and maintain a personnel staff that is responsive to the needs of all programs and staff.

    See Information Technology Goals # 3 and 4

12. To stay current with technological development.

    See Information Technology Goals # 1, 2, 3, and 4

13. To offer programs and activities that increase student participation in campus life and governance.

    See Information Technology Goals # 10 and 14

In addition, the Crafton Hills College Information Technology Strategic Plan considered the goals and objectives of the California Technology II Strategic Plan. Although full implementation of these strategies depends upon funding by "two major stakeholders: the State and the private sector", consideration of each was included in Crafton Hills College's plan. The CA. Tech II goals are:

- ***Student Access*** – Promote student access to the California Community Colleges including access to instruction and student support services.
- ***Student Success*** – Promote student success in their educational and career goals.

The objectives identified for each goal are as follows:

- Student Access Objectives
  a) Establish a baseline of access to computers for students, faculty and staff that serve them that includes a technology replacement program for computers and related equipment at all colleges.

     See Crafton Hills College Information Technology Strategic Plan Goals # 5, 6, and 7

  b) Support the development of student services technology applications that have system-wide impact.

     See Crafton Hills College Information Technology Strategic Plan Goals # 6, 12,

13, and 15

c) Provide a baseline suite of student support systems and services that would be available, as an option, for each college.

System-wide Objective and see Crafton Hills College Information Technology Strategic Plan Goal # 12

- Student Success Objectives
  a) Provide ongoing training for faculty in the use of information technology tools and provide centralized Web and multimedia hosting sites for all California Community Colleges on one of two course management systems.

  See Crafton Hills College Information Technology Strategic Plan Goals # 1, 2, 3, 4 and 9

  b) Expand access to multi-media classrooms and student computer labs.

  See Crafton Hills College Information Technology Strategic Plan Goals # 6 and 7

  c) Establish and support a baseline of technology infrastructure at every college that will ensure that all students, regardless of disabilities, will receive the benefits from such technology in their student services and instructional programs.

  See Crafton Hills College Information Technology Strategic Plan Goals # 1, 2, 6, 8, 10, 12, and 13.

  d) Improve faculty and student access to automated library and learning resources including electronic information databases and administrative services.

  See Crafton Hills College Information Technology Strategic Plan Goals # 4, 12, 13, and 15

  e) Develop a centralized Web-based resource center for materials, resources and processes with full faculty access to support the best practices in curriculum and instruction.

  See Crafton Hills College Information Technology Strategic Plan Goals # 2, 3, and 4

  f) Integrate technology into college offices and support areas to ensure that staff have the tools required to deliver services to students and faculty efficiently and effectively.

  See Crafton Hills College Information Technology Strategic Plan Goal # 6.

g) Improve and maintain system-wide networks to support telecommunication needs of the system; develop and support a technology planning guide and fund the local development of technology plans.

   See Crafton Hills College Information Technology Strategic Plan Goals # 6 and 14.

h) Establish a new leadership role in the California Community College Chancellor's Office to carry out the new body of work and expectations that are defined in the Tech II Plan.

   System-wide Objective

VI. ONGOING REVIEW PROCESS

Strategic planning is an ongoing process. The goals and strategies set forth in this document require periodic review and assessment. It is the intention of Crafton Hills College to incorporate review of the Information Technology Strategic Plan as part of the institution's overall planning process and to align the information technology planning process with the institution's budget cycle.

CRAFTON HILLS COLLEGE
COLLEGE-WIDE INFORMATION TECHNOLOGY GOALS AND STRATEGIES
2001-2004

Implementation of each strategy listed below is dependent upon overall budget priorities that are established by the College**.**

STRATEGY	DEPENDENCY	OWNER	2001-2002	2002-2003	2003-2004
GOAL #1: To determine the appropriate level of technology use for individual job functions or disciplines.					
1.1 Survey individual offices and disciplines to determine the current uses of technology on campus		Office of Research & Planning working in conjunction with Unit level managers	**X**	**X**	**X**
1.2 Research externally to determine what are the current possibilities.		Office of Research & Planning working in conjunction with Unit level managers	**X**	**X**	**X**
1.3 Within the offices and disciplines, determine the appropriate level of technology use for Crafton Hills College		Office of Research & Planning working in conjunction with Unit level managers	**X**	**X**	**X**

STRATEGY	DEPENDENCY	OWNER	2001-2002	2002-2003	2003-2004
GOAL #2: To provide information technology support during all open campus hours.					
2.1 Identify additional funding sources for hiring additional general and instructional technology support staff.		President's Cabinet	**X**	**X**	**X**
2.2 Schedule information technology support staff (full-time, part-time and student employees) to be available or on-call during all times that classes are scheduled on campus.	Strategy 2.1	President's Cabinet		**X**	**X**
2.3 Explore the options and decide upon a strategy for adequate coordination of all information technology support services		President's Cabinet	X		
2.4 Provide web-based assistance for college-supported hardware and software, including user guides and FAQs	Strategy 2.3	District Computing Services		X	**X**
2.5 Develop a process that will help the college to anticipate and communicate relevant developments in newly emerging technologies		Planning Committee	X	X	X

STRATEGY	DEPENDENCY	OWNER	2001-2002	2002-2003	2003-2004
GOAL #3: ***To provide accessible information technology training for faculty and staff.***					
3.1 Identify a CHC employee who is responsible for faculty and staff technology training		President's Office	X		
3.2 Create a faculty technology development plan that allows for a variety of modes of learning and for discipline specific training.		Planning Committee	X		
3.2.1 Establish a multimedia training facility for staff and faculty training.	Strategy 3.2	President's Cabinet		X	
3.2.2 Identify ways to motivate faculty and staff to explore new technologies that may increase their effectiveness or efficiency.	Strategy 3.2	Staff Development Committee		X	
3.3 Schedule frequent training sessions for faculty and staff, including both open and cohort training, in basic applications such as Word, Excel and PowerPoint.		Staff Development Committee	X	X	X

STRATEGY	DEPENDENCY	OWNER	2001-2002	2002-2003	2003-2004
GOAL #4: ***To provide instructional technology design training and support for faculty.***					
4.1 Provide faculty with research updates on technology-assisted learning and adult learning.		Instructional Designer/Assistive Technology Specialist	X		
4.2 Provide on-campus support for faculty interested in incorporating technology into their classes and/or developing distributed education courses.		Instructional Designer/Assistive Technology Specialist	X		
4.3 Provide on-campus training for faculty interested in incorporating technology into their classes and/or developing distributed education courses.		Staff Development; Instructional Designer/Assistive Technology Specialist		X	
4.4 Investigate the possibilities for providing additional instructional technology support persons.		President's Cabinet		X	
4.5 Provide faculty with opportunities to explore various software applications.		Instructional Designer/Assistive Technology Specialist, Enterprise Network Specialist		X	X
4.6 Increase number of on-line Library resources and make them available 24 X 7.		Library	X	X	X

STRATEGY	DEPENDENCY	OWNER	2001-2002	2002-2003	2003-2004
GOAL #5: ***To establish on-going funding for technology hardware and software.***					
5.1 Make technology equipment costs a fixed budget item.		President's Cabinet		X	
5.2 Identify additional sources of funding for technology.		President's Cabinet	X	X	X
5.3 Enlist the services of a grant writer to assist in locating outside funding sources for technology.		President's Cabinet; Central Services		X	X

STRATEGY	DEPENDENCY	OWNER	2001-2002	2002-2003	2003-2004
GOAL #6: ***To provide the appropriate information technology to support college operations.***					
6.1 Devise and implement a process for life cycle management, e.g. periodic and systematic upgrades / replacement of technology.		President's Cabinet	X	X	X
6.2 Evaluate the needs for equipment and resources in technology- intensive programs.		Instructional Council	X	X	X
6.3 Integrate technology into college offices and support areas to ensure that staff have the tools required to deliver services to students and faculty efficiently and effectively and with sensitivity to universal access issues.	Goal # 1; Strategy 8.2	President's Cabinet		X	X
6.4 Assess and enhance as appropriate the network infrastructure, bandwidth and server requirements.		Enterprise Network Specialist; District Computing Services	X	X	X
6.5 Investigate and propose appropriate uses of wireless local area networks within buildings		Enterprise Network Specialist; District Computing Services	X	X	X

6.6 Maintain accessibility to all servers. Identify potential points of failure, recognize anomalies, and provide corrective actions.		Enterprise Network Specialist; District Computing Services	X	X	X
6.7 Insure that off-campus e-mail access is adequate to support the needs of CHC faculty and staff		District Computing Services	X	X	X
6.8 Explore the needs for student e-mail access and decide on future directions		President's Cabinet	X		
6.9 Maintain updated virus protection software on all computers connected to the college network		District Computing Services	X	X	X
6.10 Maintain appropriate security measures to ensure that access to college servers is limited to those with appropriate authorization.		District Computing Services; Enterprise Network Specialist	X	X	X

STRATEGY	DEPENDENCY	OWNER	2001-2002	2002-2003	2003-2004
GOAL #7: ***To equip all classrooms with technology to meet the instructional needs of faculty.***					
7.1 Identify classroom technology requirements (Including electrical, acoustical, environmental needs, ADA requirements) and develop guidelines for several tiers of classroom technology.	Goal #1	Instructional Designer/Assistive Technology Specialist; Outside Consultant	X	X	X
7.2 Design intelligent / smart classrooms that include a variety of technologies appropriate to the instructional needs of Crafton Hills College faculty and students.	Goal #1; Strategy 7.1	President's Cabinet	X	X	X
7.2.1 Equip at least one classroom per year with one or more technology-tiers for the next five years.	Strategy 7.2	President's Cabinet		X	X
7.3 Establish a training program for faculty who wish to use smart classrooms.	Strategy 7.2.1	Staff Development; Instructional Designer/Assistive Technology Specialist		X	X
7.4 Investigate the need for a networked computer lab for student use of computers during class for disciplines other than computer science.		Instructional Council	X	X	X
7.5 Evaluate equipment and resource needs of technology- intensive programs.		Instructional Council	X	X	X

STRATEGY	DEPENDENCY	OWNER	2001-2002	2002-2003	2003-2004
GOAL #8: T*o ensure compliance with all applicable aspects of the American's with Disabilities Act and other applicable federal and state requirements.*					
8.1 Ensure that technology is available for students with disabilities wherever computer services are provided.		Instructional Designer/Assistive Technology Specialist	X	X	X
8.2 Determine standards for all newly developed or purchased software and hardware to ensure that, to the maximum extent possible, it is designed with accessibility in mind.		Instructional Designer/Assistive Technology Specialist	X	X	X
8.3 Provide ongoing training for personnel		Instructional Designer/Assistive Technology Specialist	X	X	X

STRATEGY	DEPENDENCY	OWNER	2001-2002	2002-2003	2003-2004
GOAL #9: ***To offer distributed education to as broad a community as possible.***					
9.1 Establish intellectual property policies for distributed education and negotiate into contracts as appropriate		Central Services		X	X
9.2 Assess effectiveness of distributed education courses at Crafton Hills College.		Office of Distance Education; Office of Instruction, Research & Planning Office	X	X	X
9.3 Offer on-line courses in at least one additional discipline each year for the next 3 years.		Office of Distance Education; Office of Instruction	X	X	X
9.4 Provide support personnel to assist faculty in designing new methods of course delivery.		Instructional Designer/Assistive Technology Specialist	X	X	X
9.5 Use marketing / advertising techniques in order to build enrollment in the college's distributed education courses.		Office of Distance Education; Office of Marketing/PR		X	X
9.6 Provide appropriate distributed education opportunities to supplement campus instruction for Crafton Hills College students.		Office of Distance Education	X	X	X

9.7 Provide for distributed student support functions, i.e. admissions, library, registrar, counseling		Office of Distance Education in coordination with District Computing Services and other appropriate offices	X	X	X

STRATEGY	DEPENDENCY	OWNER	2001-2002	2002-2003	2003-2004
GOAL #10: ***To increase the information technology skills of Crafton Hills College students and thus their marketability.***					
10.1 Survey potential employers to determine their technology needs and how they perceive the technology skills of CHC students as potential employees.		Workforce development office; Office Occupational Education	X	X	X
10.2 Determine the technology skills of CHC students.		Office of Research and Planning in conjunction w/ others		X	
10.3 Determine options for implementing this goal based on need and resources available.		Instructional Council		X	X

STRATEGY	DEPENDENCY	OWNER	2001-2002	2002-2003	2003-2004
GOAL #11: ***To provide technology-training opportunities to the community, including local business and industry.***					
11.1 Enhance job-related skills by continuing to increase the number of credit, non-credit, or fee-based courses that are computer related.		Workforce and Economic Development; Instruction	X	X	X
11.2 Increase contacts with community, business and industry to determine training needs		Workforce and Economic Development; Instruction	X	X	X
11.2.1 Develop and provide training based on the responses in 11.2		Workforce and Economic Development; Instruction	X	X	X

STRATEGY	DEPENDENCY	OWNER	2001-2002	2002-2003	2003-2004
GOAL #12: ***To provide students with access to all information and complete all transactions from any location and at any time.***					
12.1 Provide computers for student use in various places around campus, as well as access from off campus via the Internet, for quick student access to information and services.		Student Services; District Computing Services	X	X	X
12.2 Provide on-line applications for potential students to apply to the college via the web		Admissions & Records; District Computing Services	X		
12.3 Provide a method for students to remotely take their assessment tests		Counseling and Matriculation; District Computing Services	X	X	X
12.4 Provide methods for students to participate in orientation process on-line		Counseling and Matriculation; District Computing Services	X	X	X
12.5 Provide on-line counseling and advising		Counseling and Matriculation; District Computing Services		X	X

12.6	Provide methods for students to register , review class schedules and pay fees on-line		Admissions & Records; District Computing Services	X	X	
12.7	Provide access to the bookstore for on-line purchase of books		Bookstore; Administrative Services	X	X	
12.8	Provide students with a method for viewing their educational plan and assessing their progress toward completion		District Computing Services; Counseling and Matriculation	X	X	
12.9	Provide access to other special services such as financial aid, EOPS, DSPS, etc.		District Computing Services; Student Services		X	X

STRATEGY		DEPENDENCY	OWNER	2001-2002	2002-2003	2003-2004
GOAL #13: ***To make effective use of the web for instruction, operations, communications and marketing.***						
13.1	Develop a robust web presence to assist past, present, and potential students and provide public access to the college's educational resources.		Instructional Designer/Assistive Technology Specialist, Webmaster; District Computing Services		X	X
13.2	Develop a web portal for all CHC students, faculty, and staff.		District Computing Services	X	X	X

STRATEGY	DEPENDENCY	OWNER	2001-2002	2002-2003	2003-2004
GOAL #14: ***To provide an efficient and effective information technology advisory and decision-making process.***					
14.1 Establish an information technology coordinating structure to recommend standards and projects to the President.		President's Cabinet	X		
14.2 Develop a process for notifying the college community of information technology decisions and plans.		Marketing Director, President's Cabinet; District Computing Services	X	X	X
14.3 Develop a mechanism for gathering input and ideas from the college community regarding potential uses of technology.	Goal 1; Strategy 14.1	Through the IT governance planning structure		X	X

STRATEGY	DEPENDENCY	OWNER	2001-2002	2002-2003	2003-2004
GOAL #15: ***To use information technology to make data available for decision-making, problem solving and to streamline college operations.***					
15.1 College data should be stored in non-redundant databases.		District Computing Services; Research and Planning;	X	X	X
15.2 Determine and implement processes to improve reporting of administrative data.		District Computing Services, Research and Planning	X		
15.3 Provide staff training on the use of all appropriate databases.		Research; District Computing Services	X		
15.4 Implement appropriate authentication processes or methods to comply with FERPA, GAAP, and other federal or state regulations.		District Computing Services in conjunction with appropriate offices	X	X	X
15.5 Make college operational forms available in an electronic format		District Computing Services in conjunction with appropriate offices	X	X	X

15.6 Provide for on-line completion and authorization of college operational forms		District Computing Services in conjunction with appropriate offices	X	X	X
15.7 Provide for electronic distribution of college reports		District Computing Services in conjunction with appropriate offices	X	X	X

Appendix A.

Participants in of the 2001 Crafton Hills College Information Technology Strategic Planning Meetings

Susan Shodahl - Coordinator
Carl Dury (COLLEGIS) - Facilitator

Ron Boatman
Richard Booth
Betty Byron
Alex Contreras
Carolyn Creagh
Brenda Davis
Patrick Fite
Gloria Harrison
Jack Jackson
Damaris Matthews
Virginia Moran
Bill Orr
Kim Salt
Laurens Thurman
Shane Veloni

CRAFTON HILLS COLLEGE
HIGH TECHNOLOGY TASK FORCE

FIVE-YEAR PLAN FOR REACHING THE TOP OF THE TECHNOLOGY CURVE IN COMPUTER-ASSISTED INSTRUCTION (1995-2000)

The Challenge

Crafton Hills College has reached a crisis point in its ability to deliver quality educational programs to the residents of the San Bernardino Community College District. A pervasive computer technology deficit has crippled instructional programs in which state-of-the-art computer hardware is essential to the teaching/learning environment. Other potential applications of computer technology across the curriculum are beyond the reach of faculty for lack of adequately equipped classrooms. Failure to position Crafton Hills College at the top of the computer technology curve is jeopardizing many vocational and general studies disciplines.

Both the Business & Office Technology and Computer & Information Science programs are unable to keep pace with changes in teaching requirements fostered by new hardware and software. Of the two B&OT classrooms, one is equipped with 14-year-old technology and is totally dysfunctional for teaching purposes. The other B&OT classroom has upgraded five-year old computers and is minimally adequate for instruction. The C&IS program has the only classroom equipped with computers which could be judged "acceptable." However, the C&IS computer laboratory, which has evolved into a collegewide lab, is equipped with old technology and will not support any advanced programming instruction.

The technology deficit is also eroding the mathematics program, which must move toward computer-assisted instruction in calculus or risk losing the transfer status of calculus classes. Many other disciplines, such as English and psychology, are eager to establish classroom environments utilizing computer technology. In response to a recent survey, twenty-two instructors, over one-third of the teaching faculty, expressed an interest in using computers with their students in the classroom or laboratory.

Student assessment, a requirement of state-mandated matriculation activities, will have to revert to paper and pencil testing without access to new computer technology. To utilize the newest version of the CPT instrument, which for several years has been used to assess students' basic skills, would require the upgraded computer hardware provided for by this plan.

There is no prospect that this collegewide technology deficit can be eliminated without the adoption of new attitudes and new strategies in the allocation of resources. Recognizing the serious implications and consequences of not addressing this challenge, the Crafton Hills College Planning Committee called upon the college president to establish a High Technology Task Force to determine the short- and long-term computer technology needs of the college and to recommend strategies for achieving those needs.

The Task Force began meeting during the 1995 Spring Semester and identified as its most urgent priority the immediate upgrading of computer equipment for the B&OT program and the C&IS laboratory. Ultimately, computer-assisted instructional technology should be provided collegewide. To achieve these goals, the Task Force developed a "Five-Year Plan for Reaching the Top of the Technology Curve."

The High Tech Vision Statement developed by the SBCCD Board of Trustees and modified by the District Assembly has provided inspiration for this plan which would give substance to the stated vision. It is imperative that a commitment to fund the initial phase of this plan be given in a timely manner in order to implement the first-year goals in 1996-97.

The Five-Year Plan

The fundamental assumptions underlying this Five-Year Plan are:

1. There must be maximum usage of existing and future computer technology to benefit all instructional programs requiring or desiring access to the technology. (It is assumed that any computers acquired under this Plan would have full multi-media capability.)

2. The college must achieve a state-of-the-art posture by the year 2000 and maintain all technology at that level thereafter.

3. Financing computer technology as an annual "fixed cost" budget item must be adopted as a District strategy. This would institutionalize the process of maintaining state-of-the-art technology over time.

4. In-service training in utilizing computer technology must be provided to faculty and staff continuously and consistently.

