# FOOTHILL COLLEGE CAMPUS TECHNOLOGY PLAN

Accomplishments of 2003-2004 Plans for 2004-05

Compiled by
Penny Patz
Office of Technology and Instruction
December 2004

### **Table of Contents**

Adaptive Learning Division
Biological and Health Sciences Division
Business and Social Sciences Division
Computer Science, Information, and Technology Division 18
Counseling and Admissions and Records28
Fine Arts and Communication Division29
Foothill Global Access30
Language Arts Division32
Library and Learning Resources Division35
Middlefield Campus39
Office of Student Success and Outreach40
Physical Education Division42
Physical Science, Mathematics and Engineering43

# Foothill College Campus Technology Plan 2004/2005

This document is the tenth edition of the Campus Technology Plan. We stated in 1994 that this would be a "living" document with annual updates, and it continues to be updated.

Much progress has been made on the campus with technology since 1993. The campus completed its run of fiber optics and Cat 5 wiring in the fall of 2000. In June 2002, there were well over 1000 computers on campus including student labs, faculty offices, administrative offices, and staff offices. Additionally, there are now over 40 full multimedia classrooms with several divisions having portable configurations. Faculty, staff, and administrators in the 1600, 1700, 3000, 4100, 5200, and 6000 buildings have moved back to their renovated offices and have received new furniture and new computers.

Measure E projects have been completed in the BSS complex and Fine Arts; therefore, all of those buildings have been renovated.

In June 2001, Foothill purchased the rights to ETUDES, our online course management system; purchased two servers; and created two full-time support positions for FGA. In the Spring 2002 it was decided the campus and FGA staff in particular would re-engineer Etudes. In the fall of 2003, our Dean of Distance and Mediated Instruction wrote a grant and proposal for funding Etudes rewrite. The decision has now been made to abandon our rewriting of the Etudes2 project and join the Sakai project. ETUDES/FGA continues to grow to well over 100 sections of online courses being offered, more than 150 faculty in the program, and nine degrees being offered fully on line at Foothill. Statewide over 22,000 students are using ETUDES at thirty colleges. Many classes on campus are now being offered using the hybrid method.

The Dean and her team has made significant progress with the Sakai project. The pilot will be ready for spring 2005 and the first version will be rolled out in fall 2005. In addition, the Dean has completed the SOPHIA project during the summer and fall 2004. This is an open course content project with faculty throughout the state participating.

Penny Patz Vice President, Technology and Instruction

### **Adaptive Learning Division**

The mission of the Adaptive Learning Division (ALD) is to provide equal access to educational opportunities for students with disabilities. The goal of adaptive computer technology is to enhance access, learning, retention and overall student success.

Access to technology has proven essential for people with disabilities to fully participate in today's high tech society. Under the Americans with Disabilities Act (ADA) as well as Section 504 of the 1973 Rehabilitation ACT the colleges have significant responsibility to assure that all programs and services are accessible to persons with disabilities. The Technology Act of 1996, the Web Initiative and recent findings by the U.S. Department of Education Office for Civil Rights (OCR) outline standards for accommodating students with disabilities.

The Adaptive Learning Division will play a lead role to ensure that Foothill College provides an environment that is responsive and accessible to persons with disabilities. Appropriate accommodations will be provided so that technology and all computer laboratories are accessible, as guaranteed by law.

### **Accomplishments 2003/2004**

- Accessible computer workstations were installed in three new locations. The Middlefield campus computer lab, the CIS computer lab and the library.
- The Next Step Program computer lab at the off campus site in Menlo Park was completely upgraded with 11 new pc computers and a new printer. This was a boost to the programs ability to provide job related training to disabled veterans.
- Upgrade for all accessible software was installed to keep out programs up to date.
- Two new scan/ read work stations were added to the Computer Access Lab. More learning disabled student are taking advantage of alternate media to access their textbooks and class materials making it necessary to add these workstations to satisfy the demand.
- Computer Access Lab relocation to 5901 The move and renovation of the Computer Access Lab involved software upgrades (Kurzweil and Dragon Dictate), accessible workstations and adding two insulated rooms for students requiring low distraction environment. These rooms are also used for test proctoring. The Computer Access Lab is now conveniently located near the main Disability Resource Center. These changes have significantly improved coordination of services for students needing academic accommodations.
- The Alternative Media Specialist updated and improved the Adaptive Learning Division web pages. The ALD increased the use of on line resources and class offerings.
- Set up an independent server and file share for confidential information shared among staff and faculty that work directly with students. Implementation of the shared file has increased communication among support staff/faculty and improved support for

- students. This is also a convenient and efficient way to track and document student progress.
- Purchased and used Canon sheet-feeding scanner to produce electronic text from
  printed books for blind and learning-disabled students. The purchase of this
  equipment gives us the ability to respond within a reasonable time to students needing
  this service. For example, this technology provides quick scanning of text to convert
  to e-text for students.
- Purchased and used Sony DVD recorder for computer system image backup and recovery. This backup system should reduce our dependence on ETS for this kind of assistance. This equipment will also be utilized to maintain the accessible workstations on campus.

### Plans for 2004/2005

- Outreach and education will be a focus for this year. It is our goal to provide on-going training to Foothill faculty and staff to increase awareness and understand compliance issues relating to technology and accessibility.
- Develop and implement Faculty and staff training to include overview of technology and accessibility.
- Training for ALD staff and faculty and other lab coordinators where the new accessible workstations are located. Included in the training should be a visit to the Computer Access Lab with demonstration of the technology.
- To broaden our access for disabled students on campus our technology goals include adding accessible computer workstations to each computer lab on campus. This will make our campus accessible for night student and allow the day students more independence. Accessible, workstations are planned for KCI, CTIS Labs, Math Lab, IDEA Lab.
- Current technology will be maintained and upgraded as needed. Adaptive computer technology software and hardware improvements occur on a regular basis. To provide up to date service we must continue to maintain and upgrade on a regular basis. It is also cost effective to purchase upgrade rather than a whole new package.
- Faculty in the Adaptive Learning Division are integrating on line resources and providing class materials and assessments on line. This has created a need for faculty to have laptop computers so they can have access on and off campus and in the classroom. The Learning disability specialists would utilize the laptops for Learning Disability assessment programs. The faculty has requested two pc laptops and one imac laptop. A scanner has also been requested for the distance learning aspect of the Adaptive Fitness Training program.
- The Next Step Program located In Menlo Park has a need for a Projector for multimedia presentations in the classroom.
- The technology based writing class requires a license for Kurzweil 3000 Software for the Macintosh computer lab. Kurzweil 3000 is a scanning, reading and writing solution for people with learning disabilities or reading difficulties.
- Implement a student tracking system. The division needs a system to track For state reports and division tracking especially for the Computer Access Lab we require a sign in and out program that can be run on a computer to track hours.

### **Description of Hardware and Software Needs**

Two Dell Laptops -

Two i book laptops

Scanner

Printer

Digital recorders

**Epson Projector** 

Rolling rack for captioning system

Kurzweil 3000 lab pack software license

Accessible workstations including:

Jaws

Kurzweil 3000

Dragon Naturally Speaking and headset

Inspiration

ZoomText

Scanner HP 3970c

Dell Optiplex GX 2.2GHZ Pentium IV 17 inch flat

screen

Electronic Sit Stand Workstation

Ergonomic Chair with Ergo arms

### Participants in the Development of This Chapter

Brenda Davis, Margo Dobbins, Gertrude Gregorio, Mary Hawkins, Karl Knopf, Jessica Ochoa-Briesse, Janet Spybrook, Steve Sum, Carol Watson

### **Biological and Health Sciences Division**

#### **Statement of Needs**

The following is the strategic planning technology need information for the disciplines of Biology, Biotechnology, Dental Assisting, Dental Hygiene, Ornamental Horticulture, Paramedic/EMT, Pharmacy Technician, Respiratory Therapy, Radiologic Technology, Radiation Therapy, Diagnostic Medical Sonography, and Veterinary Technology.