5. Providing more and larger classrooms and a quality educational experience will result in increased FTES.

6. The integrity of Crafton Hills College instructional programs will be enhanced/assured.

7. The plan is an evolving document that will be reviewed and modified annually.

FIRST YEAR (1995)

ACTIVITY		ESTIMATED COST
1.	Lease or purchase 58 IBM-compatible up-to-date Computers (25 computers for C&IS lab; 33 computers for classrooms)	$58,000
2.	Convert C&IS computer lab to collegewide computer lab and network equipment	10,000
3.	Software acquisition fund (High Tech Task Force to coordinate and monitor all acquisitions)	5,000
4.	Lease or purchase five (5) mobile computer instructional stations (computers and projection equipment)	15,000
5.	Lease or purchase five (5) Macintosh computers for Learning Resources Center	15,000
6.	Purchase five (5) dictaphones for Computer Lab	1,800
7.	Computer Lab Manager (Faculty reassignment - .400)	8,000
8.	Technical support (15 hours per week @ $15.00 per hour, 52 weeks)	11,700
9.	LRC instructional assistant (20 hours per week @ $10.00 per hour, 44 weeks)	8,800
10.	Purchase replacement printers and new scanners	5,000
11.	Ethernet communication components	5,000

12.	Room remodeling/electrical	5,000
13.	Recycle fifty (50) surplus XT8088/8086 computers from B&OT classroom and C&IS lab for use in a computerized writing lab. Note: Approximate value added is $75,000	
14.	Recycle eighteen (18) 486 computers from C&IS classroom (OE214A) to LA217 and reschedule classes to LA217 to maximize computer usage. Note: Approximate value added is $27,000	
15.	Recycle sixteen (16) surplus 386 computers from B&OT classroom to Accounting Lab and to Central Computer Lab Note: Approximate value added is $40,000	

TOTAL FIRST YEAR COSTS $148,300

SECOND YEAR (1996)

1.	Continue lease of 58 IBM-compatible up-to-date computers	$58,000
2.	Software acquisition fund	8,000
3.	Lease or purchase six (6) Macintosh computers for Central Computer Lab and relocate four (4) surplus Macintosh computers to Physics Lab	18,000
4.	Lease or purchase five (5) Macintosh computers for Learning Resources Center	15,000
5.	Lease or purchase five (5) mobile computer teaching stations (computers with projection equipment)	15,000
6.	Purchase replacement printers and new scanners	5,000

7.	Network one classroom	10,000
8.	Purchase computer classroom/laboratory modular workstation furniture	10,000
9.	Computer Lab Manager (Faculty reassignment - .600)	12,000
10.	Technical support (15 hours per week @ $15.00 per hour, 52 weeks)	11,700
11.	LRC instructional assistant (20 hours per week @ $10.00 per hour, 44 weeks)	8,800
12.	Ethernet communications components	1,500

TOTAL SECOND YEAR COSTS $173,000

THIRD YEAR (1997)

1.	Purchase previously leased computers	
2.	Lease or purchase 52 up-to-date IBM-compatible computers (26 for a third classroom and 26 for Central Computer Lab)	$52,000
3.	Lease or purchase five (5) mobile computer teaching stations (computers with projection equipment)	15,000
4.	Lease or purchase five (5) Macintosh computers for Learning Resources Center	15,000
5.	Network second classroom	10,000
6.	Software acquisition fund	8,000
7.	Purchase replacement printers and new scanners	5,000
8.	Computer Lab Manager (Faculty reassignment - .600)	12,000

9.	Technical support (15 hours per week @ $15.00 per hour, 52 weeks)	11,700
10.	LRC Instructional Assistant (40 hours per week @10.00 per hour, 44 weeks)	17,600
11.	Potential 15+ surplus computers from Computer Lab available for assignment to faculty/staff offices Note: Approximate value added is $37,500	
12.	Purchase classroom/laboratory computer modular workstation furniture	10,000
13.	Ethernet communications components	1,500
14.	Room remodeling/electrical	5,000

TOTAL THIRD YEAR COSTS $162,800

FOURTH YEAR (1998)

1.	Purchase or continue lease of 52 up-to-date IBM-compatible computers from Year Three	$52,000
2.	Software acquisition fund	8,000
3.	Lease or purchase five (5) mobile computer teaching stations (computers with projection equipment)	15,000
4.	Lease or purchase five (5) Macintosh computers for Learning Resources Center	15,000
5.	Network third classroom	10,000
6.	Purchase classroom/laboratory computer modular workstation furniture	10,000
7.	Computer Laboratory Manager (Faculty reassignment - .600)	12,000

8.	Technical support (15 hours per week @ $15.00 per hour, 52 weeks)	11,700
9.	LRC Instructional Assistant (40 hours per week @ $10.00 per hour, 44 weeks)	17,600
10.	Ethernet communications components	1,500
11.	Purchase replacement printers and new scanners	5,000

TOTAL FOURTH YEAR COSTS $157,800

FIFTH YEAR (1999)

1.	Lease or purchase 50 up-to-date IBM-compatible computers. *Lease to continue for Year 2000	$50,000*
2.	Purchase previously leased computers Redirect oldest 486 computers to writing lab and to faculty offices.	
3.	Lease or purchase five (5) Macintosh computers for Learning Resources Center	15,000
4.	Purchase classroom modular computer workstation furniture	5,000
5.	Purchase additional printers and new scanners	5,000
6.	Software acquisition fund	5,000
7.	Computer Lab Manager (permanent, full-time position)	25,000
8.	Computer Technician (permanent, full-time position	25,000
9.	LRC Instructional Assistant (permanent, full-time position)	25,000

10.	Ethernet communications components	1,500
11.	Room remodeling/electrical	5,000

TOTAL FIFTH YEAR COSTS $161,500

Anticipated Benefits to CHC

It is difficult to identify and articulate all of the benefits which could accrue to the instructional programs at Crafton Hills College through the implementation of this five-year plan. Students and faculty could benefit in ways which are not yet apparent. Certainly the overriding benefits would be that CHC would have been positioned at the top of the technology curve with respect to computer-assisted instruction and that the integrity of instruction would be assured into the foreseeable future. There is also an underlying expectation that student academic performance will be improved.

The following outcomes have been identified as a measure of the anticipated benefit to Crafton Hills College:

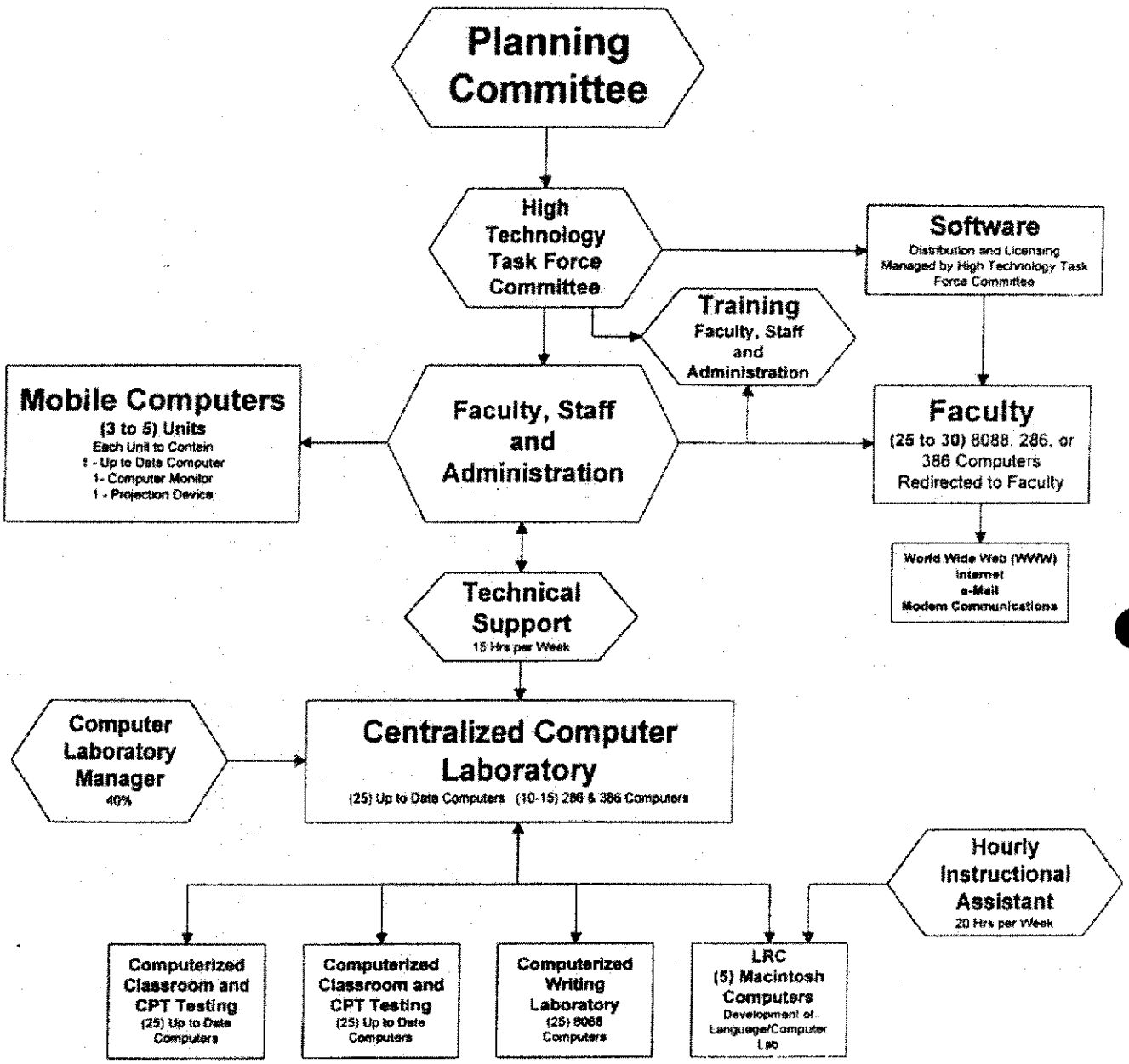
- Students and faculty will have access to up-to-date computer technology (hardware and software).
- Faculty will be encouraged to take advantage of alternative techniques of providing instruction.
- Centralization of computer classrooms and laboratories will ensure maximum efficiency and utilization of technology for all instructional programs.
- The process of acquiring and maintaining computer technology will become institutionalized as an annual fixed cost.
- All faculty who desire the use of computer-assisted instruction will have access to appropriate technology.
- Student assessment using the computer placement test could be conducted without the restriction of waiting for a classroom to become available and the newest version of the CPT assessment instrument could be used.
- The use of modular furniture will increase the number of student stations in each classroom.

Other less tangible outcomes would be:

- Students will become more computer oriented.
- Instructors will become more aware of how computer-assisted instruction can be effectively applied in their own disciplines.
- Students will be exposed to technology they will likely use on the job or at four-year colleges and universities.
- There will be more personal interaction between faculty and students and between students and other students.

Technology 2000

First Year



Lease/Purchase 58 Up to date Computers

Convert C&IS Computer Lab to Crafton Hills College Centralized Computer Lab

Centralize Software Acquisition Licensing and Distribution

Lease/Purchase Five Mobile Computer Stations

Lease/Purchase Five Macintosh Computers for Learning Resource Center

Convert Language Lab into Language/

Purchase Five Dictaphones for Centralized Computer Lab

Lab Manager 40% Reassigned Time, Computer Technician 15 Hrs per Week, and Instructional Assistant 20 Hrs per Week

Replace 10-15 Older Printers in Classrooms and Lab

Network Faculty Computer Communications to Internet and World Wide Web

Network Centralized Computer Lab

Remodel (Lights and Electricity) Classrooms and Lab

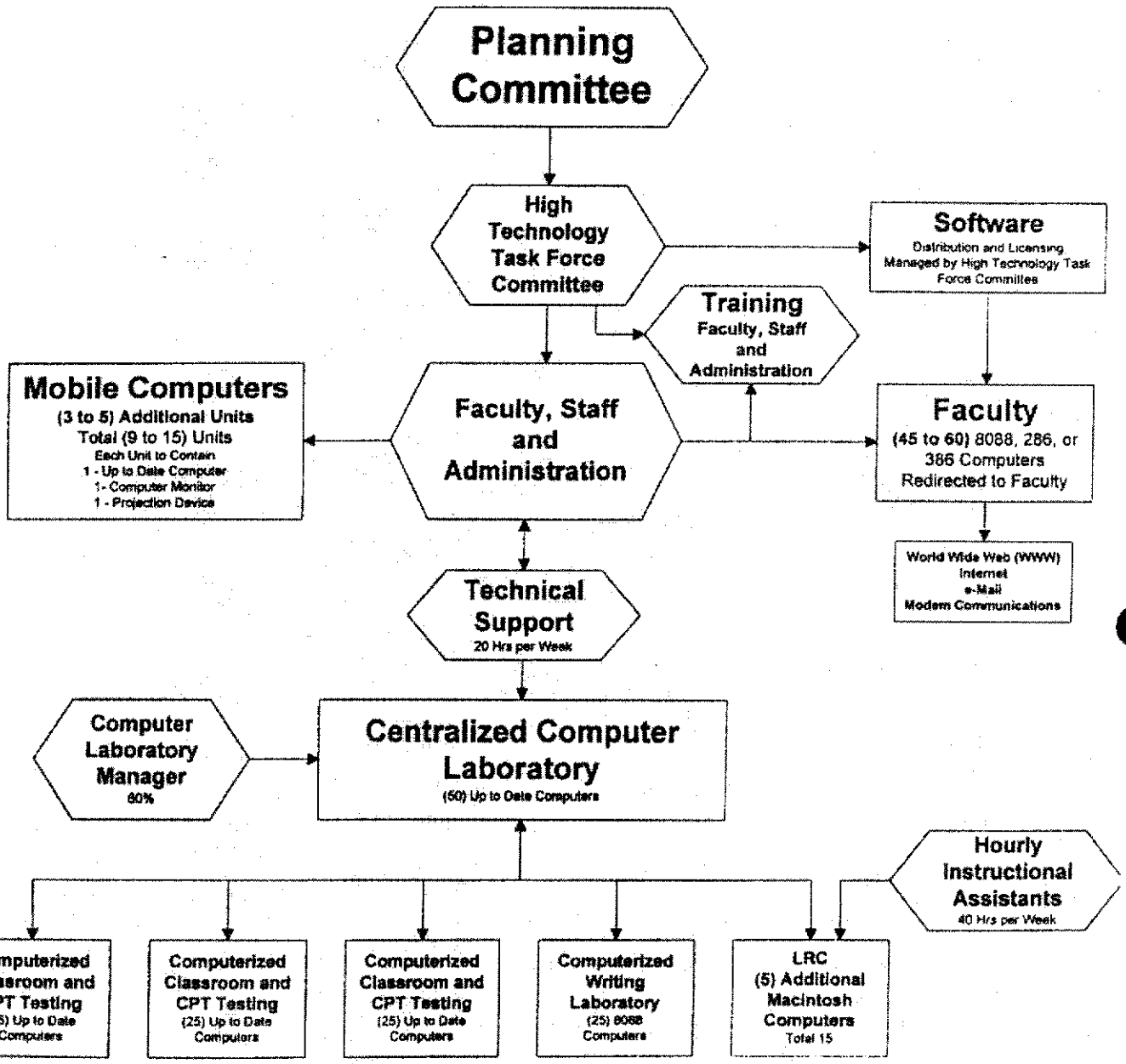
Relocate 50 Surplus Computers to Computer Writing Lab and Faculty

Relocate 18 IBM Compatible 486 Computer to Classroom and Lab

Relocate 16 IBM Compatible 386 Computer to Accounting Classes and Lab

Technology 2000

Third Year



Lease/Purchase 52 Additional Up to Date Computers for One Additional Classroom, CPT Testing and Distribution to Faculty

Continue Centralize Software Acquisition Licensing and Distribution

Lease/Purchase Five Additional Mobile Computer Stations

Lease/Purchase Five Additional Macintosh Computers for Learning Resource Center

Increase Lab Manager to 60%, Technical Support to 20 Hrs per Week and LRC Instructional Assistants to 40 Hrs per Week

Purchase Printers as Needed to Replace Printers in Classrooms and Lab

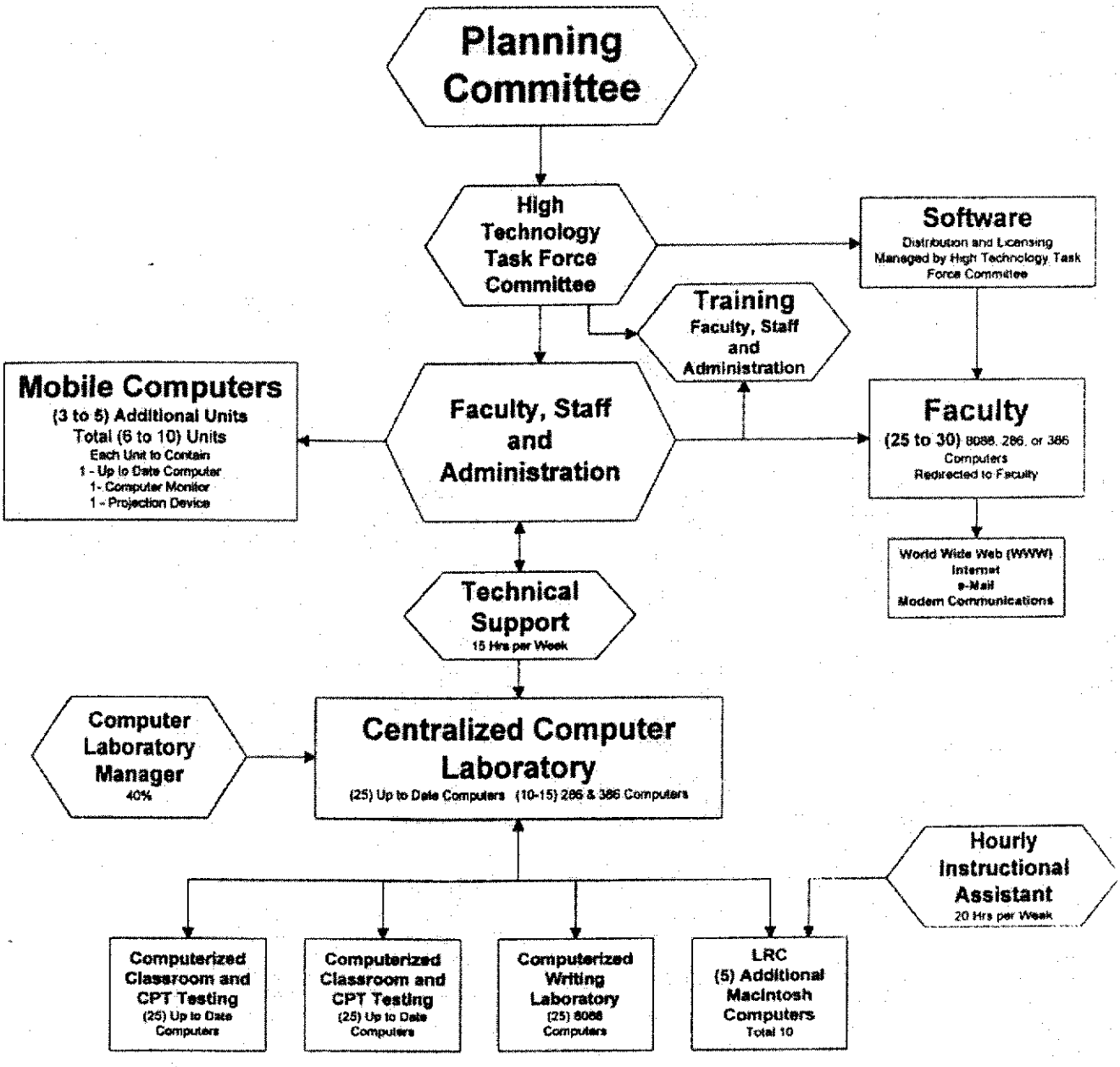
Continue Network Faculty Computer Communications to Internet and World Wide W

Network Second Computer Classroom

Purchase Modular Furniture for Classrooms a Lab

Technology 2000

SecondYear



Continue Lease/Purchase 58 Up to date Computers

Continue Centralize Software Acquisition Licensing and Distribution

Lease/Purchase Five Additional Mobile Computer Stations

Lease/Purchase Five Additional Macintosh Computers for Learning Resource Center

Lease/Purchase Six Macintosh Computers for Central Computer Lab and Relocate Four Macintosh Computers to Physics Lab

Continue Lab Manager, Computer Technician and Instructional Assistant at Same Rate