Modern biological science and allied health fields spanning diverse disciplines encompassing the needs of basic research to clinical medicine have for years been intimately linked with computer science and continually face the challenge of keeping pace with evolving technology. Our needs and challenges include modernizing our labs to maintain state-of-the-art equipment for our students, incorporation of simulation and tutorial software to train students in near real life situations, new hardware, software, and faculty training to meet our obligation to teach using current technology.

By maintaining modern teaching facilities and utilizing the latest hardware and software, we will attract both new students and re-entry students and be capable of providing the highest level of both undergraduate and continuing education. Furthermore, the most successful graduates must be computer literate and possess strong practical skills—preparing the students for success requires more advanced teaching technology and capital resources. The job market for our graduates' demands sharp technical skills and students with substantial depth and breadth of knowledge that simply cannot be inculcated in the historic classroom setting.

The division continues to need both the Macintosh and DOS/Windows platforms as we are driven by software availability. Cross platform connectivity remains a divisional priority.

Division technology needs encompass more than simply computer hardware and software and include the acquisition of capital equipment to modernize biology and allied health laboratories. The division has a responsibility to instruct students using the equipment they will encounter in practice; therefore, it is essential that we do not focus solely on computer technology.

The division continues to support the need for a centralized computer lab, with approximately 30-35 computers (50% Macintosh and 50% PC), for the students to use outside the classroom. The current media center does not meet our needs. Our vision is an open access computer lab that can also be used for instruction and currently is scheduled to be in the new Life Science Building. The students will use this computer lab for the following:

- interactive CD ROM's which the instructors would provide
- internet access and word processing
- practice taking registry examinations and tutorials
- CDs and DVDs for interactive learning
- case studies and simulation

The division also continues to support the need for high quality training on use of technology that allows participants to gain <u>hands</u> on experience. This training should be available to faculty, staff, and administrators.

The division's individual program technology accomplishments and needs are submitted as follows:

### Division Office & General Division Accessible Technology

### Accomplishments for 2003/04

Updated Division Secretary Computer software, Filemaker Pro

#### Plans for 2004/2005

Remote telephone headset for division assistant Color Printer Upgrade/Update 2 Division Computers Titanium Laptop Electrical pump for the pond Update Division Secretary Computer to OSX

### **Biology Department**

### Accomplishments of 2003/2004

Multimedia equipment was fully integrated with a newly purchased ceiling mounted projector in 5105 (March, 2004).

200 microscopes were serviced (Fall, 2003). This includes microscopes from VT & EHD (OH). Data analysis software is now available for student use – the need for a computer lab for the division is underscored.

#### Plans for 2004/2005

Complete microscope sets in all rooms. This includes compound and dissecting scopes, as needed. Total desired number of compound microscopes is 147.

Install student computer stations in rooms 5101 and 5113.

Continue reviewing software, CDs, videos and other instructional materials.

### **Description of Hardware and Software Needs**

New microscopes: we have defined the need in each room with respect to microscopes. Not all of the lab rooms have complete, functional sets. Not all microscopes can be repaired, when broken. We feel this will be an ongoing need, with the following numbers of microscopes needed per lab room (numbers reflect those needed by students, the instructor, plus 3 extra):

- a. 5101 = 36
- b. 5102 = 28 (this is the BTEC lab)
- c. 5105 = 28
- d. 5106 = 19
- e. 5113 = 36

#### f. Total = 147

9 computers and 2 printers for student computer stations (5101/5113) Physiology software for BIOL40 and possibly for use in BIOL1B and BIOL14 Phylogenetic analysis software for BIOL1C and possibly for use in BTEC 6 spectrophotometers for 5105

CD-ROM: Interactive Biology, Investigating Heredity, Mitosis & Meiosis

### **Biotechnology Program**

### Accomplishments of 2003/2004

The DNA sequencer was repaired and is fully operational. The DNA sequencing and Bioinformatics course was revised from a 5 week format to a 12 week format to give students additional time to gain skills using the DNA sequencer. Two new courses were developed. Microarray Data Analysis and Virology for Biotechnology. The software needed for the Microarray course has been donated by Affymetrix, Inc. The overhead projector was installed in 5102.

### Plans for 2004/2005

The biggest concern for the program remains the upkeep and maintenance of equipment. We have some funds for recalibration of micropipettes, but additional funds will be needed to recalibrate all of the micropipettes that are in the laboratory. The micropipettes are currently used by Btec students, Bio1A, and Bio 41 students.

In addition, the field is changing, and additional short courses will be developed to cover some of the new leading technologies. These include: cell-based assays, including RNAi assays and apoptosis assays. Development of a microscopy course is also being considered.

### **Description of Hardware and Software Needs**

Three student computers in 5102 need software updates, printer connections and internet connections. With the current use of database analysis, the internet connections are critical. Room 5102 needs its own visualizer. The microarray data analysis course will run during the winter quarter of this academic year. A logical next step would be to design a microarray design course to introduce students to design of arrays as well as analysis of arrays. To fully support a microarray design course, a microarray gridder and scanner would be needed. We are still in need of rotors for centrifuges that have been purchased, but rotors were left off or changed on the purchase order.

### **Dental Assisting/Dental Hygiene Programs**

The dental assisting and dental hygiene programs are utilizing many different types of software that were either purchased or donated. In addition, many major dental auxiliary textbooks are now giving instructors software resources to utilize in the classroom, laboratory or clinic. All dental assisting and dental hygiene students utilize the technology in the classroom, lab and clinic in most if not all of their classes to keep up-

to-date with the rapid advances in dentistry. Technology for dentistry is rapidly changing. Patient charts can be kept on the computer instead of on paper ("paperless charts") and dental restorations are made in the dental office using computer generated images,.

### Accomplishments of 2003/2004

Increased utilization of Dental Assisting/Dental Hygiene software & CD-ROM case studies and tutorials

Faculty utilization of digital video equipment for instrumentation videos which can be downloaded from the Foothill College website

Digital x-ray training incorporated into the curriculum for dental assisting and dental hygiene students

Full-time and part-time faculty are continuing to develop on-line courses (DA 58, DH 59 and DA 57)

Accreditation documents in electronic form

#### Plans for 2004/2005

Continue to use digital video camera to make video clips for students Increase number of digital x-rays taken by students Increase number of Etudes hybrid or online courses taught by DA/DH faculty Install new clinic software program for patient and student tracking Replace blood pressure cuffs

### **Description of Hardware and Software Needs**

White Board for classroom 5301
6 PC Computers (Clinic)
Digital perio probe w/ voice recognition
Head set
4 bar code wands
bar code charger
bar code printer
Orthodontic software (\$5,000)
Dental handpieces (10)
Replace Videocassette Recorder (VCR) for Room 5301

# Diagnostic Medical Sonography (formerly Ultrasound)

### Accomplishments for 2003/2004

Partial funding banked for new US machine: \$40,000. out of needed \$100,000. Posters: anatomy posters new lab

#### Plans for 2004/2005

Replacement for outdated "live" ultrasound machine. Current one is outdated by 16 years. Partial (40%) funding has been banked from 2003-2004.

Updated software update for Med Sim simulation machine est \$6,000.00

Investigate program expansion into northern California. Target is 2005-2006.

Increase marketing efforts for student enrollment.

Storage cabinet for DMS lab.

Image Printer for US machine.

### **Description of Hardware and Software Needs**

Software update for Med Sim simulation machine CD- ROM programs AV programs

### **Environmental Horticulture & Design**

### Accomplishments of 2003/2004

Our needs continue to be concentrated on the acquisition of horticulture related equipment and computer/educational hardware and software. In 2003/2004 we were able to purchase:

Multi-media equipment including a PC for room 5702, a DVD player, a PC Laptop.. Five (5) station lab license upgrade for VectorWorks & Landmark CAD software

### Plans for 2004/2005

John Deere Utility Vehicle

Bobcat tractor attachments (rotary cutter, rotary tiller, concrete mixer, chipper)

Truck

Power & Hand Tools

Soil Sterilizer

### **Description of Hardware and Software Needs**

25 Compound Microscopes

25 Dissecting Microscopes

Three (3) new computers with flat screen monitors for our computer lab.

Printer for our computer lab.