Purchase Printers as Needed to Replace Printers in Classrooms and Lab

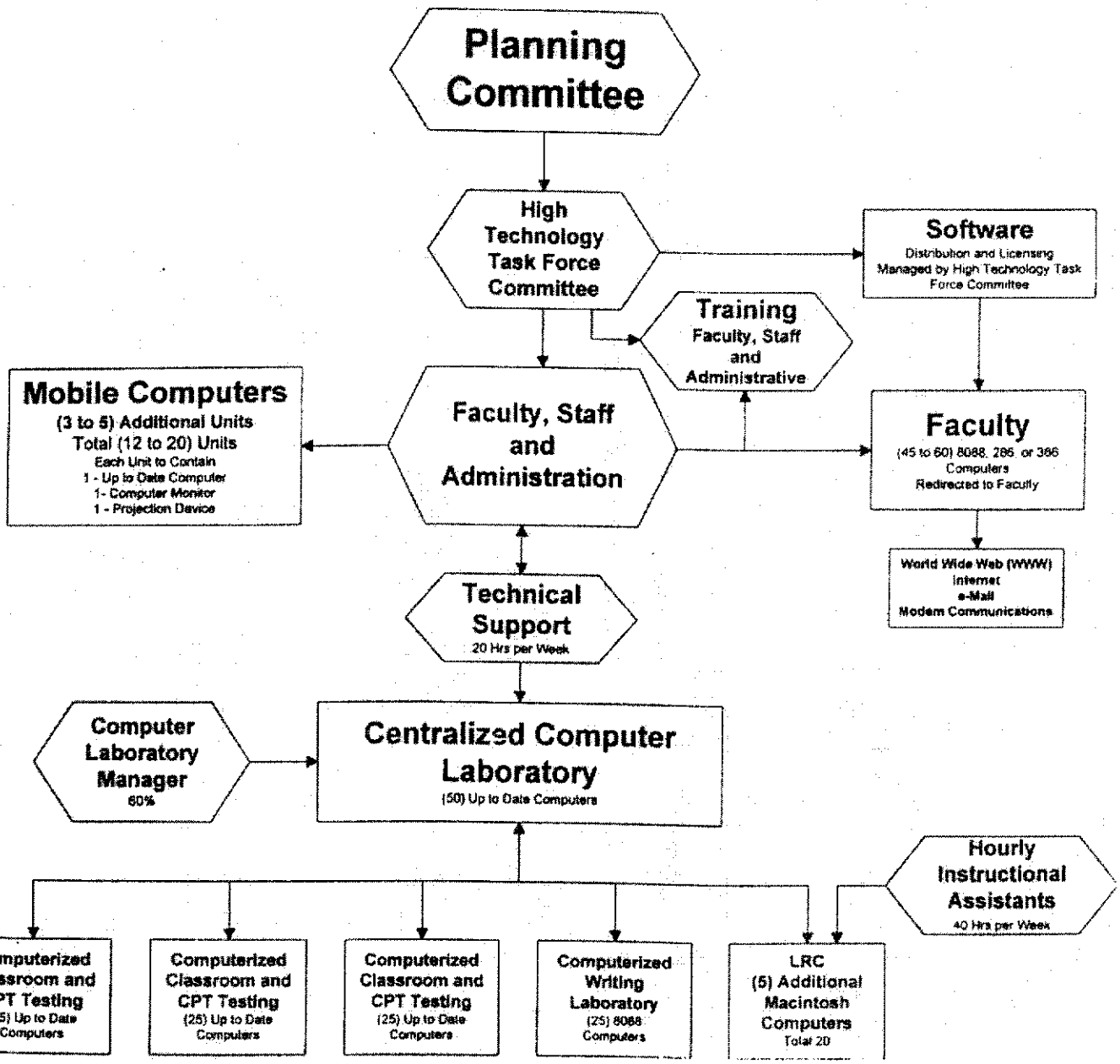
Continue Network Faculty Computer Communications to Internet and World Wide Web

Network First Computer Classroom

Purchase Modular Furniture for Classrooms and Lab

Technology 2000

Fourth Year



Continue Lease/Purchase 52 Additional Up to Date Computers

Continue Centralize Software Acquisition Licensing and Distribution

Lease/Purchase 5 Additional Mobile Computer Stations

Lease/Purchase (5) Additional Macintosh Computers for Learning Resource Center

Continue Lab Manager to 60%, Technical Support to 20 Hrs per Week and LRC Instructional Assistants to 40 Hrs per Week

Purchase Printers as Needed to Replace Printers in Classrooms and Lab

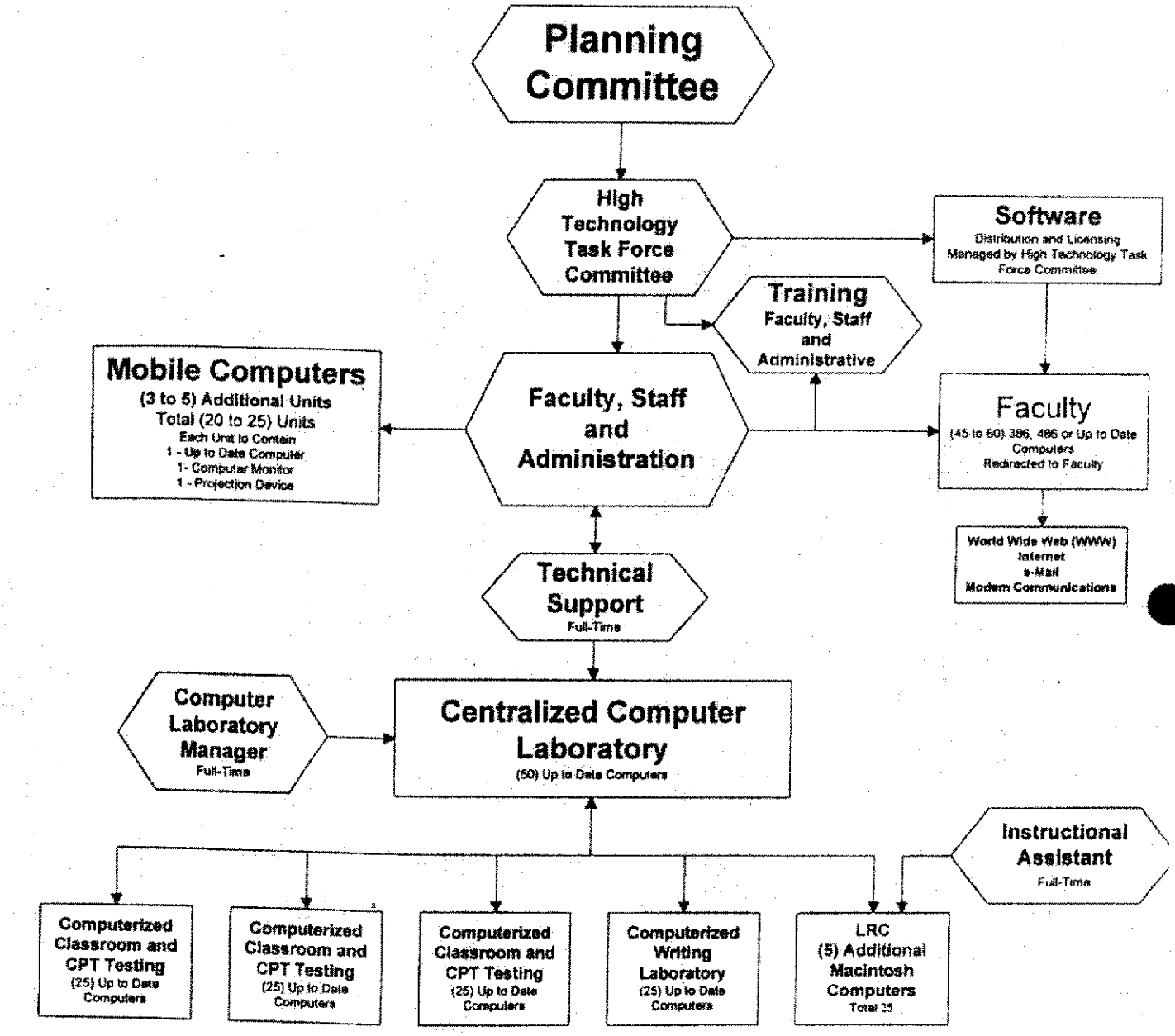
Continue Network Faculty Computer Communications to Internet and World Wide V

Network Third Computer Classroom

Purchase Modular Furniture for Classrooms a Lab

Technology 2000

Fifth Year



Lease/Purchase 50 Additional Up to Date Computers

Replace Older 8088 Computers in Writing Lab with Up to Date Computers

Remodel (Lighting and Electrical) as Needed

tinue Centralize Software Acquisition Licensing and Distribution

Lease/Purchase Five Additional Mobile Computer Stations

Lease/Purchase Five Additional Macintosh Computers for Learning Resource Center

Lab Manager, Technical Support, and LRC Instructional Assistant to Become Full-Time

Purchase Printers as Needed to Replace Printers in Classrooms and Lab

Continue Network Faculty Computer Communications to Internet and World Wide

Network Fourth Computer Classroom

Purchase Modular Furniture for Classrooms Lab

SAN BERNARDINO
COMMUNITY COLLEGE DISTRICT

INFORMATION TECHNOLOGY STRATEGIC PLAN
2001-2004

November 2001

TABLE OF CONTENTS

Executive Summary 2

I. Context for IT Planning at San Bernardino Community College District 6

II. The Strategic Planning Process 6

III. Information Technology Vision 7

IV. Information Technology Guiding Principles 9

V. Planning Assumptions Concerning the Current and Future Environment 10

VI. Information Technology Goals and Strategies 12

VII. Alignment of Information Technology Plan 15

VIII. Next Steps 21

IX. Implementation Grid 22

Appendix – SBCCD IT Strategic Planning Team Members 27

SAN BERNARDINO COMMUNITY COLLEGE DISTRICT
INFORMATION TECHNOLOGY STRATEGIC PLAN
2001-2004

Executive Summary

Under the direction of Dr. Donald Averill, appointed Chancellor in 2000, San Bernardino Community College District (SBCCD) has taken a proactive approach to Information Technology (IT) strategic planning to meet the future technology challenges of the district and funding mandate of the State of California. Information Technology strategic plans were first developed at each of the colleges, focusing on the needs of Crafton Hills College and San Bernardino Valley College stakeholders. The process used to develop the district and college plans was collaborative.

Each college planning team was cross-functional representing faculty, staff, and administration. The college teams met over a three-month period during Spring 2001 having final drafts completed by June 2001. Based on these final drafts, the district-wide Information Technology strategic plan was developed by a planning team comprised of representatives from both colleges and the district office (see appendix). Final approval of college and district IT strategic plans came in Fall 2001.

The SBCCD IT Vision reflects the ideal toward which the district will progress over time. The Guiding Principles are to be used as directional statements to govern the district's decisions and actions as it pursues the implementation of the IT goals and strategies. This plan is intended to be dynamic with annual review and subsequent updating to keep the district positioned to meet the technology challenges of the future.

INFORMATION TECHNOLOGY VISION

Through the use of information technology, San Bernardino Community College District is the linchpin for community and business development, provides all stakeholders with accurate and timely information and, most importantly, supports access to college learning-centered environments where students are empowered to develop their potential.

INFORMATION TECHNOLOGY GUIDING PRINCIPLES

- ***Information technology supports and promotes student learning by providing ready access to the learning environment independent of time, space, or student financial constraints.***
- ***Electronic communication encourages openness and promotes accessibility to information and the learning environment.***
- ***Information literacy is necessary for SBCCD to be a learning organization.***

- ***Technology facilitates faculty and staff professional development and assists employees to maximize their effectiveness.***
- ***SBCCD technology currency and standards are equal to those in the business community.***
- ***SBCCD ensures privacy and security of information within its technology systems.***
- ***Technology provides accurate and timely information for effective decision-making.***
- ***Information technology enhances and improves efficiency.***
- ***SBCCD technology facilitates the use of technology so that the colleges may deliver instruction efficiently and effectively.***
- ***Information technology enables all SBCCD employees to work together in order to make the district the educational leader of the region.***

Deleted: *assists*

Deleted: *facets of*

Deleted: *to be*

INFORMATION TECHNOLOGY GOALS AND STRATEGIES

District-wide Goal #1: Provide consistent resources to support Information Technology throughout the district.

Formatted: Bullets and Numbering

District Leadership Strategies:

1.1 Provide Human Resources, facilities, and funding support for Information Technology at all district locations as needed.

1.2 Explore a variety of funding sources to ensure that the yearly Information Technology needs of the district are met.

District-wide Goal #2: Ensure that there is technology available to support the colleges in their various initiatives.

Formatted: Bullets and Numbering

Central Computing Services Strategies:

2.1 Provide support for grant writing to assist the colleges in locating external technology funding sources.

2.2 Assist the colleges to assess network infrastructure, bandwidth, and server requirements.

2.3 Work with the colleges to research and recommend appropriate uses of wireless technology.

2.4 Update virus protection software on all networked college computers.

Formatted: Bullets and Numbering

2.5 Assist the colleges in the development of a robust web presence.

2.6 Provide and maintain a centralized web portal.

2.7 Assist the colleges in ensuring that all software licensing is current.

2.8 Assist the colleges in developing a replacement cycle for all technology.

2.9 Assist the colleges in developing processes and procedures for technology acquisition.

District-wide Goal #3: Provide access to all district-wide information in support of college goals.

Formatted: Bullets and Numbering

Central Computing Services Strategies:

3.1 Provide online access to Governing Board policies, agendas, and supporting documents.

3.2 Maintain and support accessibility to all systems for authorized users.

Formatted: Bullets and Numbering

3.3 Provide Internet access to college information and services from off-campus locations for students and the community, such as, college catalogs, course outlines and other public information.

3.4 Provide access to online student services.

3.5 Provide faculty with online capabilities to record and track student grades.

3.6 Provide access to college directories in searchable formats.

Deleted: *sortable*

3.7 Provide technologies to assist with the Early Alert of students who require professional intervention (tutoring, counseling, etc.)

District-wide Goal #4: Support distance learning to meet the needs of students and the community.

Formatted: Bullets and Numbering

Central Services Strategies:

4.1 Provide support for distributed student support functions, i.e., admissions, library, registrar, counseling, etc.

4.2 Provide support to colleges for the establishment of distance education standards in software, network and classroom (including video) configurations, etc.

4.3 Support the colleges in offering instruction in an online format and a multi-media format.

4.4 Assist the colleges in transitioning telecourses to digital format.

4.5 Assist the colleges in addressing appropriate staffing, partnering with K-12 and other community colleges, university, etc. for distributed learning.

4.6 Provide support to the colleges in the investigation of "tele-learning."

4.7 Provide technology support for assisting the colleges in marketing distributed learning.

4.8 Provide technology support to the colleges in the coordination of KVCR services.

District-wide Goal #5: Support distributed learning to meet the needs of students and the community.

Formatted: Bullets and Numbering

KVCR FM/TV Strategies:

5.1 Assist the colleges in coordinating efforts for KVCR addressing appropriate staffing, partnering with K-12 and other community colleges, university, etc.

5.2 Work with colleges to transition KVCR to digital format.

Formatted: Bullets and Numbering

5.3 Investigate ways that KVCR can utilize "tele-learning."

5.4 Assess costs associated with keeping KVCR competitive in the education market.

District-wide Goal #6: Support technological connectivity among all stakeholders.

Formatted: Bullets and Numbering

Central Computing Services Strategies:

6.1 Ensure that off-campus email access is adequate to support user needs.

Formatted: Bullets and Numbering

6.2 Work with the colleges to develop a plan communicating IT decisions and plans to the college communities.

6.3 Provide email access for all students.

6.4 Assist the district in developing a plan to purchase and implement new telephone systems as needed.

District-wide Goal #7: Provide technology training support for SBCCD.

Formatted: Bullets and Numbering

Central Computing Services Strategies:

7.1 Provide appropriate training for all administrative systems.
7.2 Provide web-based, user-friendly, and current user guides and FAQs in support of administrative systems.
7.3 Assist in the formation of Technology User Support Groups to provide a forum for technology at the colleges.

Formatted: Bullets and Numbering

District-wide Goal #8: **Provide effective and efficient administrative systems to support the business of the district.**

Central Computing Services Strategies:

8.1 Work with the colleges to provide non-redundant databases for college information.
8.2 Assist the colleges in improving administrative systems reports and provide online distribution of such reports.
8.3 Provide all district operational forms online.
8.4 Provide appropriate authentication processes to comply with federal and state agencies in conjunction with the colleges.
8.5 Provide college and district data in report formats that assist in decision-making.
8.6 Provide technology in support of district-wide safety and security.

Formatted: Bullets and Numbering

I. Context for IT Planning at San Bernardino Community College District

The San Bernardino Community College District has recognized the demand for information and communication technologies for a number of years and has made tremendous strides in meeting the needs of Crafton Hills College and San Bernardino Valley College. Planning for information technology has recently been a priority in all California Community Colleges due to a funding mandate in 2000. In response to this mandate and also wishing to be proactive in its approach to technology challenges of the future, SBCCD began an IT strategic planning effort, first, at the colleges and then at the district level.

With the appointment of a new Chancellor in 2000, the support of future growth and service to students has become technology priorities. Chancellor Averill supported the approach of the college IT plans being aligned with not only their individual institutional goals, but also with the district's mission, and the California Community Colleges system technology directives. In addition, the district-wide IT strategic plan would be based on the college plans thus ensuring that alignment and implementation of college goals and strategies would be the driving force behind district IT initiatives. Chancellor Averill convened a district-wide steering team that was responsible for combining the two campus-based plans into an overall district-wide IT strategic plan.

II. The Strategic Planning Process

The purpose of long range or strategic planning for information technology is to tie institutional priorities to technology trends. This approach to IT planning allows the San Bernardino Community College District to look at strategic planning as a process that identifies the current educational environment, articulates a future institutional environment, and how, specifically, the district can successfully achieve its goals. The focus is on the needs of the district's various stakeholders, particularly the students, rather than on the information technology organization. The plan is aligned with the district's mission and goals, and focused on what the district needs to "do" with technology rather than on what technology the district needs to "buy." This information technology plan seeks to provide directions and a management strategy within the context of changing internal and external environments, while it sets the philosophy and direction for the use of information technology within the district.

Chancellor Averill and representatives from Crafton Hills College and San Bernardino Valley College (see Appendix) developed the San Bernardino Community College District IT Strategic Plan for 2001-2004 in two half-day sessions. The methodology used focused on organizational transition as described in *Organizational Transitions, 2nd* edition (1987), by Beckhard and Harris. The methodology is based upon the principle that:

> "…a core dilemma for executives and leaders is how to maintain stability in their organizations and, at the same time, provide creative adaptation to outside forces; stimulate innovation; and change assumptions, technology, working methods, roles and

responsibilities, and the culture of the organization itself." (*Organizational Transitions*, p. 1)

The planning approach that was adapted for use by the district, from the methodology proposed by Beckhard and Harris, required the following steps:

- Development of a "future state" vision of how the use of information technology, in its broadest definition, should add value in support of the district's and the colleges' mission and goals.
- Development of guiding principles that should govern the decisions and actions of the organization.
- Development of planning assumptions detailing the environment in which the district and the colleges currently exist.
- Development of goals and strategies to enable the district and the colleges to move forward toward the desired "future state" in accordance with the guiding principles.

III. Information Technology Vision

The San Bernardino Community College District envisions a future state where students have "learned how to learn" and can remain current in their quest for knowledge because they have access to the information they need. Students take classes online from faculty worldwide and can access student services at anytime, from anywhere. They have real-time control of transcripts and can check their program status whenever they wish.

Area high school students consider graduation from CHC or SBVC to be their goal rather than high school graduation. They look to SBCCD to meet their technology needs especially if technology is not readily available in their homes. Both CHC and SBVC are viewed as affordable, desirable, and leaders in technology and a means to acquire the skills and knowledge they need to be successful.

Faculty collaborate electronically with educators throughout the world in this future state. They facilitate learning by working with students to identify their educational plan and determine the strategies needed to achieve their goals. Faculty customize programs to meet a student's needs by combining courses offered by SBVC and CHC as well as other educational institutions throughout the state and globally. Technological fluency is a "given" among faculty and they work to continually update their skills and knowledge.

Likewise, classified staff and administrators use technology to the fullest making informed decisions because of the availability and accuracy of the data. The district's professional growth programs in technology are known throughout the country providing training that is not only up-to-date and effective but also exciting. Innovative incentives to remain technically current and maintain a high level of expertise are available for all staff and only add to the outstanding reputation of the SBCCD.

Alums of SBCCD recognize the quality education they received at Crafton Hills or Valley College and express their appreciation by contributing generously to the advancement of the district. They continuously return to SBCCD to take classes to keep updated in their fields or to learn a new skill or pursue a new interest. In addition to their financial support, they give their time and talent to CHC and SBVC because they are connected via technology and are proud to be a part of future-thinking institutions. They also encourage potential students to attend the colleges and promote the sense of community that SBCCD fosters using technology.