Laser Planes

Instructional CD's & DVD's

Other CADD software (AutoCAD Light; Eagle Point, Dynascape, Plant Master,

Horticopia, Visual Imaging).

### **Paramedic Program**

### Accomplishments of 2003/2004

We purchased the following items to update the student labs: 2 Extrication Device, 2 Oxygen Regulators & oxygen cylinders, 12 simulated intravenous access arms, 4 simulated tension pneumothorax decompression mannequins, 10 decompression replacement skins, 2 glucometers, 4 pulse oximeters, 6 medication brief cases, 5 Suction units, 5 cervical collar bags. We also purchased one laptop computer.

### Plans for 2004/2005

We would like to be able to provide more convenient technologically advanced teaching techniques in the lecture room. We plan to reassess our laboratory needs by surveying the faculty, students, and advisory board to ascertain if we are meeting the needs of the student learning environment.

### **Description of Hardware and Software Needs**

Ceiling mounted projector/VCR/computer/visualizer Mount TV to ceiling

### **Pharmacy Technician Program**

### Accomplishments of 2003/2004

Purchased 2 Palm Pilots

Purchased Lexi Comp complete drug information software for Palm Pilot

DVD/VCR donated

Movable cart for VCR/DVD donated

Library references (hardcopies and online references) updated for 2004

Added printer with network capability in office

Purchased IV pole

Nomad device utilized for instruction

### Plans for 2004/2005

Set up Room J4 or J5 (Middlefield) with ceiling mounted projector and multimedia equipment to improve instruction technology

Purchase drug pronunciation software

Increase use of hybrid Etudes courses

Install white boards in J5 classroom and lab

### **Description of Hardware and Software Needs**

Flatbed scanner for office

Printer with network capability

Instructional DVD,s and CD,s

Multimedia equipment integrated with ceiling mounted projector

Practice tutorials and examinations for state registry

Whiteboards

### Radiologic Technology

### Accomplishments 2003/2004

iMac laptop computer for laboratory 5305 Overhead LCD projector for laboratory 5305 Multimedia cart for 5305 Wheel Chair for laboratory 5305

#### Plans for 2004/2005

Quality Control Test Kit Printers for offices 5207, 5208, 5209

### **Radiation Therapy Technology**

### Accomplishments of 2003/2004

New Tables for 7609- RTT Treatment Planning system

Videos: Cancer management

### Plans for 2004/2005

Acquire Lab equipment

Enhance Classroom instruction; videos, CD-Rom

### **Description of Hardware and Software Needs**

File Cabinet – Student Records 5219

Videos: Cancer management, new treatment techniques, & equipment

Storage Cabinet 7609 – RTT Lab Equipment

Phantom for treatment simulations

**Breast Board** 

Head & Neck immobilization equipment (Base & Aquaplast, prone pillow, prone head holder, timos)

Wing board

### **Respiratory Therapy Program**

### Accomplishments of 2003/2004

Upgraded G3 Apple Lap Top Computer

3 O2 Flowmeters

1 Posey Cuff Monometer

Upgraded computers in the Media Center, 2 Dell Pentium 4 Computers

1 Dell Pentium 4 computer for Respiratory Therapy Lab

Mounted ceiling projector in 5307

2 Blood Pressure Cuffs

### Plans for 2004/2005

1 Laser Jet Printer with Networking Capabilities

1 Rhythm SIM Arrhythmia Simulator

12 lead ECG Machine

2 Blood Pressure Cuffs

3 - Oxygen Analyzers

2 Magtrak III Wright Resp. Monitor

Neonatal test lungs

1 Posey Cuff Monitor

2 Bohringer Mechanical Spriometers

Capnograph

Skill Demonstration Videos

Pulmonary Function Screener

Pulmonary Function Machine

Neonatal ventilator

Home Volume Ventilator

2 Small compressors for SVN's

MNPB 840 Ventilator (with baby software)

**IPV** Machine

2-Wick Humidifier Heaters with brackets and support poles

### **Description of Hardware and Software Needs**

Updated library media/simulations

1st yr tutorial programs

Neonatal/pediatric clinical simulations

15 Clinical Simulations

5 IBM Compatible Computers (256RAM/CD/Printers)

**DVD** Burner

2 - G4 portable computers for instructors to use for instructor station

### **Veterinary Technology Program**

### **Accomplishments of 2003/2004**

### **Medical Technology Purchased:**

Veterinary Anesthesia Machine (1)

Blood/Urine Centrifuge (1)

Blood Rocker (1)

Large Animal Instrument Kit

Small Animal Stretcher

New K-9 and Feline Dental Typodonts (15each)

Refurbished 30 Canine/Feline Typodonts

Rabbit and Cat Skeletons

### **Educational Technology**

#### A/V Media

Acquired Misc. DVDs and Videotapes for VT Media Collection.

#### Other

Subscribed to Online Services for VT Faculty: Veterinary Information Network (VIN), AVMA Network of Animal Health (NOAH)

#### Plans for 2004/2005

### **Computers and Peripherals:**

Replace VT Lab main teaching computer with a PowerMac G5

PowerBook for VT Director's Assistant

### **Medical Technology:**

Digital Radiography Unit

Additional fully equipped Veterinary Anesthesia Machines (1)

Additional Microscopes for VT Lab (6)

Video Microscope (1)

Additional Veterinary Anatomic Models, Wall Charts, and Clinical Procedure

Simulators.

Additional K-9 Intubation Simulator Models (2)

Feline Intubation Simulator Models (3)

Additional Patient Monitoring Devices: Pulse Oximeter (2), End Tidal CO<sub>2</sub> Monitor,

Cardiac Monitor (12)

Veterinary Ultrasonic Dental Scalers (2)

### **Educational Technology**

### **Digital Imaging/Presentation Technology:**

Acquire dedicated server/Hard Drive Array for storage of VT Digital Assets.

#### A/V Media

Purchase additional videotape and DVD selections for VT Media Collection as available.

#### Software

Upgrade program owned software as required.

### Other

Obtain Wireless Internet/Network Access from VT Lab.

### **Description of Hardware and Software Needs**

Upgrades for all software including installation of Mac OSX as needed.

Two PowerMac G5 w/ DVD-R/CD-RW SuperDrive; large capacity Hard Drive; 1Gb of

RAM; Graphics Accelerator Card with 512MB of VRAM

Apple 22" Flat Panel Display (#1)

Wireless Modem + Service (#1) or other wireless technology to provide an **Internet** connection to the VT Lab.

### **Description of New Facility Needs**

Please refer to the College Facilities Master Plan. The need for a new Veterinary Technology Teaching Facility will be met in approximately 2–3 years by the Measure "E" Building Project.

Funds to equip new facility are required.

### Participants in the Development of this Chapter

Kathleen Austin, Shirley Treanor Barker, Debra Blodgett, Celeste Carter, Karen Erickson, Cara Miyasaki, Eloise Orrell, Mary Ann Pavic, Karl Peter, LeeAnn Osterdock, Christine Mangiameli ,Phyllis Spragge, Dan Svenson, Mary Green, Marcia Bhide, Kathleen Duncan, Carolyn Holcroft-Burns, Joanne Lopez, Martin Melia, Lisa Schultheis, Catherine Kornegay, Ken Horowitz, David Sauter, Mary Green, , Bonny LePape, Jenene

Key, Sandra Simon, Charlie McKellar, Debra Blodgett, Virginia Becchine, Anne Sandoval, Margaret Conlin, Nicole McSweeney, Ben Schmidt, Karlene Gambelin, Karen Johnson, Paramedic students, Joel Levis, Paramedic Advisory Board, Miriam Rosenthal, Robert Cormia, Christine Mangialmeli, Kerry West

#### **Business and Social Sciences Division**

### **Accomplishments for 2003/2004**

### Added on-line courses via FGA:

In addition to our existing online offerings, during the 2003-2004 academic year we added the following additional courses:

Course	Course Title	Faculty member/s
PHIL 8	Ethics	Woolever
SOC 19	Alcohol and Drugs	Cormier
SOC 40	Marriage and Family	Gibbs

### **Upgrade 3101**:

During 2003/2004, the lab was relocated back to Room 3101. New furniture was installed.