In this future state, SBCCD is a major contributor to the economic success of local businesses and industry because of the just-in-time workforce that CHC and SBVC provide. SBCCD is the technology training/education provider of choice. The workforce is highly knowledgeable and skilled acquiring this expertise through SBCCD's advanced technical support. Businesses are true partners with SBCCD by providing space, expertise, and resources in establishing satellite campuses on their premises. They are connected directly to the colleges and rely on SBCCD to help meet their technology needs. In addition, SBCCD is the change-agent in the economic development of San Bernardino and Riverside counties. All of this is accomplished through SBCCD's outstanding use of technology.

Technology vendors want to do business with the district because they consider SBCCD spokespeople for their products. They seek the district's opinion as to the future of technology and work with the colleges in product pre-release so that SBCCD can provide state-of-the-art training for the workforce. In addition, vendors provide student scholarships and equipment and willingly share their expertise by teaching at CHC and SBVC.

SBCCD partners with other cities and government agencies through the use of technology. The integration is so complete that visitors to government websites are also linked to the colleges. Other educational institutions look to SBCCD as the model for addressing entry into four-year institutions using electronic transcripts, counseling, etc.

The community, likewise, considers SBCCD as a valuable asset. SBCCD has changed the face of education using technology and made measurable contributions to community quality of life. Through the effective use of technology, the social fabric of the community has been improved and SBCCD is the portal and information conduit to the world. Citizens go through SBCCD electronic kiosks when seeking information and consider themselves privileged to be a part of the SBCCD "smart" community.

In this future, the SBCCD Board of Trustees is well versed in technology and Trustees are proponents of innovative and effective uses of technology throughout the district. They recognize the technology leadership that SBCCD provides its stakeholders and uses technology to extend their interaction with the community. Board meetings are webcast and public comments are shared.

Keeping this future state scenario in mind, the SBCCD IT strategic planning team created the following vision for how information technology can be used to add value to the San Bernardino Community College District in support of the district's mission and goals.

INFORMATION TECHNOLOGY VISION

Through the use of information technology, San Bernardino Community College District is the linchpin for community and business development, provides all stakeholders with accurate and timely information and, most importantly, supports access to college learning-centered environments where students are empowered to develop their potential.

The SBCCD IT vision statement reflects an ideal state. Attainment of this vision is not immediate. Progress will be made over time as SBCCD begins to implement the goals and strategies contained in this IT Strategic Plan and in future plans.

IV. Information Technology Guiding Principles

If San Bernardino Community College District is to be successful in achieving its IT vision and accomplishing its strategic objectives, it is not sufficient to do things right; it must do the right things. In their book *Paradigm Shift: The New Promise of Information Technology*, Don Tapscott and Art Caston state that a useful technique for ensuring that those responsible for IT are "doing the right thing," is to establish a set of guiding principles, with "principles" being defined as "simple, direct statements that describe what is determined to be good practice." Principles should describe the fundamental values or criteria against which the institution is prepared to make decisions regarding the acquisition and use of information technology.

The following is a list of IT Guiding Principles for the San Bernardino Community College District. These principles are based on the IT vision and are intended as directional statements used to govern the decisions and actions of the district as it pursues the acquisition and implementation of information technology.

INFORMATION TECHNOLOGY GUIDING PRINCIPLES

- ***Information technology supports and promotes student learning by providing ready access to the learning environment independent of time, space, or student financial constraints.***
- ***Electronic communication encourages openness and promotes accessibility to information and the learning environment.***
- ***Information literacy is necessary for SBCCD to be a learning organization.***
- ***Technology facilitates faculty and staff professional development and assists employees to maximize their effectiveness.***

- ***SBCCD technology currency and standards are equal to those in the business community.***
- ***SBCCD ensures privacy and security of information within its technology systems.***
- ***Technology provides accurate and timely information for effective decision-making.***
- ***Information technology enhances and improves efficiency.***
- ***SBCCD technology facilitates the use of technology so that the colleges may deliver instruction efficiently and effectively.***
- ***Information technology enables all SBCCD employees to work together in order to make the district the educational leader of the region.***

Deleted: *assists*
Deleted: *facets of*
Deleted: *to be*

V. Planning Assumptions Concerning the Current and Future Environment

The following is a list of planning assumptions about the environment in which the San Bernardino Community College District exists. These assumptions are based upon the observations and opinions of the SBCCD IT strategic planning team and are intended to reflect the current internal and external environmental factors that have a bearing on the development and implementation of the district's IT strategic plan. As the environment changes, assumptions and resulting goals and strategies will need to be modified. This will occur through an annual review process of SBCCD's Information Technology strategic plan. (Note: There is no priority attributed to the order in which the assumptions are listed.)

Student-related Assumptions:

- ***SBCCD students are culturally and ethnically diverse.***
- ***There is a growing need for remediation for incoming students.***
- ***SBCCD students are slightly older than those of the universities in the region.***
- ***More women attend college than males and this trend is increasing.***
- ***It is a challenge to recruit men to attend college.***
- ***High school students are becoming increasingly more technologically sophisticated.***
- ***Many students are more technologically savvy than faculty.***
- ***It is a challenge to keep curriculum updated and current.***
- ***There is a growing number of students with physical and learning disabilities who need to be served.***
- ***By 2005, students will be required to pass a proficiency test to graduate from high school.***
- ***Technology and group learning are being used to raise student proficiency in content areas.***

Faculty/Staff-related Assumptions:

- ***It is recognized that there is a need for technology training; however, people are not motivated to participate in training that does not match personal interests.***

Deleted: *motivat*
Deleted: *ion*
Deleted: *take*
Deleted: *is lacking*

- *There is a perception among some faculty that they are not being paid to attend technology training whereas staff take training during business hours and are being compensated.*
- *Classified staff have a tuition-reimbursement program.*
- *Some faculty tend to teach as they have in the past rather than regularly update content and methods.*
- *68% of the faculty are retirement age and many will continue to work into their 70s or older.*
- *The extent to which technology will be integrated into teaching and learning is related to intellectual property rights and faculty workload.*
- *There is no existing documentation that quantifies the amount of time necessary for development and delivery of online courses (workload) or the development of "learning communities."*
- *Many current applicants in the faculty pool have experience in incorporating technology into teaching and learning.*
- *Some faculty do not want to use computers for teaching and learning.*

Deleted: *Integration of technology*

Community-related Assumptions:

- *SBCCD serves nine surrounding cities all of which have similar industrial profiles.*
- *The northern corridor of SBCCD is experiencing growth due to a major freeway project and housing developments.*
- *Every high school district except in the mountain areas is planning one to four new high schools in the next four years.*
- *The high schools and SBCCD colleges are working to address improving proficiency.*
- *California high schools participate in the Digital High School project to integrate technology across the curriculum including faculty training, technical support, and classroom access.*

Deleted: *are*

Technology support-related Assumptions:

- *Technology support is costly yet critical.*
- *When technology is purchased with one-time money, there are often no long-term dollars to provide technology support.*
- *Technology support that is not directly tied to instruction is difficult to fund due to the 50% law.*
- *Technology support staff need to have knowledge of future technology so that they can have the expertise readily available when the new technology is acquired.*
- *Current technology support staff focus on hardware.*
- *There is a need for technology support staff that focus on both administrative and instructional software applications.*
- *Technology support staff need ongoing training to keep current as new technology is installed and implemented.*

Deleted: *both administrative and instructional*

Information Technology-related Assumptions:

- ***There is a trend in California to use more wireless technology to provide access to remote sites within the state.***
- ***SBCCD needs flexibility in providing technology access to facilities through wireless technology.***
- ***Accurate information is needed in order to make informed decisions.***
- ***New technologies are changing the way we deliver services.***
- ***The SBCCD portal will be the single point of access to the learning environment and college services and information.***

Resource-related Assumptions:

- ***There are not enough resources allocated to SBCCD by the state.***
- ***It is difficult for SBCCD to fulfill the infrastructure related mandates of TTIP due to the 50% law.***
- ***TTIP funds support statewide connectivity.***
- ***State funding is not consistent year-to-year.***
- ***Technology is expensive and SBCCD needs to look at alternative resources that are consistent on a yearly basis.***

Facilities-related Assumptions:

- ***SBCCD needs more facilities where there is unrestricted, open access to technology.***
- ***Technology can be used to improve the adequacy of some facilities.***
- ***There are some facilities where installation of technology is difficult.***
- ***Facility space is used mostly between 8:00 a.m. and 2:00 p.m. and 6:00 to 10:00 p.m.***
- ***It is expensive to retrofit buildings to accommodate technology.***
- ***Wireless is an option for bringing facilities up to standard.***

Legislative mandates -related Assumptions:

- ***The PFE (Partnerships for Excellence) accountability model that identifies goals that each institution must meet will shape the mission of SBCCD.***
- ***Research is needed to analyze PFE data but currently there is not enough staff to support this effort.***
- ***New standards are being identified for accreditation to include how technology is remaining current and how quality is being ensured in distributed learning.***
- ***SBCCD needs to address institutional effectiveness/learning outcomes accountability issues for accreditation.***

Deleted: *There is a trend from libraries to become library information centers where there will be only 20% books with access electronically to all other informationThere is a trend for mass customization of textbooks where faculty can tailor information for a specific class at lower costs to students.*

Formatted: Bullets and Numbering

Deleted: *that is infrastructure-oriented*

Deleted: *There is a*

Deleted: *for*

Deleted: *for*

Deleted: *wiring*

Deleted: *that closely follow the current high school standards that*

VI. Information Technology Goals and Strategies

The following list is the Information Technology Goals and Strategies for 2001-2004 for the San Bernardino Community College District. Goals are intended to be long-term, major targets or end results related to the survival, value, and growth of the district. Strategies are defined as

activities and resource allocations designed to achieve the long-term goals. These goal statements and strategies were based on the IT vision, guiding principles, and planning assumptions developed by the SBCCD IT strategic planning team. Each goal is supported by strategies that are to be implemented by different offices or functions within central services. These offices include District Computing Services (DCS), KVCR FM/TV, the office of Distributed Learning, Publications, and the Professional Development Center. It is understood that these offices will work with the colleges in accomplishing each strategic objective.

District-wide Goal #1: Provide consistent resources to support Information Technology throughout the district.

District Leadership Strategies:

1.1 Provide Human Resources, facilities, and funding support for Information Technology at all district locations as needed.

1.2 Explore a variety of funding sources to ensure that the yearly Information Technology needs of the district are met.

District-wide Goal #2: Ensure that there is technology available to support the colleges in their various initiatives.

Central Computing Services Strategies:

2.1 Provide support for grant writing to assist the colleges in locating external technology funding sources.

2.2 Assist the colleges to assess network infrastructure, bandwidth, and server requirements.

2.3 Work with the colleges to research and recommend appropriate uses of wireless technology.

2.4 Update virus protection software on all networked college computers.

2.5 Assist the colleges in the development of a robust web presence.

2.6 Provide and maintain a centralized web portal.

2.7 Assist the colleges in ensuring that all software licensing is current.

2.8 Assist the colleges in developing a replacement cycle for all technology.

2.9 Assist the colleges in developing processes and procedures for technology acquisition.

District-wide Goal #3: Provide access to all district-wide information in support of college goals.

Central Computing Services Strategies:

3.1 Provide online access to Governing Board policies, agendas, and supporting documents.

3.2 Maintain and support accessibility to all systems for authorized users.

3.3 Provide Internet access to college information and services from off-campus locations for students and the community, such as, college catalogs, course outlines and other public information.

3.4 Provide access to online student services.

3.5 Provide faculty with online capabilities to record and track student grades.

3.6 Provide access to college directories in searchable formats.

3.7 Provide technologies to assist with the Early Alert of students who require professional intervention (tutoring, counseling, etc.)

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

Formatted: Bullets and Numbering

Deleted: *sortable*

District-wide Goal #4: Support distance learning to meet the needs of students and the community.

Central Services Strategies:

4.1 Provide support for distributed student support functions, i.e., admissions, library, registrar, counseling, etc.

4.2 Provide support to colleges for the establishment of distance education standards in software, network and classroom (including video) configurations, etc.

4.3 Support the colleges in offering instruction in an online format and a multi-media format.

4.4 Assist the colleges in transitioning telecourses to digital format.

4.5 Assist the colleges in addressing appropriate staffing, partnering with K-12 and other community colleges, university, etc. for distributed learning.

4.6 Provide support to the colleges in the investigation of "tele-learning."

4.7 Provide technology support for assisting the colleges in marketing distributed learning.

4.8 Provide technology support to the colleges in the coordination of KVCR services.

District-wide Goal #5: Support distributed learning to meet the needs of students and the community.

KVCR FM/TV Strategies:

5.1 Assist the colleges in coordinating efforts for KVCR addressing appropriate staffing, partnering with K-12 and other community colleges, university, etc.

5.2 Work with colleges to transition KVCR to digital format.

5.3 Investigate ways that KVCR can utilize "tele-learning."

5.4 Assess costs associated with keeping KVCR competitive in the education market.

District-wide Goal #6: Support technological connectivity among all stakeholders.

Central Computing Services Strategies:

6.1 Ensure that off-campus email access is adequate to support user needs.

6.2 Work with the colleges to develop a plan communicating IT decisions and plans to the college communities.

6.3 Provide email access for all students.

6.4 Assist the district in developing a plan to purchase and implement new telephone systems as needed.

District-wide Goal #7: Provide technology training support for SBCCD.

Central Computing Services Strategies:

7.1 Provide appropriate training for all administrative systems.

7.2 Provide web-based, user-friendly, and current user guides and FAQs in support of administrative systems.

7.3 Assist in the formation of Technology User Support Groups to provide a forum for technology at the colleges.

District-wide Goal #8: Provide effective and efficient administrative systems to support the business of the district.

Central Computing Services Strategies:

8.1 Work with the colleges to provide non-redundant databases for college information.

8.2 Assist the colleges in improving administrative systems reports and provide online distribution of such reports.

8.3 Provide all district operational forms online.

8.4 Provide appropriate authentication processes to comply with federal and state agencies in conjunction with the colleges.

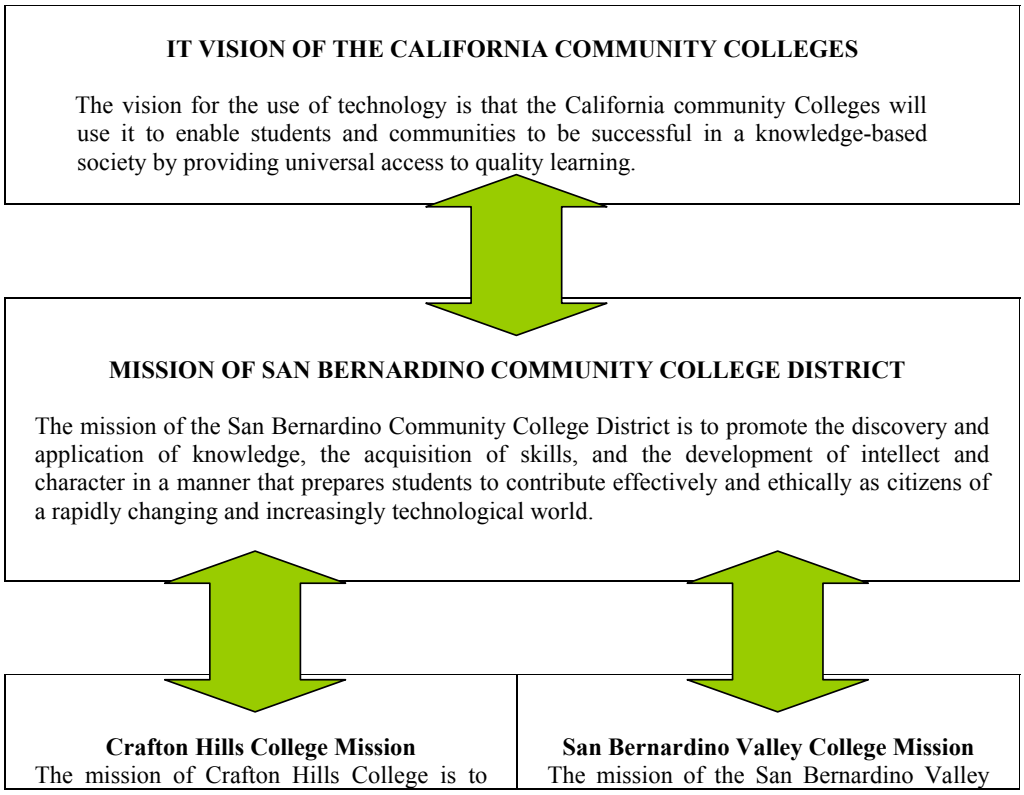
8.5 Provide college and district data in report formats that assist in decision-making.

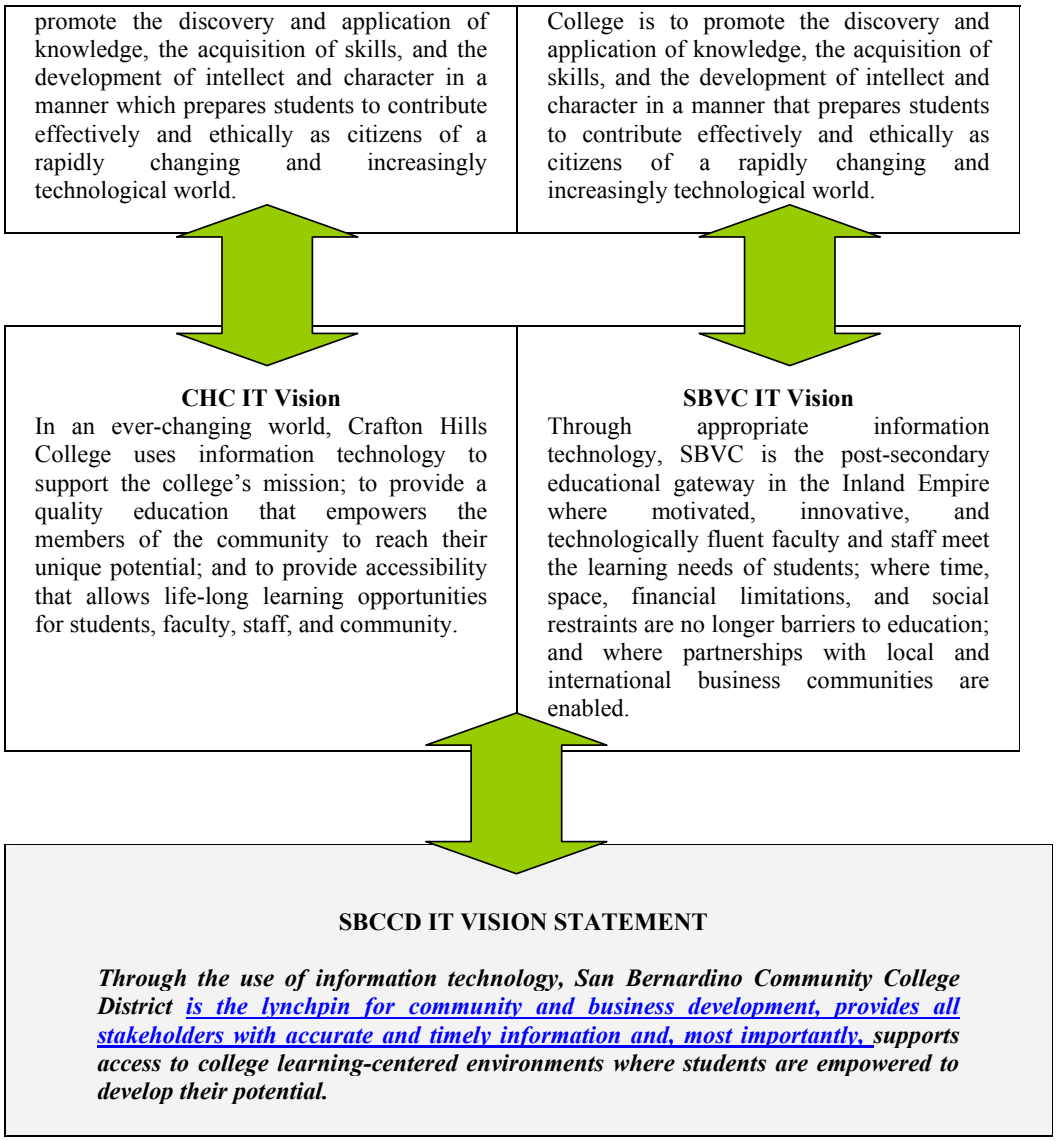
8.6 Provide technology in support of district-wide safety and security.

Formatted: Bullets and Numbering

VII. Alignment of Information Technology Plan

In order for this Information Technology Strategic Plan to be an effective tool for directing the acquisition and use of information technology within SBCCD, there must be alignment of the college plans with the SBCCD plan and the SBCCD mission. In addition, there must be alignment of the district plan with the IT vision of the California Community Colleges. This alignment begins with the following.





Just as the IT vision of the district aligns with those of the colleges, the Information Technology Guiding Principles of SBCCD also align.

SBCCD IT GUIDING PRINCIPLES

- ***Information technology supports and promotes student learning by providing ready access to the learning environment independent of time, space, or student financial constraints.***
- ***Electronic communication encourages openness and promotes accessibility to information and the learning environment.***
- ***Information literacy is necessary for SBCCD to be a learning organization.***
- ***Technology facilitates faculty and staff professional development and assists employees to maximize their effectiveness.***
- ***SBCCD technology currency and standards are equal to those in the business community.***
- ***SBCCD ensures privacy and security of information within its technology systems.***
- ***Technology provides accurate and timely information for effective decision-making.***
- ***Information technology enhances and improves efficiency.***
- ***SBCCD technology facilitates the use of technology so that the colleges may deliver instruction efficiently and effectively.***
- ***Information technology enables all SBCCD employees to work together in order to make the district the educational leader of the region.***

Deleted: *assists*

Deleted: *facets of*

Deleted: *to be*

CHC IT Guiding Principles

1. Crafton Hills College should use information technology to promote student learning.
2. Crafton Hills College should pervasively use advanced technological tools for information processing, measurements, decision-making and communication.
3. Crafton Hills College should honor the principles and practices of universal access.
4. Crafton Hills College should use information technology to provide learning opportunities independent of time and space.
5. Crafton Hills College should use information technology to provide student support functions independent of time and space.
6. Crafton Hills College should provide its faculty and staff with the resources and training to use appropriate technologies.
7. Crafton Hills College should respect the adopted

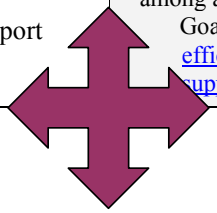
SBVC IT Guiding Principles

- Technology enhances communication among faculty, staff, students, alumni, business and industry, and the community
- Technology makes it possible to tailor learning to meet specific needs of students.
- The use of technology encourages faculty to use multiple modes of instruction including distributed means.
- Every student demonstrates basic competency in technology.
- Students, faculty, and staff are able to access appropriate information electronically.
- Technology assists faculty and staff in becoming more knowledgeable in their individual areas of expertise.
- Technology training for faculty and staff is appropriate, available, and timely.
- Technology makes learning opportunities available that eliminate the barriers of time and space.
- SBVC provides access to technology regardless of socioeconomic status or disability.
- Technology is a tool that enhances instruction.

academic freedom policy. 8. Crafton Hills College, while insuring security and appropriate usage, should protect the privacy and rights of individuals.	• It is critical to maintain technological currency in order for our students to stay competitive in the marketplace. • SBVC employs technology systems that increase efficiency and effectiveness of faculty and staff. • Compatibility of technologies is crucial. • A faculty member teaching multiple sections of the same class has access to equivalent technology in each classroom location. • The use of technology maintains appropriate levels of privacy and security. • Appropriate and timely technical support is accessible. • Technology is used to reduce the cost of administrative services. • Students have access to technology at a level equivalent to that which is required in instructional programs. • Technology assists SBVC in assessing its effectiveness.

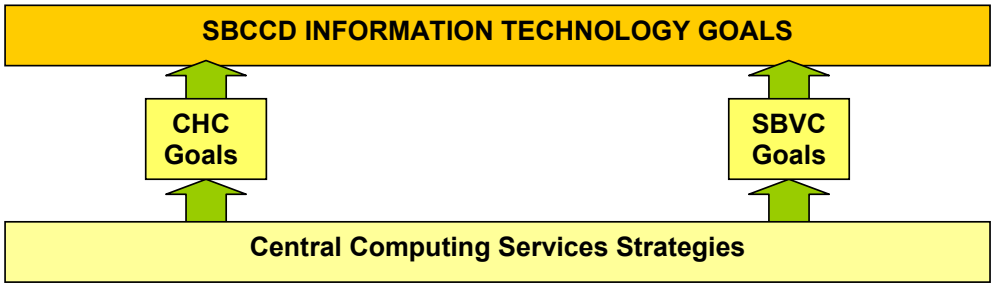
The district-wide IT goals are aligned with those of the California Community College Technology II goals and objectives.

CALIFORNIA COMMUNITY COLLEGES TECHNOLOGY II GOALS AND OBJECTIVES	**SAN BERNARDINO COMMUNITY COLLEGE DISTRICT INFORMATION TECHNOLOGY GOALS**
Student Access – Promote student access to the California Community Colleges including access to instruction and to student services. Objectives: • Establish a baseline of access to computers for students and faculty and staff that serve them that includes a technology "refresh" program for computers and related equipment at all colleges. • Support the development of student services technology applications that have system-wide impact. • Provide a baseline suite of student support systems and services that could be available at each college.	Goal 1: Provide consistent resources to support Information Technology throughout the district. Goal 2: Ensure that there is technology available to support the colleges in their various initiatives. Goal 3: Provide access to all district-wide information in support of college goals Goal 4: Support distance learning to meet the needs of students and the community. Goal 5: Support distributed learning to meet the needs of students and the community. Goal 6: Support technological connectivity among all stakeholders. Goal 8: Provide effective and efficient administrative systems to support the business of the district.



Student Success – Promote students' success in their educational and career goals. Objectives: • Provide ongoing training for faculty in the use of information technology tools. • Expand access to multi-media classrooms and student computer labs. • Improve faculty and student access to automated library and learning resources including electronic information databases and administrative services. • Develop a centralized web-based resource center for materials, resources and processes with full faculty access to support the best practices in curriculum and instruction. • Integrate technology into college offices and support areas to ensure that staffs have the tools required to deliver services to students and faculty efficiently and effectively	Goal 1: Provide consistent resources to support Information Technology throughout the district. Goal 2: Ensure that there is technology available to support the colleges in their various initiatives. Goal 4: Support distributed learning to meet the needs of students and the community. Goal 6: Support technological connectivity among all stakeholders. Goal 7: Provide technology training support for SBCCD Goal 8: Provide effective and efficient administrative systems to support the business of the district.

The alignment of SBCCD's IT goals with the college goals is important. Central Computing Services supports the district goals by working with Crafton Hills and San Bernardino Valley College personnel in their information technology needs.



Below, the alignment of SBCCD with college goals is shown.

CHC IT Goals	SBVC IT Goals	SBCCD IT Goals
Goal #5: To establish on-going funding for technology hardware and software.	Goal #13: Ensure that funding is available for our current and future technology initiatives. Goal #9: Ensure that technology is available, current, and meets the needs of SBVC.	Goal #1: Provide consistent resources to support Information Technology throughout the district.

Goal #2: To provide information technology support during all open campus hours. Goal #5: To establish on-going funding for technology hardware and software Goal #10: To increase the information technology skills of Crafton Hills College students and thus their marketability Goal #13: To make effective use of the web for instruction, operations, communications and marketing. Goal #14: To provide an efficient and effective information technology advisory and decision-making process.	Goal #3: Integrate technology into teaching and learning as appropriate. Goal #9: Ensure that technology is available, current, and meets the needs of SBVC. Goal #10: Ensure that Web services and support are adequate to meet current needs. Goal #12: Ensure that ergonomic needs are considered when identifying workstation specifications. Goal #13: Ensure that funding is available for our current and future technology initiatives.	Goal #2: Ensure that there is technology available to support the colleges in their various initiatives.
Goal #12: To provide students with access to all information and complete all transactions from any location and at any time	Goal #1: Utilize technology to provide students with access to college resources and services.	Goal #3: Provide access to all district-wide information in support of college goals.
Goal # 9: To offer distributed education to as broad a community as possible	Goal #1: Utilize technology to provide students with access to college resources and services. Goal #9: Ensure that technology is available, current, and meets the needs of SBVC. Goal #10: Ensure that Web services and support are adequate to meet current needs.	Goal #4: Support distance learning to meet the needs of students and the community.
Goal #7: To equip all classrooms with technology to meet the instructional needs of faculty. Goal #8: To ensure compliance with all applicable aspects of the American's with Disabilities Act and other applicable federal and state requirements. Goal #9: To offer distributed education to as broad a community as possible	Goal #3: Integrate technology into teaching and learning as appropriate. Goal #9: Ensure that technology is available, current, and meets the needs of SBVC.	Goal #5: Support distributed learning to meet the needs of students and the community.
Goal #1: To determine the appropriate level of technology use for individual job functions or disciplines.	Goal #6: Support electronic communication for all constituencies.	Goal #6: Support technological connectivity among all stakeholders.
Goal #1: To determine the appropriate level of technology use	Goal #4: Ensure that technical assistance and support is available	Goal #7: Provide technology training support for SBCCD.

for individual job functions or disciplines. Goal #3: To provide accessible information technology training for faculty and staff. Goal #4: To provide instructional technology design training and support for faculty. Goal #11: To provide technology-training opportunities to the community, including local business and industry	to all users. Goal #5: Provide technology training for all SBVC personnel as needed.	
Goal #6: To provide the appropriate information technology to support college operations.	Goal #2: Provide online student services as appropriate. Goal #7: Ensure that job descriptions and personnel match the technology needs of SBVC. Goal #8: Address the impact of technology on workload. Goal #11: Provide adequate college resources online.	Goal #8: Provide effective and efficient administrative systems to support the business of the district.

VIII. Next Steps

The information technology strategic planning process that resulted in the development of this strategic plan for San Bernardino Community College District was collaborative and enabled the district to focus attention on how information technology can and should be used to further its mission and goals. In order for this process to have been truly successful, however, the district must be able to operationalize this plan on an annual basis. This will require Central Computing Services working in conjunction with the colleges, to develop annual operational plans that are specifically tied to the district-wide IT goals and strategies. Such operational plans should be tied to the budgeting process as well so that it is clear what resources are required and appropriate funding allocations are made. The Implementation Grid that is included in Section IX of this plan contains a column that indicates the individual, division, or group that work to accomplish each strategy. It will be the responsibilities of these individuals or groups in conjunction with Central Computing Services to develop the annual operating plans and appropriate budget requests for each of the assigned strategies

The district must also develop and implement a communication plan that provides for the distribution of information about the IT Strategic Plan. The IT strategic planning teams at CHC and SBVC should be actively involved in such information dissemination and in gathering feedback to the plan from the various district-wide groups for future updates. On an annual basis, the district should also revisit the planning assumptions and SBCCD's accomplishments against the strategic plan, and then modify this plan as required.

IX. Implementation Grid

*Where multiple individuals or groups are listed, the first has primary responsibility for working with Central Computing Services to ensure implementation of the strategy.

Note: An "X" placed in any single FY column indicates completion of a task in that year. X's in multiple FY columns indicate multi-year efforts.

GOALS	STRATEGIES	PRIMARY COLLABORATION*	FY 01-02	FY 02-03	FY 03-04
Goal #1: Provide consistent resources to support Information Technology throughout the district	1.1 Provide Human Resources, facilities, and funding support for Information Technology at all district locations as needed.				
	1.2 Explore a variety of funding sources to ensure that the yearly Information Technology needs of the district are met.				

GOALS	STRATEGIES	PRIMARY COLLABORATION*	FY 01-02	FY 02-03	FY 03-04
Goal #2: Ensure that there is technology available to support the colleges I their various initiatives	2.1 Provide support for grant writing to assist the colleges in locating external technology funding sources.	District Computing Services	X		
	2.2 Assist the colleges to assess network infrastructure, bandwidth, and server requirements.	District Computing Services	X	X	X
	2.3 Work with the colleges to research and recommend appropriate uses of wireless technology.	District Computing Services	X	X	X
	2.4 Update virus protection software on all networked college computers.	District Computing Services	X	X	X
	2.5 Assist the colleges in the development of a robust web presence.	District Computing Services	X	X	X
	2.6 Provide and maintain a centralized web portal.	District Computing Services	X	X	X
	2.7 Assist the colleges in ensuring that all software licensing is current.	District Computing Services	X	X	X
	2.8 Assist the colleges in developing a replacement cycle for all technology.	District Computing Services	X	X	
	2.9 Assist the colleges in developing processes and procedures for technology acquisition.	District Computing Services	X	X	X

Formatted: Bullets and Numbering

GOALS	STRATEGIES	PRIMARY COLLABORATION*	FY 01-02	FY 02-03	FY 03-04
Goal #3: Provide access to all district-wide information in support of college goals.	3.1 Provide online access to Governing Board policies, agendas, and supporting documents.	District Computing Services	X	X	
	3.2 Maintain and support accessibility to all systems for authorized users.	District Computing Services	X	X	X
	3.3 Provide Internet access to college information and services from off-campus locations for students and the community, such as college catalogs, course outlines and other public information.	District Computing Services		X	
	3.4 Provide access to online student services.	District Computing Services	X		
	3.5 Provide faculty with online capabilities to record and track student grades.	District Computing Services	X		
	3.6 Provide access to college directories in searchable formats.	District Computing Services	X		
	3.7 Provide technologies to assist with the Early Alert of students who require professional intervention (tutoring, counseling, etc.)	District Computing Services	X		

Deleted: sortable

GOALS	STRATEGIES	PRIMARY COLLABORATION*	FY 01-02	FY 02-03	FY 03-04
Goal #4: Support distance learning to meet the needs of students and the community	4.1 Provide support for distributed student support functions, i.e., admissions, library, registrar, counseling, etc.				
	4.2 Provide support to colleges for the establishment of distance education standards in software, network and classroom (including video) configurations, etc.				
	4.3 Support the colleges in offering instruction in an online format and a multi-media format.				
	4.4 Assist the colleges in transitioning telecourses to digital format.				
	4.5 Assist the colleges in addressing appropriate staffing, partnering with K-12 and other community colleges, universities etc. for distributed learning.				

	4.6 Provide support to the colleges in the investigation of "tele-learning."				
	4.7 Provide technology support for assisting the colleges in marketing distributed learning.				
	4.8 Provide technology support to the colleges in the coordination of KVCR services.				

GOALS	STRATEGIES	PRIMARY COLLABORATION*	FY 01-02	FY 02-03	FY 03-04
Goal #5: Support distributed learning to meet the needs of students and the community.	5.1 Assist the colleges in coordinating efforts for KVCR addressing appropriate staffing, partnering with K-12 and other community colleges, universities etc.				
	5.2 Work with colleges to transition KVCR to digital format.				
	5.3 Investigate ways that KVCR can utilize "tele-learning."				
	5.4 Assess costs associated with keeping KVCR competitive in the education market.				

GOALS	STRATEGIES	PRIMARY COLLABORATION*	FY 01-02	FY 02-03	FY 03-04
Goal #6: Support technological connectivity among all stakeholders.	6.1 Ensure that off-campus email access is adequate to support user needs	District Computing Services	X	X	X
	6.2 Work with the colleges to develop a plan communicating IT decisions and plans to the college communities.	District Computing Services	X		
	6.3 Provide email for all students.	District Computing Services	X		
	6.4 Assist the district in developing a plan to purchase and implement new telephone systems as needed.	District Computing Services	X		X

GOALS	STRATEGIES	PRIMARY COLLABORATION*	FY 01-02	FY 02-03	FY 03-04
Goal #7: Provide technology training support for SBCCD.	7.1 Provide appropriate training for all administrative systems.	District Computing Services	X	X	X
	7.2 Provide web-based, user-friendly, and current user guides and FAQs in support of administrative systems.	District Computing Services	X	X	
	7.3 Assist in the formation of Technology User Support Groups to provide a forum for technology at the colleges.	District Computing Services	X		

Formatted: Bullets and Numbering

GOALS	STRATEGIES	PRIMARY COLLABORATION*	FY 01-02	FY 02-03	FY 03-04
Goal #8: Provide effective and efficient administrative systems to support the business of the district.	8.1 Work with the colleges to provide non-redundant databases for college information.	District Computing Services		X	
	8.2 Assist the colleges in improving administrative systems reports and provide online distribution of such reports.	District Computing Services	X	X	
	8.3 Provide all district operational forms online.	District Computing Services	X	X	
	8.4 Provide appropriate authentication processes to comply with federal and state agencies in conjunction with the colleges.	District Computing Services	X		
	8.5 Provide college and district data in report formats that assist in decision-making.	District Computing Services	X		
	8.6 Provide technology in support of district-wide safety and security	District Computing Services		X	

Appendix – SBCCD IT Strategic Planning Team Members

San Bernardino Community College District
District-wide IT Strategic Planning Team

Summer 2001

Dr. Donald Averill..... Chancellor, San Bernardino Community College District
Dr. Susan Shodahl ..... Vice President, Instructional Services, CHC
Mr. Alex Contreras..... Vice President, Student Services, CHC
Mr. Bill Orr..... Vice President, Administrative Services, CHC
Ms. Ginnie Moran ..... Director of Research and Planning, CHC
Dr. David T. Romero..... Vice President, Administrative Services, SBVC
Dr. Kay Ragan..... Interim Vice President, Student Services, SBVC
Dr. David Harris .....CIO, SBCCD Central Computing Services, Collegis, Inc.
Ms. Jan Baltzer..... Senior Vice President, Strategic Services, Collegis, Inc.
Dr. Jamie Cavalier.....Senior Consultant, Strategic Services, Collegis, Inc.

RESPONSES FOR PLANNING TIER 1:
ESTABLISHING THE INFORMATION BASE

PLANNING UNIT:	Technology Services

STAFF/FACULTY PROFESSIONAL GROWTH	
What professional development activities and/or accomplishments have your staff and faculty participated in *over the last year or since the last program review*?	
RESPONSE:	As the Technology Services Department was only created this past year, a comparison to the last program review is not possible. However, members of the department have participated in professional development in varying ways. One faculty member within the department, Ted Phillips, has both developed and delivered professional development activities to the faculty and staff on campus in the areas of Assistive Technology, the development of Online Resources, Copyright issues, as well as working with individual faculty/staff members on specific skill building activities such as basic computer use & troubleshooting, web page design, instructional design which incorporates technology, etc. on an as-needed basis. Ted has also attended professional development activities associated with the State Academic Senate, Instructional Technology Use, and Grant Writing and continues his doctoral studies in Educational Technology at Pepperdine University. Shane Veloni has attended professional development activities in technology used to support instruction through his attendance at the annual TechEd conference. Shane also continues his education and degree completion in Engineering at Cal Poly Pomona. Shane worked closely with a technician from the San Bernardino Valley College campus this spring when that technician worked on the Macintosh computers in the Learning Center. This experience greatly enhanced Shane's skills with the administration of a Macintosh network and extends the scope of the Technology Services Department. Wayne Bogh continues to pursue his degree in Information Technology at the University of Phoenix. Wayne is also engaged in the ongoing development of his skills as required by the fast pace of technology innovation and change, especially in regards to networking and network administration. The nature and speed of technology evolution and change within IT departments requires that an Enterprise Network Specialist receive on-demand training from vendors and other IT professionals as improvements, upgrades, and project implementations occur, and Wayne diligently pursues opportunities that will increase his skill set within these areas and provide a benefit for the college. Gino Baraboni, like Wayne is consistently engaged in hands-on, just-in-time training to support the changes inherent within an IT department, and are crucial to his role as a Department Network Specialist. A great deal of personal research and information tracking is necessary for Gino to continue to stay current and to continue to provide the level of effective user-support required of his position. Gino has worked collaboratively with many other technicians and IT folks within the District and our sister college (SBVC) to keep his skill set as current as possible. David Danser, although a part-time employee, is constantly receiving and developing new skills through his employ by the department. David is consistently being trained by the Technology Services staff and encouraged to extend his skill set by everyone in the department. David receives a great deal of ongoing instruction and direction from both Wayne and Gino regarding desktop and network support.

What additional training is needed to enhance staff and faculty effectiveness in your service area?	
RESPONSE:	One of the constant enemies of any Technology department is 'Moore's Law', which pronounces that technology capabilities double and become obsolete every 18 months. For this reason, IT professionals are constantly searching for opportunities using whatever resources are available to keep their skill sets up-to-date. Because Technology Services Department personnel were scattered under the direction of many different areas until this year, a consistent planned approach to training and development has been lacking within this area of the campus support structure for quite some time. Fortunately, like most technology professionals, members of the department have consistently taken the initiative to keep themselves trained by any means possible to keep pace with the increasing demands of their positions. The pace of change within technology makes it difficult to gauge what the next crucial skill set for any particular technology might be. However, based upon known future campus projects and the typical changes occurring within our area the department will need to continue to develop and improve its skills in the following areas: Microsoft network administration; SQL, Unix, Macintosh and other operating systems; all aspects of network administration which will now include voice-over-IP and, increasingly, wireless technologies; training in Microsoft and other software applications which are either upgraded or completely replaced by newer, more robust replacements (Adobe, Macromedia, etc.), continued training on the district's administrative systems (Financial2000, DataTel, SARS, etc.). If Technology Services is to continue to provide support at its current levels, training in all of these areas must be addressed through either formal or informal training and development activities. Unfortunately, there is currently no funding allocated in this area.

MAINTAINING CURRENCY	
When was the last time your area established new procedures, or updated existing ones, in order to maintain high quality services to staff and students?	
RESPONSE:	Again, as a new department, Technology Services is just beginning to get it legs as an organized business unit. Initially, the department was forced to address a myriad of processes and procedures that had emerged from the decentralization of the department's personnel over the course of many years. Often, the processes and procedures some had become accustomed to, depending upon department or area, were in conflict and Technology Services has been forced to keep processes which made sense, merge others, or develop from scratch those processes which were deemed necessary but not created in the previous, uncoordinated technology support environment. Although many different processes and procedures have been altered, merged or created, the most obvious are as follows: <u>Work Requests/Orders (Information)</u>: Technology Services has worked to better inform the campus population on the process and points of contact regarding specific technology related issues. To that end, information has been delivered in hard copy, using email, a newly developed Frequently Asked Questions (FAQ) page on the CHC web site, and through presentations by Department representatives to various leadership committees on the campus. Also, the department now proactively acknowledges the receipt of every work order request, and similarly is proactive in following up on work order status with requestors. <u>Work Requests/Orders (Accountability)</u>: Due to the large number of work requests received by the department, a more robust utilization of an electronic tracking tool for work orders has been initiated. The assistance of a secretary on loan (part-time) from the Research and Planning Department has helped alleviate the time required to enter and track work order requests, freeing personnel to spend more time performing their assigned support duties, rather than paperwork. This help has also increased the Department's ability to track

	successful completion of requested services and quantify the needs of the department and of the campus for the Department's services. Finally, this arrangement has enabled the Department to provide more effective feedback on work order requests than has been possible in the past. Consultation Services: The Department has been proactive in seeking out and encouraging campus departments/disciplines and individuals to discuss technology needs, projects, and implementations prior to the purchase of equipment or modification of existing technology dependent work areas. Training Services: The Department continues to design and present training and in-services on topics relevant to the campus community. This year, shorter, hour long, time staggered, monthly sessions addressing different topics were introduced in an attempt to accommodate the various schedules of faculty and staff. Additionally, referenced-based online documents were introduced on the Department's web site area, to give faculty and staff access to information regarding basic troubleshooting or procedural processes on several different topics. Assistive Technology: This arm of the department made a proactive effort to increase dedicated time devoted to communication with the DSP&S department to better understand the needs of our disabled population and the support needed by the DSP&S department from Technology Services. The development of processes for requesting assistive technology assistance by faculty/staff are currently being developed to fill the need for increased faculty/staff understanding of their roles and responsibilities, as well as available assistance, in this area. General Technology Assistance: As mentioned, the department has developed a consistent informational process for the acquisition of requests for technology assistance, and feedback regarding such requests. To that end, a pseudo-help-desk has been developed and manned by the Coordinator of the Department to address the frustration faculty/staff had expressed regarding the need to know that their concerns have been heard. This service allows faculty members to receive emergency help, or non-emergency assistance with issues such as ordering software, help using technology, or other problems which can be addressed through contact with a person who is available during normal operating hours.
Describe the use of technology in your area to support or expand delivery of high quality services to students and staff.	
RESPONSE:	This Department's primary charge is to support the delivery of high quality technology services to students and staff. Virtually everything we do uses technology in some way to achieve this end. Since maintaining, updating, and improving technology functionality on campus is the Department's primary charge, this past year we began proactively initiating strategy meetings with individual departments whenever we became aware of potential technology supported initiatives. By taking this proactive stance, we have been able to more effectively implement technology supported initiatives, realize some cost reductions in equipment by combining the purchasing of concurrent projects, and better develop and meet timelines for project implementations. The department has begun to more fully utilize an electronic tracking system to keep track of incoming work orders, completion rates, and work load. Similarly, the Department's representation on the team which has redesigned and rebuilt the campus web site has improved the scope and accessibility of the campus' web site for all faculty, staff, and the campus community. The installation of a new 'PIX' firewall and SQL server to the campus server farm has increased security for our network infrastructure, given us more flexibility to provide individual requests for service and increased our ability to develop and exploit data bases for the purposes of improving the campus' ability to better utilize the information contained in existing data bases. Implementing a contact point for faculty and staff (via phone) has increased the Department's

	ability to communicate with individuals and other departments on specific technology service needs. This includes communication in regards to submitted work orders, better response times for technology emergencies, and real-time assistance for simple technology problems.

RESPONSIVENESS TO CAMPUS NEEDS	
Describe efforts within the service area to ensure that your area is meeting the needs of the campus.	
RESPONSE:	Essentially, there are three fundamental areas in which the department must judge its performance in this area: 'Basic Functionality', 'Maintenance', and the development of a broadly-based, effective technology support system. Basic Functionality The Department defines 'Basic Functionality' as the ability to provide the functionality requested by the campus administration and the District to ensure that the college can realize the commitments it has made to faculty, staff, students, and the community. To that end, Technology Services is responsible for ensuring the following: ❑ The campus communications infrastructure is functional ❑ The campus technology tools (computers, phones, etc.) are installed in designated areas and workspaces To the extent that Technology Services controls the day-to-day operations of the campus' communications infrastructure our record for 'up' time (fully functional) has been excellent. Overall, administrative systems, email, Internet access, etc. work uninterrupted each and every day the campus is engaged in operations. Certainly, there are (and have been) exceptions to this overall successful picture, but those instances have been isolated and generally, short-lived (less than a day). During the past year, no major technology failures have occurred and our department has not been made aware of any situations when a failure within the technology infrastructure has resulted in a serious, negative result to student learning, administration systems, or other campus functions or commitments. Technology Services has and will continue to install technology equipment on the campus as directed by campus decision-makers to enhance, improve, or upgrade existing capabilities for end-users. In the past year, Technology Services has proactively engaged the administration, departments, and individuals to consult with us for the purpose of ensuring that technology supported proposals do not compromise the larger communications infrastructure or conflict with that infrastructure, use appropriate technology for the intended purpose, assist with cost savings, and help to establish and maintain project timelines. Additionally, the department has evaluated individual components within the communications infrastructure and made recommendations for upgrades or replacements as deemed appropriate to maintain the campus' functionality. In addition, Technology Services is working to develop support and funding for the development of technology-rich 'smart' classrooms strategically located throughout the campus in order to help facilitate the effective use of technology on campus, and reduce the manpower required to cart laptops, projection devices, video devices, etc, throughout the campus. In this area, Technology Services has already placed TV's and VCR's in a majority of the classrooms on campus, and is now looking towards modifying classrooms by mounting computer projection devices in both traditional and lecture hall classrooms to provide more effective use of our limited technology AV equipment. Such an effort will require coordination between the Technology Services Department, the Office of Instruction, administrators charged with the scheduling of classes, and funding, to try to ensure that these modified technology classrooms are being used as close to 100% of campus operational time as possible. In the coming year, Technology Services, working closely with District Computing, will be coordinating and directing the implementation of a new telecommunications infrastructure to replace our existing phone system with a Voice Over IP (VOIP) infrastructure. This will be a monumental task in light of the limited Technology Services personnel available to perform the

job, and the Department will to depend upon support from District Computing to help supply the required manpower and expertise necessary to complete a successful implementation of this campus wide upgrade. This project, though noticeable to staff upon completion, will be somewhat invisible to most of the campus community because of the nature of the job. Most of the equipment, programming, and other items required to complete this project will be located out of the sight of the average end-user and will be notable to most simply because a new phone, with new capabilities, will be placed on their desk. Connection speeds, improved stability in the communications infrastructure and room to grow with new technologies will be the primary benefits of this new infrastructure.

Maintenance

The Department defines 'Maintenance' as the ability to keep existing technology functional and available for use by the campus community. Although the department feels that it has performed well in this area the inability of the Department to increase its personnel combined with continuous increases in technology acquisitions has stretched the Department's ability to maintain some technology services at the levels we would like. Continuous increases in technology acquisitions for the campus, without a parallel increase in our personnel has required the department to work more efficiently than in the past but, increasingly, it is becoming clear that workplace efficiencies instituted within the Department may not be able to overcome the demands of maintaining the technology resources currently installed on the campus. If the campus trend of rapid technology acquisition and implementation continues without parallel increases in Departmental resources, Technology Services will likely be unable to maintain current levels of functionality by the end of the academic year.

That said, the Department has implemented several strategies in attempts to meet the support demands of the campus. We have begun to more effectively track our work processes and made improvements in how we handle requests for support. We have proactively engaged all areas of the campus to help plan technology initiatives and better understand the needs of different campus constituencies, and have consolidated the 'brain trust' of the Department to work collaboratively on solving especially difficult support issues, and maintained/strengthened our collaboration with District Computing Services to solicit help and strategize on support issues.

We have also worked diligently to promote the existence of Technology Services as the department charged with primary responsibility for all things technology on the campus, which has proven to be a difficult task. Because of the lack of coordination of technology support services in the past, processes for centralized technology support have not existed until this year. Therefore, some departments and individuals continue to operate under the paradigm of the past and inadvertently side-step the Department on technology purchases, acquisitions, and project implementations. At times, the result of this failure of the system to move beyond past practices has forced the Department to have to react to avoidable crises because of the lack of consultation with the Department, resulting in inefficient use of manpower, an overall reduction in support response times, and the delaying (or canceling) of planned technology maintenance projects. Hence, the need for our increased communications and consultation efforts.

Technology Support Structure

The creation of the Technology Services Department has been an important first step towards ensuring the college's increasing dependence upon technology is not interrupted, its increasing investments in technology are not wasted, and its desire to more effectively use technology are not degraded. As a centralized department now able to operate in a unified manner, Technology Services has the potential to bring real improvements to the campus' technology needs. However, the creation of the department can only be viewed as a first step.

In order for Technology Services to begin to have a real impact upon the campus community in a positive way, systemic changes in the way in which the campus community approaches technology are becoming increasingly necessary. The most pressing of these systemic changes are:

- That Technology Services be viewed as the primary technology support entity for the campus – no other entities, other than District Computing, should be viewed as technology support centers for the campus
- That in order for Technology Services to be held responsible for all technology on campus, all technology related maintenance, support, and functionality must fall under its direction
- That Technology Services have a major role in the planning of all projects, implementations, upgrades, etc. that include technology as a component of those initiatives

<u>One Support Entity</u>
Because of a lack of centralized technology support prior to the creation of the Technology Services Department, over time, various campus entities have at times needed to take on roles, which under a centralized technology support structure should not be necessary. For example, individual instructors should not have to be responsible for researching and ultimately purchasing desktop computers that (not only) fit their needs, but interact ubiquitously with the campus network. It should be the role of Technology Services to provide informed choices and alternatives for such acquisitions. Similarly, instructional departments should not have to interact with the underlying layers of the campus' communications infrastructure other than to use the tools connected to it. After communicating their needs to Technology Services, and agreeing on a plan, the task of implementing the technical side of technology support should be the responsibility of the Technology Services Department and no one else. After all, this is one of the fundamental roles of the Department (functionality) and the personnel within Technology Services are essentially the only qualified people employed by the campus to perform these tasks.

Herein lies the rub…because of the decentralization of technology support, and the need for some members of the campus community to tip toe into areas of technology support because of the decentralized practices of the past, individuals and departments outside of Technology Services can (and have) directly impacted in a negative way, the efforts of Technology Services to provide support in an effective and efficient manner. In the end, this practice of having individual, non –technology experts directly interact with the larger campus technology structure and organization results in wasted man hours trying to fix problems that could easily be avoided or prevented, the absorption of extra costs which result from a lack of understanding of the larger technology infrastructure and its components and, ultimately, a decrease in the ability of Technology Services to fulfill the needs of the campus. Realistically, if it is necessary for non-Technology Services personnel to support technology on campus, then this should be considered a symptom of a much larger technology support illness – insufficient resources provided to the technology support structure. To illustrate how seemingly innocuous, decentralized technology strategies impact both individuals and the larger campus two examples illustrating how these problems play out are provided in the next few paragraphs.

<u>Example: Systemically caused Inefficient use of man hours</u>
If a new computer is not ordered with the correct equipment, or operating system, and is done so without the knowledge of Technology Services, should that system fail and a member of the Department arrive to provide support, not only must the support person diagnose the problem on an unfamiliar system, the unfamiliarity or incompatibility of the system set-up might require hours (in at least one case this year, days) to resolve because of problems inherent in the hardware or software itself. In this case, had Technology Services been consulted on the purchase a system that was consistent with the existing campus infrastructure, it's likely such a system would have been purchased instead of what was ultimately bought, and the problems would likely have never occurred. Instead, over 16 hours were devoted to a problem which should never have occurred in the first place.

<u>Example: small view planning</u>
If a department has the need to re-configure, move, or otherwise change a number of it's technology systems (computers), it is imperative that such a move be planned with the input of

Technology Services. Past decentralization of technology support in the past often left departments unsure, or unable to sit down with technology support personnel and discuss technology supported change projects & initiatives, resulting in situation where department leaders often felt that they must make decisions about timing, equipment etc., without the expertise to make such decisions, but feeling there was little option. In this example, several related technology projects might inadvertently be scheduled at the same time, and with timelines that were appropriate if technology support had been coordinated, but unreasonable when all of the projects were left to the last moment, and imposed upon a fixed schedule, with time critical requirements, without adequate information being given to technology support personnel. To exacerbate the situation, if inappropriate equipment was ordered, or if not all of the equipment needed was ordered, a project might be doomed to failure from the outset. Under a technology planning structure which requires more pre-planning on the part of managers, a greater priority placed on consultation by the Technology Services Department, and an established overall campus planning process, the need to plan in isolation (small view planning) could be eliminated.

Large view planning, on the other hand, allows more effective, efficient decisions to be made due to the larger picture it can provide decision makers. Large view planning is important to Technology Services because virtually everything Technology Services does impacts (or has the potential to impact), the entire campus. A poorly configured network switch forced into use because of a poor purchasing decision has the potential to cause huge disruptions in the campus communications infrastructure…likewise, two projects requiring a week each to complete and presented to Technology Services for the first time 10 days prior to an absolute need to be operational is literally an impossible task to complete successfully, and will force the Department to drop virtually all non-emergency support functions trying to resolve these 'created crises'. Created, because with proper planning and advanced strategizing, it's likely both projects could've been completed far in advance of serious deadlines. In the end, short view planning:

- requires Technology Services to work more quickly than necessary –increasing the likelihood of mistakes that might compromise the larger communications infrastructure
- has a negative impact on the support available to all campus users
- presents the very real potential of costing more because purchasing cannot be consolidated for discount pricing
- is no longer necessary with a centralized technology support structure.

The development and creation of a Technology Services Department suggests that, from its creation point forward, one entity will be responsible for technology on the campus, not individuals or individual departments working in isolation. Such a strategy does not remove people from the decision-making, or input process, it actually provides a means for more effective decision-making and input to occur…something decentralization cannot do.

One note that must be addressed at this point, is the relationship between the campus Technology Services Department and District Computing Services. The single entity, idea presented here does not change this relationship at all. District Computing is charged with, and maintains responsibilities integral to CHC's technology efforts which are not inconsistent with Technology Services' roles and responsibilities. Sometimes these two entities share responsibilities, sometimes they do not. Regardless, a close relationship between these two entities is essential for the campus' technology infrastructure to work and such a relationship does exist. Aside from day-to-day functionality and repair it would be rare that these two entities would do anything in isolation from the other. In that sense, the two must almost be considered a single entity that does not usually end up in short view planning situations. However, the problems which technology can present at any given moment does sometimes get the best of both of these support areas and Technology Services and District Computing maintain a close relationship for this reason…placing emphasis on our communication practices between the departments to attempt to keep problems from occurring or escalating.

<u>Responsibility and Accountability</u>
As with any organizational entity, responsibility and accountability go hand-in-hand, Technology Services is no different. Again, noting the decentralized nature of technology

	support in the past, a systemic 'bad habit' which has emerged on campus is allowing entities to make technology decisions without having to be accountable for those decisions, yet holding Technology Services accountable for rectifying any negative consequences resulting from these poor decisions. The reasons for this are similar as described in the previous section, but have foundations in the real need some had, (or perceived to have had) to make decisions about technology because they felt they needed to since technology support did not always appear to be readily available. This situation has manifested itself in many ways but a few examples might help clarify the situation as the Department sees it. Under the decentralized technology support structure, individual departments may have needed, or felt they needed (and were sometimes given) more access to computer systems than might usually be the case because a leader, or individual, had a particular expertise or understanding of what Technology Services considered less mission critical tasks. In a case such as this a person, or department might have been allowed the ability to function at a 'higher' than typical level that would assist both their work, and allow for the realities of limited personnel resources inherent in the campus tech support environment to satisfy the more sophisticated user(s). A good arrangement, provided the person being given the extra access, be knowledgeable, and accountable if they chose to take on tasks which they had the ability to perform, but resided outside their real expertise. In the campus' past smaller environment, with fewer end-users, and less sophisticated infrastructure, this kind of arrangement was more manageable and practical. Now, however, arrangements made under these previous circumstances seem entrenched within some parts of the system, even though the original players and circumstances may no longer exist. A typical example of this might be the granting of administrative computer rights to an especially savvy end-user. Such access might allow the person to download programs or alter configurations that could cause a catastrophic failure on the user's system, or real problems for the larger campus infrastructure, if even minor errors are made. This possibility merely exemplifies how quickly someone with technology savvy might lose that edge due to the swift changes technology makes in today's computerized culture…as mentioned in this document, even Technology Services personnel are hard pressed to keep up. In a case where the technology advances have moved beyond the understanding of the end-user, the problems that may occur versus those that can be avoided must be weighed in today's context, not yesterday's. In an arrangement as just described, even though intentions might be good, end-users may not be capable of being accountable for their use, despite their desire to be, simply because the scope of accountability has changed, not because of a desire to hamper use. Similarly, some may have a fundamental understanding of how networking or programs work, but no knowledge (or little knowledge) about how particular configurations on our network might render some 'truths' untrue. So, a wiring scheme, or a lab configuration which seems simple might be terribly complicated if the person performing the tasks involved is not completely up to speed on the particulars of the situation. With few exceptions, no one other than Technology Services personnel would have such an intricate understanding of the complexities of any particular insertion, or change, to the larger networking infrastructure…nor should they. Technology Services should be the only entity which takes responsibility for the system and held accountable for the decisions made. So then, this is the change that needs to occur in the way the campus approaches technology…those who are manipulating technology must be accountable for the results of those manipulations. If this is an individual end-user, a mistake or problem on a local machine due to actions by the end-user alone cannot suddenly be considered an emergency for Technology Services, unless the problem generates larger scale issues for the campus as a whole. Technology Services has promoted (and will continue to promote) the idea of providing end-users with appropriate abilities to do more things with their computers, but only if they also accept the responsibility and accountability that goes with such privileges. To do otherwise creates unnecessary crises for Technology Services and, again, lowers the level of support the department can provide because of the time it must spend addressing preventable problems.

	Role in Planning Throughout this document, one theme should clearly be evident…planning is essential to the ability of Technology Services to support the technology needs of the campus. However, this planning needs to occur under a paradigm significantly different than the one used in the past. The new paradigm requires the campus community to approach technology in the context of a unified support unit which is integral to the success of any technology supported activities. Unlike the past when the same positions now incorporated under the umbrella of Technology Services reported to the VP of Administrative Services, the VP of Instruction, the Director of the Learning Center, the Coordinator of DSP &S, and a CIS instructor and rarely worked together on projects, today's organizational structure has provided a centralized structure for meeting the technology needs of the campus. The isolated, and sporadic initiative implementation/planning pseudo-processes of the past no longer apply to the context of today's technology support strategies. It is no longer necessary for campus employees to feel they need to make important technology decisions in isolation. Indeed, to do so will likely cause the same frustrations experienced in the past…and need not be a part of the present or future. Now, with a centralized technology support unit in place, everyone will need to address changes in the way technology is planned, purchased, upgraded, and ultimately eliminated from the campus infrastructure. And, even though some of these changes will be difficult for the larger campus community, the scope and extent of change within Technology Services will have an even greater impact upon the personnel serving within this new department. Without planning – preferably well in advance of the campus needs and directed by an entity which can place the role of technology into the larger scheme of the campus and its future – the chance that breakdowns in the technology support structure will only increase. Technology Services is prepared to help inform the decisions made by those who have ultimate weighty discretion over the path technology should take on the campus, and stand ready to install infrastructure, repair and replace equipment, provide support for the in-classroom, in-office, and larger technology needs of the campus community. However, given the strained resources of the Department and the inherent problems decentralization can (and have) brought to the campus, Technology Services cannot be prepared to support the campus' technology needs unless we are included in developing the road map, informing the decision process, and given discretion over how best to implement the directives of the campus. Without planning, and Technology Services playing a role in the process, little in this document will be relevant to the future, because technology support will be forced to operate as it has been forced to in the past…reacting to situations rather than acting purposefully to achieve results, diverting very limited resources to resolving avoidable crises, and being forced to bring the Department's considerable expertise to situations only after problems have occurred, rather than ahead of time to prevent these problems proactively. These consequences are only too familiar to the campus community because of the decentralization of the past. Technology Services was created to change that reality, which this document attempts to address…and planning is central to this context of change.

OVERALL PROGRAM EFFICIENCY	
Provide a summary for your service area of all staff, assignments, and workload.	
RESPONSE:	Currently, the Technology Services Department consists of four full-time and one part-time employees who are fully dedicated to and funded for the department. Additionally, one part-time employee works for the department, but is funded from another area and another employee has been given time to assist the department as possible. Technology Services currently maintains the following (7) positions staffed by 4 full-time positions funded for the department, and 2 part-time employees: ❑ Coordinator, Technology Services ❑ Network Enterprise Specialist

- Department Network Specialist
- Audio-Visual Technician
- Instructional Designer/Assistive Technology Specialist
- Audio-Visual (Part-Time)
- Lab Technician (Part-Time – funded outside dept.)
- Clerical Assistance (Part-Time – funded outside dept.)

Coordinator, Technology Services.
This position is responsible for coordinating all of the activities of the Technology Services office. The position is one which blends both faculty responsibilities with administrative ones. At this point in time the Coordinator handles all incoming calls from the campus community, local community, and vendors in regard to technology questions, concerns, or problems. The Coordinator is also responsible for: clarifying, approving, communicating progress, and completing technology related work requests; consulting all departments on technology equipment acquisitions (and retirements), upgrades, connectivity; consulting all departments in regard to the planning of technology initiatives and projects; the development of sound practices and processes in regard to all technology related items (above); informing/reporting to the campus administration, District entities, faculty and staff on current technology related issues being addressed on campus; represent the department on various committees both on campus and district wide. In other words, be the central contact point for all phases of technology related items on the campus.

In addition this position, Crafton's Coordinator of Technology Services also serves as the Instructional Design/Assistive Technology Specialist and is responsible for those positions and their respective duties as well (those positions are described below). Originally, the Instructional Designer/Assistive Technology Specialist (a combined position), the added duties of Coordinator of the department has had an impact upon all three roles this person is responsible for on the campus. Without clerical support, and the wide range of responsibilities all three positions require, effectiveness in any of the three roles is necessarily compromised at any given time depending upon the priority needs of the moment.

Network Enterprise Specialist (NES)
This position has several equivalents within the District Computing Services Department and was created at CHC several years ago because of a lack of support from District Computing that often left the campus infrastructure wanting for assistance and support. The NES is primarily responsible for the administrative communications systems of the campus. This includes the entire network infrastructure: data, phone, and wireless communications systems on the campus. The NES informs the Coordinator of Technology Services of the status for maintaining a viable communications system and maintaining the functionality of that system, both structurally (hardware) and strategically (hardware, software, wiring, etc.). The NES works closely with District Computing Services to ensure that standards, compatibility, and other larger-than-the-campus issues, are addressed whenever technology is to be inserted into, upgraded, or removed from, the campus communications network.

In addition, past practices and personnel levels have necessitated that the NES assist the Departmental Network Specialist (DNS) with non-administrative tasks such as end-user troubleshooting, lab set-ups, imaging, and other tasks that might not normally be considered within the scope of the position due to a lack of resources. By necessity, the Network Enterprise and Departmental Network Specialists must work closely together in order for the campus' technology to work effectively, and cross-over is to be expected, however, this cross-over has become increasingly more difficult as an increase in campus technology and the insertion of new networking strategies (both locally and district wide) have made it more and more difficult for the Network Enterprise Specialist to assist the Departmental Specialist on matters unrelated to system administration and larger communications infrastructure issues. The Network Enterprise Specialist is also the campus' primary resource on networking strategies for the campus and developing the specifications to be used on local, district wide, and contracted, communications installations and upgrades. The NES serves on both campus and District committees related to technology and in need of the expertise of the position.

Departmental Network Specialist (DNS)
This position is primarily designed to maintain instructional and end-user technology functionality on the campus, namely computing systems. The DNS is the person on campus who is expected to be the primary handler of troubleshooting and day-to-day functionality of end-user systems. In that capacity, the DNS position is the first line of defense for the department for diagnosing computer related problems and rectifying those problems, setting up computer systems for use by end-users, setting up the campus computer labs and maintaining their functionality, developing more effective use of existing computer systems, consulting with departments on their specific computer needs within computer labs and open computing areas, and developing solutions for those needs, maintaining software standards and the consistency of computer images throughout the campus.

Since the initial hiring of the DNS in September of 2000, in part to support the NES and to increase the end-user support on campus, the responsibilities of the position have increased tremendously in terms of workload. In the past three years, the number of individual computers, computer labs, and open-use computers on the campus has increased the DNS workload dramatically. In those three years individual computers were increased to include all full-time faculty and permanent staff, the addition of the campus learning center and its computer systems, the addition of over 100 CIS lab computers, and an accounting lab. Changes in the locations of existing labs and personnel has been consistent throughout these years forcing the DNS to not only maintain systems but consistently tear-down, move, and reconfigure systems throughout the campus on an ongoing basis. The DNS cannot work in isolation on the campus and must work closely with NES to ensure that individual computer systems and labs are working effectively on the camps and district networks. Because the functionality of the campus infrastructure must take precedence over individual machines or labs, the DNS is often required to delay routine maintenance, troubleshooting requests and other tasks within the position's charges in order to assist the NES with larger networking issues as they occur. Though necessary, this need creates a situation where the lack of time to maintain existing systems and labs in the most effective way possible is beyond the abilities of the DNS and problems which could be avoided sometimes cannot be because of the larger needs of the campus. Fortunately, student workers have been available in the past to help the DNS with non-critical maintenance tasks, and the addition of a part-time lab technician (funded by another department) to assist the DNS have helped with the workload in this area. Unfortunately, none of these positions is permanent, nor is funding guaranteed at this point in time. The loss of these positions will, and at times has, dramatically reduced the level of support the Technology Services Department and the DNS can provide to the campus.

Audio-Visual Technician (AVT)
Created within the past two years as a full-time permanent position (by combining several part-time positions) the AVT is responsible for supporting the campus' needs in regard to audio-visual equipment and other technical tasks related to the presentation of instructional content, the presentation needs within campus meetings or large events, and the maintenance/repair of various audio-visual related items such as video tapes, slide projectors, PA systems, computers, etc. In this capacity, the AVT organizes the distribution of various audio-visual equipment and media throughout the campus when requested by a member of the campus community. The AVT has developed, maintained and publicized the processes required for obtaining use of any of the campus' pooled AV equipment, and must work diligently to ensure that instructors and others have the equipment they need, when they need it, and where they need it throughout the entire campus on a daily basis. In addition, the AVT is responsible for developing strategies designed to ensure that the campus' resources are used in the most efficient way possible and makes recommendations in regard to permanent AV set-ups throughout the campus, and the purchasing of the necessary equipment to develop or maintain such permanent AV supported locations. The AVT develops standards in regard to the kinds of equipment the campus uses for its AV needs, how equipment is disseminated and retrieved. Unfortunately, the AVT is also in the business of having to develop methods and strategies it ensure that the campus' AV equipment is not lost to due theft. In addition, the AVT has expertise in the repair and setup of computer systems and electrical repair of AV and other related equipment. These skills are used to maintain the

lifespan of the AV equipment on the campus.

Instructional Designer/Assistive Technology Specialist

This position, created in 2001 combines two positions into one and is funded primarily through Technology Services. The marriage of Instructional Designer and Assistive Technology Specialist positions makes sense on several levels and was developed for the college with that in mind. However, it is difficult to discus how the two positions can co-exist as one without first separating them to better understand their functions.

Typically an Instructional Designer has no strong affiliation with technology at all. Certainly, technology can play a role in the duties of an Instructional Designer but, as the title implies, it is the design of instruction which drives the position. That is, Instructional Designers support faculty and staff in the development, creation, improvement, etc., of content delivery. This includes items such as best practices strategies, pedagogical strategies, resource development, classroom management techniques, and, yes, the integration of technology into the instructional setting. Instructional design, then, is the science of instruction and instructional designers are typically hired to either develop courses and deliver them, or to assist those in the development of courses and their delivery. Within academia, it is the latter role, that of a peer skilled in content delivery and strategy whose primary role is to support content area experts (instructors) in which one most often sees an Instructional Designer operating. Indeed, it is this expertise in a non-content area (instructional design) which provides added value to content area experts (instructors).

Unlike Instructional Designers, Assistive Technology Specialists (ATS) are married to the use of technology in their duties. As the name implies, Assistive Technology Specialists are very skilled in the use of many kinds of technology and strategies for the purpose of ensuring that technology works for everyone, especially those with conditions that might find their use of technology limited without modifications to various kinds of software, hardware, workstation setups, etc., designed to assist them with their access. The ATS is also responsible for providing the campus with support and guidance on federal and state legislative and policy matters as they pertain to the use of technology on campus. The role of the ATS can vary widely, and it is expected the person performing these duties is current on the laws pertaining to technology use and education, knowledgeable on a wide range of software and hardware products and how they can be used by specific populations on the campus, willing to train and inform the faculty and staff on matters pertaining to the development of alternate media formats and other technology resources to be used within instructional settings on the campus. Within the virtual environment, i.e. the Internet, the ATS is expected to help drive the development of the campus web site in a manner that is consistent with various programming and design elements identified by the Americans With Disabilities Act as necessary for compliance with accessibility standards as laid out in the law.

Combining the positions of the Instructional Designer and Assistive Technology Specialist is a smart move on many fronts. In both cases, the positions require an expertise and focus upon the end-user and best practices associated with human-technology interactions. Though the focus is slightly different; Instructional Designers pay attention to effective instructional practices, Assistive Technology Specialists focusing on effective inclusion practices, their end result is not inconsistent…a better experience for learners and individuals who are engaging the educational and technology environments on the campus.

Lab Technician (Part-Time)

- Currently, this position is funded by another department.

The PT Lab Technician provides skilled support to both the Network Enterprise and Departmental Network Specialists. More than anything else, the Lab Technician assists the DNS and NES with the day-to-day maintenance, repair, installation, and troubleshooting requirements of the campus. The Lab Technician position requires someone with a high-level of computer skills and expertise, but not at the level of the DNS or NES. The Lab Technician typically spends most of the time addressing work orders for computer repair, printing problems, minor functional mishaps, and other non-critical computer problems on the campus. The role is an important one because the services the Lab Technician is able to provide help

	the NES and DNS devote more time to larger, more 'mission critical' problems related to the campus network and installed technology base. In addition, the Lab Technician also assists the DNS and/or NES on larger projects (i.e. asset inventory, developing computer images, setting up computers, etc.) which can be more efficiently done with a larger pool of personnel resources. Although the Lab Technician position was not a part of technology support beyond an individual classroom in the past, the addition of the Lab Technician this year has improved the support that Technology Services can provide to the entire campus. In the past, some of the tasks provided by the Lab Technician have been done through the use of student workers, but the skill and expertise of the Lab Technician exceeds the instability of skills and turnover associated with student workers. That the Lab Technician has become an important component in how Technology Services provides support to the campus is unquestionable. Unfortunately, because this position is not funded specifically for the department it makes it difficult to plan for expansion due to the uncertain nature of the Lab Technician's future availability to the department. <u>Audio Visual (Part-Time)</u> Funded in Technology Services budget The part-time AV position provides support to the campus by directly supporting the Audio Visual Technician to fulfill the AV needs on the campus. The PT AV position fills a time gap that cannot be filled by one person to cover all of the operational hours of the campus, and the potential AV needs of that timeframe. The PT AV person helps the AV Technician to deliver, set-up, and retrieve AV equipment throughout the campus and directly supports faculty and staff on a daily basis. Aside from providing needed support for the AV Technician, the PT AV position provides the AV Technician the opportunity to repair and maintain AV equipment by delegating AV delivery duties when appropriate. Typically, a work study PT AV person is also a part of the AV support structure, but funding for this position lies outside of the Technology Services budget. <u>Clerical (PT)</u> • Not funded by Technology Services. The PT Clerical help received by Technology Services is provided as an assistance by another campus department. The clerical help Technology Services receives is provided by another department's FT secretary whenever workload allows that person to provide assistance. The PT clerical person has been a tremendous help to the department by taking over some of the paperwork and tracking tasks which forced Technology Services personnel to spend less time supporting the campus, due to the need to keep up to date records, tracking information, etc. Every task which the PT clerical person has been able to perform for the department has increased the support levels for end-users on the campus in some way, yet the inconsistency of the help afforded leaves a large gap in the ability of Technology Services to expand services or improve support in the future. Now, as an organized area which is responsible for developing processes, tracking work requests, maintaining warranty information, verifying licenses, communicating effectively with end-users, etc. it is increasingly clear that Technology Services will need far more clerical assistance than that which can be provided by a clerical person who is not dedicated to the department.
List and explain any internal reports you use for monitoring use of college resources.	
RESPONSE:	Currently, Technology Services is using 'TrackIt' software to track and maintain our requests for work, progress on those requests, completion of requests, etc. In addition, records of equipment which are checked out to faculty and staff, generally audio-visual equipment, are tracked by the Audio-Visual Technician using both hand entry and software strategies. On-going equipment inventories conducted both internally, and requested externally (County Offices or other audits), are conducted regarding all of Crafton's technology related equipment with the exception of disposable items such as ink toner. Generally speaking, Technology Services can comment on virtually every piece of technology related equipment on campus. Certainly, items such as computers, monitors, printers and other items which are usually considered non-portable would only be moved by Technology Services staff and, therefore, more easily tracked by the department. In the past, there have

	been occasions where individual faculty or staff may have moved smaller technology items and it can be difficult to find the item without contacting a particular faculty/staff member to ascertain a location. Except for those kinds of instances the department is very well informed on the use of technology on campus, and where that equipment is located. Recently, an audit instigated by the County Office did inform us on the need to work with our Receiving Department to ensure that all technology items are correctly identified within the inventory tracking system prior to deployment on the campus. In addition, Technology Services has requested access to view the County inventory system (an authorization we do not presently have) to assist in ensuring that our technology items are all listed, and that their locations are accurate. We have also asked for 'change location' privileges within that County system so that the specific locations of technology on campus (LADM 101, CHS 237, etc.), which can move frequently, are accurately reflected in the County system in as timely a manner as possible. Because the County system is web based, Technology Services sees the ability to view inventory and update locations as an effective tool for maintaining accurate inventory and resource allocation on the campus. The web based nature of the system means that virtually every deployment or move of technology on campus could be updated in near real-time by simply connecting to the web when these kinds of actions occur. Also, because the County system acts as a de facto master list of equipment inventories, having access to this system will avoid any duplication of effort required to develop and maintain a second, local inventory to track single items.
Describe efforts within the program or service area to ensure efficient use of college resources.	
RESPONSE:	As just mentioned (above) there are already several processes and reports available for the tracking of technology use on the campus, though the department is currently pursuing others as well. Currently, Technology Services has begun tracking weekly work order requests and successful completions using our TrackIt software in an attempt to be more current in our understanding of the uses, and failures, of technology resources on the campus. Also, the nature of technology support lends itself to on-the-spot requests for help with technology problems and the department generally tries to deal with these kinds of requests on a case-by-case basis. To better understand how effectively Technology Services staff are working through formal written requests vs. on-the-spot requests, the department has begun an aggressive strategy of capturing all work requests regardless of origin to determine if the practice of on-the-spot service is an effective strategy in light of our staffing levels. Initial feedback on this focus indicates that, in the near future, Technology Services may have to discontinue the practice of on-the-spot, non-emergency technical support as it appears to be imposing too many delays to formal, written work requests. In last year's Technology Services 5-year plan, planned obsolescence of technology resources was addressed in a comprehensive way to begin a discussion regarding how the college deploys, upgrades, and replaces technology on the campus. Planned obsolescence is fast becoming a crucial issue for the department for a number of reasons. The high costs of purchasing and replacing technology, combined with warranty support, and the lesser demands on support staff normally associated with newer technology equipment could have a dramatic impact upon the level of support the department can provide. The older a computer is the more likely it is to have less desirable, incompatible, or outdated software; an increase in the numbers and severity of failures, the inability to handle the processor requirements of our most robust and updated software programs, etc. Because of these factors, more man hours are required to service these aging machines than would be required normally. A plan for consistent and planned updates of existing technology will help alleviate these (and other) issues with older technology. However, without a larger campus-wide, umbrella plan for this kind of maintenance for keeping systems functional, older inefficient systems will continue to cause the Technology Services department to spend more time than should be required on systems that, in reality, should no longer be operating on and interacting with the larger infrastructure as they do. In reference to planned obsolescence, efforts have begun to develop a systematic process for recycling (redeploying) existing technology on the campus. Initially, the focus of this recycling

	plan will be on computers but there is general agreement that the process does have cross-over potential for other technology as well…including software. To support this effort, a survey of the needs of all individual users on the campus has been prepared and will be available to the campus community during the 2003-04 school year. With the information this survey will provide, it will be possible to more efficiently deploy, or redeploy, technology on the campus based upon the stated needs of the end-user rather than on the convenience of the location of equipment or the initial purchaser of the equipment. In the end, knowing what our end-users need to perform their duties and comparing that to what is available in the recycling or purchasing pipeline will make it possible to more efficiently match end-user needs with available equipment (or to pool purchases) and increase the likelihood that technology resources (both equipment and human) are operating as effectively as possible. Finally, Technology Services has (and will continue) to lobby that a more efficient, organized, and fair process for the purchasing of new technology on the campus be developed and implemented. Currently, the campus allows a great deal of autonomy by any entity on campus that has the funding available to make a technology purchase. This often results in problems such as: ❑ the campus paying more for technology because orders are not coordinated for larger buys that could reduce negotiated quotes ❑ purchasing technology which is inconsistent with the current campus infrastructure requirements or configurations (operating systems, modems, etc.) ❑ purchasing technology for which the campus and Technology Services has no replacement parts (light bulbs, disk drives, etc.) ❑ purchasing technology without appropriate peripherals or other hardware (Centurion Guard, cabling, network cards, etc.) Although Technology Services does not promote, nor desire, complete control over the purchasing of new technology for the campus, individuals or departments which act alone when purchasing technology often end up paying too much for equipment, sometimes get poor equipment, and further burden the Technology Services Department (and the college) by creating situations which could be avoided if the purchases were made in a more coordinated fashion. To that end, Technology Services believes it could better serve the technology purchasing needs of the campus if the majority of technology purchases were planned and coordinated twice yearly, preferably through the formal planning process. If this were to occur, the Department feels that the following benefits would result: ❑ larger purchases increase the possibilities of receiving steeper pricing discounts ❑ requiring purchases to be tied to the formal planning process would help ensure that technology purchases were designed to have the maximum positive impact upon the campus (and keep negative consequences to a minimum) ❑ requiring purchases to be tied to the formal planning process would help ensure that Technology Services would have a clear view of the projects it needed to plan for the next six months to a year. Thereby, eliminating last minute projects which force the delay of scheduled projects or other work order requests ❑ if purchases were coordinated from the larger perspective of the campus, inequities in terms of numbers, and quality of technology distributed throughout the campus could be relieved These are just some of the benefits a less autonomous purchasing would have on the overall technology picture on the campus, as well as provide more consistency throughout our technology systems making support of those systems less demanding on the limited Technology Services staff.

MEETING STAFF/CAMPUS NEEDS
What is being and/or has been done to indicate that staff members (outside your area) are satisfied with the services you provide? Describe any efforts to systematically evaluate your services.

RESPONSE:	In this beginning stage of Department development, Technology Services has been primarily focused on developing an efficient internal work flow, one which allows us to attend to crisis, emergency, scheduled maintenance, and non-emergency troubleshooting, as well as the project implementations of the campus. To that end, our internal tracking processes have begun to yield results regarding our work order completion rates in terms of quantity, timeliness, and other tangible measures. This information has begun to shape how we prioritize and respond to all kinds of requests for service on the campus. Our next step is to collect input directly from those we serve to better understand which areas of support the department carries out in a manner our clients like, and in which areas we can use improvement, or should consider changing our internal processes. To that end, a survey has been developed, and will be distributed during the 2003-4 school year, to all faculty and staff to get a baseline read of client satisfaction and needs. Once completed, the department will develop a strategy for increasing our approval ratings (regardless of initial baselines). The intent of the department is to conduct this survey, or one like it, each year to keep ourselves informed on client satisfaction with our services. Other possible evaluation tools the department has discussed implementing are individual, anonymous, service evaluation forms to be distributed to end-users at the completion of each work request we respond to, online evaluation forms for specific services performance and general areas of support, as well as the use of e-mail. Because the Department has existed less than a year, no baseline data for end-user satisfaction of support exists other than informal reports by individuals. As might be expected, the reports most likely to be voiced would be those of dissatisfaction as such a view is often the result of a technology failure to the end-user which causes a disruption in the end-user's ability to perform technology related tasks. On the other hand, end-users who have not had problems with their technology rarely have a reason to voice their satisfaction (though it does occur) and their informal evaluations tend to be perceived as a minority view as a result of this lack of outward, positive commentary. Interestingly, in the case of technology support, 'no news really is good news', from the standpoint that a lack of work requests, or other technology related problems indicates that technology is functioning appropriately and is, in a sense, an endorsement of the support service even though no positive action has been taken to indicate that satisfaction. Obviously, none of these views has a basis in sound data, and thus the reason for the creation of the end-user survey to be distributed by the department this year. The Department does believe, however, that a vast majority of end-users have experienced no problems in the past year…at least our records of work order requests would suggest that. Generally, Technology Services work request tracking has begun to see trends in the areas, departments, or individuals on campus who require our services more often than others…a small minority. The reasons for the increased need of interactions with specific individuals/departments can range from the technology skill sets (high or poor) of the requestors, to the reliance upon technology for functionality, or merely the nature of a curriculum, or the job requirements of the requestors. In these cases, the increased interaction of Technology Services with these individuals/departments promotes a clearer communication vehicle through the sheer numbers and frequencies of contacts. In those cases, because communication is generally more direct and current, the Department feels even this informal communication gives a good indication of the satisfaction of these 'high maintenance' clients with the Department's support services. The Department is also discussing the feasibility of creating and maintaining a newsletter/information web page (or similar tool) to increase communication possibilities with the entire college community.
Describe any preventive maintenance measures that have been implemented and the intended and/or actual impact of such measures.	
	As a support department which interacts continuously with equipment, Technology Services must view preventative maintenance in two ways: Maintenance of hardware and the education of end-users to prevent problems though a lack of technology skill or knowledge – which can exacerbate preventable problems.

Preventative Maintenance – Hardware

The more traditional of the preventative tasks of Technology Services, the maintenance of the campus' technology hardware and associated software, consumes a significant amount of overall activity time within the department. As mentioned earlier, the pace at which technology is improved, updated, and rendered obsolete presents a continuous struggle by the department to keep systems up-to-date in terms of sheer machine capabilities, the upgrading of software associated with all kinds of technology, and an influx of ever more sophisticated technology being inserted into the technology infrastructure.

The task of maintaining the integrity of the campus' technology infrastructure requires that the department minimally tend to all of the following:

- Network integrity (including protection from outside attackers and viruses…this includes the installation of Centurion Guard on student machines and setting permissions for individual users)
- Upgrading of equipment (including individual machine components such as hard drives, software patches, workstation setups, etc.)
- Installation of new equipment, equipment purchase consultation (informing purchasers of current minimal standards, obtaining quotes, piggy-backing orders for price discounts, etc.)
- Troubleshooting activities ranging from individual machines to networked classrooms, to the entire campus network (setting up accounts, re-establishing e-mail, diagnosing/resolving workstation crashes, etc.)
- Development and creation of teaching and administrative workstation platforms as per individual needs, classroom needs, or other requisites
- Setup and delivery of media devices, projectors etc. This includes the current move to permanently establish multi-media functionality in specified instructional areas, as well as support for the Performing Arts Center, graduation, video conferencing activities, and other activities requiring specialized technology for the delivery of media elements.

The variety and complexity levels of the technology hardware and software which Technology Services supports on campus creates a complex balance between allowing end-users the freedom they need to perform duties with technology in an effective manner and safeguarding the equipment from abuse through either ignorance with the complexity of the equipment or a willingness by some to believe (wrongly) that they are more competent with the technology than they actually are. In general, Technology Services can only maintain the campus equipment viably when the department is the entity determining what end-users can and cannot do with the campus equipment. For example, an end-user who does not understand network design cannot be allowed access to the controls of the campus network to avoid the potential of the user bringing down, or damaging, the entire network. Similarly, classrooms which are generally used by one department or instructor must remain under the control and configuration of Technology Services to avoid potential problems which could be created via unsafe downloads (or download practices) or the altering of computer configurations that make the room unusable for the wider campus population. The balance for the Department is to allow end-users as much freedom as possible without jeopardizing the equipment through overly generous freedoms to end-users.

Technology Services is in a better position than any other entity on campus to recommend what practices or permissions can, could, should, or should not be allowed for end-users to ensure that the technology of the campus remains useful for the widest possible number of users. Obviously, Technology Services cannot be the sole entity to determine these matters (nor should it be) and the department consults closely with District Computing Services on strategies, and takes it's final guidance from the campus' decision making bodies. Though this need to manage the uses of technology on the campus might sometimes be viewed as overly controlling by some, many of the ongoing, preventable problems the department must react to can be directly linked to end-users altering a computer configuration, downloading a program, attempting to install a program, etc. without enough knowledge of the campus technology system to perform the task without glitches, thereby disrupting either their

own machine or those of many others. Still, Technology Services realizes and understands that end-users must be allowed to have as much freedom as possible to use technology in ways that might be dictated by the special needs of a course, discipline, or teaching strategy. Generally speaking, with good communication and Technology Service's familiarity with an end-user's skills and needs, the department will usually recommend giving end-users as much freedom as deemed appropriate to ensure that end-user can perform the tasks they need, and still maintain the integrity of the campus technology and communications infrastructure.

End-User Education

Tied directly to the maintenance of the campus technology hardware and software is the need of the Technology Services Department to consistently do what it can to educate and train end-users on new and existing technologies made available to them by the college. Unlike technologies of the past, today's technologies are incredibly sophisticated and continuously being upgraded and improved on an almost daily basis. Moore's Law, which suggests that computer related technology doubles in capability and halves in size every 18 months, continues to drive hardware and software manufacturer's product life cycles and creates a real need for consistent end-user training for a Technology Services Department. The college partially acknowledged this need two years ago when it created an Instructional Designer/Assistive Technology Specialist position to assist faculty and staff in the use of technology on the campus. Similarly, the upgrading of the AV Technician position to require a skill set demanding more computer related technology expertise addresses in a less direct way, the need for technology support personnel to be well versed in a wide range of technology related equipment and software competencies. Aside from the links these two positions have to educating end-users in the use of technology, the department's other direct support positions must generally address educating end-users as part of being a responsive support unit.

The task of educating the campus' technology end-users requires that the department minimally tend to all of the following:

- Providing sufficient knowledge of the campus technology systems to ensure that end-users can access those technologies required by their respective job requirements (email, DataTel, SARS, word processing, data bases, etc.). *Note: District Computing Services is generally responsible for training employees in the use of administrative systems.*
- Provide just-in-time training to end-users who might suddenly be required to use technology for which they are typically unfamiliar, or use only rarely (projection devices, phone conferences, digital photography, etc.)
- Provide assistance with understanding and implementing strategies for providing alternative delivery of technology resources or supplemental materials accessible by persons with disabilities, as per the Americans With Disabilities Act (developing accessible web sites, captioning of videos, voice recognition systems, etc.)
- Provide educational and training opportunities for end-users to obtain basic technology skills or improve upon those basic skills to perform more effectively in the job roles (hardware and software)
- Provide basic training in the safe use of the campus technology systems to ensure that data, or end-user systems are not unduly impacted by the actions they take while using the campus' technology.

The Technology Services Department has a direct and vested interest in educating end-users in the use of the campus' technology because of the potential huge impact one user can have upon both the department or the entire cadre of college technology users on the campus. Unlike technology use even a decade ago, in today's technology-rich work environment one end-user can significantly impact the entire communications infrastructure of the college by simply downloading an apparently innocuous photo, or opening an email (releasing a computer virus). This reality requires that Technology Services do everything it can to educate end-users on the appropriate use of campus technology and maintain levels of security and access appropriate to an end-user's level of expertise/need on an individual basis.

Less dramatically, end-users unfamiliar with a campus technology could damage their own

work stations or a piece of equipment relied upon by many others through a simple misjudgment regarding the capabilities of the equipment, the relationship of the equipment to the needs of others, or the connection of the equipment to others over the campus network. In each of these cases, Technology Services would be required to divert manpower and support service from other users to alleviate the threat to the communications infrastructure, or to get the end-user functional again. This is unfortunate for a couple of reasons, 1: very often system failures instigated by end-users could have been avoided with proper training in the use of equipment or software, and 2: these kinds of problems generally require a 'cold response' which necessitates that Technology Services personnel diagnose the problem thoroughly before attempting a repair, and often under the created pressure of needing immediate resolution because of the end-user actions which created the problem. Regardless of the reason, a lack of training or understanding of a particular technology element by an end-user dramatically impacts the ability of Technology Services to perform the kinds of hardware and software maintenance described earlier in this section. With each unexpected incident a domino effect which forces delays in scheduled maintenance and delaying responses to previously initiated support requests. Certainly, many such instances 'go with the territory' of technology support and have nothing to do with a lack of education by end-users, but a significant enough portion of these problems do occur for this reason to believe that an aggressive education program in the uses of specific technologies, or technology related issues, could have a huge, positive impact in the 'up' time end-users have with their technology, and could dramatically improve the responsiveness of Technology Services to the clients we serve.

In the past year, the ability of the Instructional Designer/Assistive Technology Specialist to develop and deliver needed end-user education has been impacted by the addition of the Technology Services Coordinator position to that individual's responsibilities. Although the department has kept training efforts moving forward, these efforts have been less planned and more 'just-in-time' in nature because of this situation. Similarly, all of the Technology Services staff have been less able to provide even minimal education regarding technology systems (both new and existing) because of the dramatic impact new technology acquisitions have had upon the time available for the department to move from troubleshooting/reaction mode to a more focused and planned educational mode designed to prevent problems before they occur.

In many ways, the stretching of the Technology Services personnel's responsibilities and the resulting loss of ability to formally train, or informally explain preventable problems to end-users may also be impacting the ability of the department to more effectively respond to end-user service requests. Simply, the dramatic rise of the insertion of new technology into the college system (over 150 computers in the past two years) combined with no increases in Technology Services personnel, or technology maintenance budgets (cuts have occurred instead) have simply pushed the department to the point that education of end-users often must take a back seat to performing troubleshooting, or 'emergency' activities almost as a state of normalcy. Ultimately, this lack of resources has helped to create a 'loop of inefficiency' partially resulting from the inability to educate end-users in how to prevent problems resulting in more problems than might otherwise occur. Similarly, the increased 'emergency' load requires staff to spend less time developing and delivering formal training activities which could also make end-users more skilled in their technology use and less likely to create avoidable problems impacting technology support services.

Related to this lack of training time availability, is the lack of a technology training facility on the campus. Though computer supported classrooms do exist, these classrooms have often been configured in a manner inconsistent with good training practices and are often not set-up to accommodate training which requires unusual or specialized hardware and software, making it difficult for not only Technology Services to present training opportunities to the campus community, but for other departments as well.

Related to the time constraints now being borne by Technology Services, the general lack of planning, upgrading, and implementations developed in isolation by some departments and individuals on campus has only increased the inability of the Technology Services Department to conduct training activities of a preventative nature which, in the end, forces the department

	to address these issues later in an emergency scenario. Technology Services has made huge efforts to publicize and address this lack of technology planning to the wider campus community with mixed results. In cases where individuals or departments have consulted with Technology Services and allowed time for adequate planning; acquisition of quotes, equipment and resources; and come to agreement on roles and responsibilities of the parties in a technology implementation, there has been much success in the efforts made by the department and others to effectively improve technology use on campus or in specific areas. However, too often, individuals or departments who do not coordinate and consult with Technology Services to ensure cost effectiveness, adequate time for implementation, adequate time for obtaining quotes, etc., end up creating avoidable crises that must be addressed by Technology Services because of the nature of the problem they've created. This has had a dramatic, negative impact upon individuals and departments who have planned and consulted with Technology Services in an appropriate manner, yet must have their projects delayed because of the nature of these 'created crises'. This is unfortunate on several counts, most notably the inability of Technology Services to simply ignore these crises because of the major impact they may have on students – one of our highest priorities. On several occasions in the past year, a department's insistence on autonomy has forced Technology Services to delay scheduled maintenance, or planned implementations to resolve exactly these kinds of created crises. Ultimately, forced planning, combined with a policy that no department or individual other than Technology Services can move, change, purchase, alter, or otherwise modify existing technology on the campus will have the biggest, positive impact upon end-user satisfaction and the ability of Technology Services to be responsive to the needs of the campus community. To do otherwise (our current status quo) will merely require Technology Services to continue to do what it is forced to do too much of right now – be alerted to a problem only after an end-user or department has altered technology to the point that it is non-functional, then expect Technology Services to arrive, diagnose, and repair the problem on the spot…at the expense of delaying service to other users who have worked diligently to carefully plan out a successful technology implementation. Likewise, it is usually the case that individuals or departments who attempt to 'assist' Technology Services by taking on a technology dependent task without full knowledge of the campus system, or the appropriate skill set to perform the task appropriately, or by the Department's standards, end up creating situations where Technology Services must respond to a now avoidable problem simply due to the good, yet ill-informed, intentions of non-Technology Services staff. Again, this can be directly related to the inability of the department to effectively educate end-users because of the non-education/crises/reaction/delay loop. Aside from the burden this places on an already stretched Technology Services staff, it is blatantly unfair to those who have made a conscientious effort to work with the department, only to be disappointed when a lack of end-user education elsewhere delays their carefully planned project. This is especially true when autonomous actions, undertaken without the larger knowledge Technology Services has of potential impact to students forces Technology Services to bail out the instructor or department to insure prolonged, negative student impact is not the end result.

MEETING COMMUNITY NEEDS	
What is being and/or has been done to indicate that your area is meeting the needs of the communities we serve?	
RESPONSE:	Perhaps the most effective means of determining the success of the Technology Services Department is the amount of 'up time' we provide our end-users. In the end, functioning technology that is capable of performing the tasks asked of it by the people required to use that technology is the holy grail of the Department. That is, if an end-user is unable to access or use technology to perform their duties the department has not successfully carried out its charge. It is the responsibility of the Department to ensure that such 'down time' occurs as infrequently as possible and the Department feels its record of avoiding such problems is a good one. To our knowledge no major, negative, consequences have occurred in the past year due to a loss of technology functionality. Certainly, there have been difficult moments, and end-users have had to adjust to temporary situations when issues

	such as a virus has infected the infrastructure, or the e-mail system has temporarily gone down, but none of these 'hiccups' have caused a loss of funding, the missing of a deadline, or other such calamity that could be directly linked to a loss of technology functionality by a college employee or student. If this has occurred, the Department has not been made aware of such an instance. Technology Services continuously strives to ensure that there is back-up functionality for end-users, are alternatives to disruptions in service, and enough flexibility in our internal processes to resolve any loss of use issues as quickly as possible. To that end, the Department maintains (when possible) back-up computer systems, develops redundant processes so that end-users can continue to use their technology at locations other than their primary work space, and provides a pseudo help desk function so that end-users can talk to a person (rather than a message) as often as possible. Unfortunately, the college's current funding of the Department lacks levels sufficient enough to ensure the Department has the necessary hardware and software on hand to make certain this kind of redundancy exists within the system

CULTIVATING PARTNERSHIPS	
To what extent are partnerships (within or outside of the college community) used to enhance your area and meet its goals?	
RESPONSE:	It is the belief of the Technology Services Department that our ability to partner with other departments on campus has been very good in the past year. Real efforts and resulting improvements in service and functionality have occurred as a direct result of the Department working closely with other areas of the campus. For example, the Department has played a significant role in redeveloping the college's web site to better present important information to students, faculty, and the surrounding community. This effort has brought the department into partnerships with the Library, Counseling, Admissions and Records, Workforce Development, CIS, individual instructors, and others, to not only improve the efficacy of the college web site, but increase the skill sets of individuals on campus in regard to using the web site as a primary informational tool and developing skills in the design and creation of web sites. A Partnership with the Counseling Department has fostered the better utilization of older computers to assist with registration and assessment activities conducted in that area. Working with both individuals and disciplines, the Department has begun to help standardize the equipment procurement process as a means of ensuring compatibility and functionality for all of our end-users now and in the future. Within the district, the Department has worked closely with District Computing to handle several tough issues this past year: a virus outbreak, installation of an SQL Server and PIX Firewall, and the preparation for a new voice-over-IP infrastructure, to name just a few. Crafton's decision to create a separate Technology Services Department has enabled the college and District Computing to better coordinate activities which require the involvement of both entities on technology related matters. As a single voice with a thorough understanding of the campus' infrastructure the Department has been able to save the college and District funds, and avoided unnecessary problems by simply being able to better communicate focal issues and side issues from an informed, centralized perspective. Partnerships with outside entities is the biggest weak spot of the partnering focus within the Department. This, the Department believes, is not due to a lack of desire to partner with entities outside the college or district, but a direct result of the lack of personnel and funding provided to the Department. Because the Department's resources are stretched so thin, it is difficult (if not impossible) for the Department to realistically believe that it can turn it's focus away from the needs of the campus and place them externally at this time. Frankly, occurrences such as an illness by a member of the department, or the taking of vacation time can have a dramatic impact upon the amount and level of support the Department can provide on a daily basis. Similarly, Since no allocations for training exist within the Department's budgeting professional opportunities which the Department would like to take advantage of are greatly reduced. This is particularly troubling on several fronts: 1. lack of training will have

	a direct impact upon the Department to maintain the levels of functionality currently available on the campus; 2, a potential means for departmental personnel to create and nurture meaningful external partnerships is severely hampered. In the end, a lack of training impacts the entire campus community in that the college can only advance its technology functionality and support to the levels of expertise present within the Department (and those we collaborate with). In other words, limiting the investment in ongoing training for the Department effectively limits the possibilities of technology use for the entire campus. It is the hope of the Technology Services Department that most of the changes suggested in this narrative are embraced and incorporated on the campus. Increases in funding, personnel, and awareness of the need to carefully plan for future technology innovation, and sustainable technology functionality, will make it possible for the Technology Services Department to move forward with initiatives that can focus outside of the immediate campus community. However, without these changes, it is unlikely that significant progress in this area can be achieved and make it possible to provide the level of technical capacity requested of it by the District, campus, students, and surrounding community.

EVALUATION & SYNTHESIS: Based on this examination of your program or service area, what are the areas of strength and the areas to improve? Please identify as many areas of strength as you can discern. They represent your program accomplishments for the past year. As part of your planning document, you will be asked to identify the effective practices that must continue in order to maintain the strengths that are most critical to the success of your program or service area.

Pinpoint as many areas to improve as you can discern. Note that prioritized improvement strategies, and a detailed action plan for implementing them, will need to be developed in your planning document.

AREAS OF STRENGTH	AREAS TO IMPROVE
❑ Willingness to be trained, attend training (and absorb costs personally) ❑ Willingness to train others ❑ Desire to work with others to develop, and implement successful projects ❑ Capturing processes ❑ Ability to deliver technology 'up time' ❑ Securing data for measurement/evaluation ❑ Ability to develop stable, streamlined technology solutions ❑ Work within budget ❑ Maintain equipment functionality, extend length of equipment service ❑ Ability to plan carefully enough to complete projects with minimal changes in anticipated requirements ❑ Accept ownership of technology support ❑ Multitasking, willingness to respond to emergencies ❑ Developing functional implementation strategies ❑ Willingness to accept/respond to criticism	❑ Communicating processes ❑ Making time to attend training / skill development activities ❑ Communicating day-to-day priorities ❑ Capturing all services rendered ❑