### **Increase use of online interaction to improve division communication flow:**

In addition to the web-postings of draft schedules, meeting minutes, and course outlines, the division regularly tuses email to distribute the monthly division agendas and other communications.

### **Description of Hardware and Software Needs**

Through the coordinator Allison Lenkeit, the GIS program will continue to seek donations of the latest GIS software products; Flash/Dreamweaver for webpage development; additional Acrobat software for PDF formatting.

### **Description of New Facility Needs**

The BSS Division has access to one new multimedia classroom, 6712, beginning in Fall, 2003. Rooms 3401 and 3403 are newly installed multi-media rooms. The data ports in all BSS classrooms have been activated for Internet access.

### Plans for 2004/2005

Add multi-media equipment to 3402, 3404, 3106, and buy a movable multi-media cart.

Continue to upgrade the BSS lab including the installation of the Student Tracking System.

### Participants in the Development of this Chapter

Penny Patz, Al Ruffinelli, and Allison Lenkeit

### **CTIS Division**

### Accomplishments of 2003/2004

To put the accomplishments in the proper context, a table is included (below) which shows the configuration of the CTIS laboratories as of the summer of 2004. A column showing the changes from the last year is also included. Note that at the moment building 4200 is in renovation and the rooms have been scattered about the campus.

### CURRENT CLASSROOM / LABORATORY CONFIGURATIONS (<Summer 04)

Room	Use	03/04 Change	Current Hardware	Current Software
<b>5972</b> (temp) 4201	PCS and help-desk laborator y	No important changes here.	11 PC's for PCS (mostly older) miscellaneous older electronic eqpt 4 Tektronix scopes storage racks and cabinets 4 newer Dell systems	DOS 6.2.2 Norton System Works Win 98, 2000Pro & XP
6708 (temp) 4202	Classroo m	Equipment in storage	none	none
<b>5931</b> (temp) 4222	Networki ng classroo m and laborator y	Lab moved this summer and rebuilt in 5931	21 Dell PC's (512MB, removable HD, NIC P4) 1 Sharp table top projector misc. data communication gear	Windows 2003Pro Windows XP
4301	Open PC lab/ class room	New Dells to replace older computers. Set up typing station and scanner station	1 Sharp ceiling projector 21 Dell computers w flat panel upgraded to 512M RAM 1 HP LaserJet 4100TN printer 1 HP LaserJet 4100N printer 4 micron older PC's for typing test 1 micron older PC for scanning	Windows XP, Photoshop7, Premiere Pro, OfficeXP, Winscp 3.1, Real Player 10, Oracle 9i, Norton Antivirus, Netscape 4.71&7.1, Visual Studio.NET 2003, Visio 2003, Codewarrior8, Fireworks4,

4302	Open PC lab/ class room	Minor upgrades to RAM and software	21 Dell systems (512MB) 1 ceiling-mounted projector	Dreamweaver MX, FlashMX, , Eudora5.0, PowerDVD Player, CmpassESL, TextPad, All the right Type v3t, Putty 0.55 Same as 4301 plus AutoCAD 2000 and POV Ray 3.5.
4304 (temp) 4209	Used as a highend Mac lec/lab for Graphic s. Shared with special Ed.	Moved all equipment from 4209 Upgraded system to Panther Updated software	22 G4 Computers HP 4100N printer One beige G3 driving an AGFA color scanner Cart-mounted projector to replace the older and broken wall mounted unit	OS 10.3.5 (Panther), Adobe Illustrator CS, InDesign CS, ImagereadyCS, Photoshop CS, Adobe reader 6, Dreamweaver MX 2004, Flash MX 2004, Inspiration 7.5, MS office X, Internet Explorer, Mozilla, Fugu, Stuffit, Widows Mediaplayer, QuickTime player, Safari, Imovie, Iphoto Itunes.
4305	Networki ng lab + UNIX sys admin	Took out a few of the older/broken machines.	15 HP Vectras P3, 128MB RAM Swappable hard drives	Multiple OS's and applications available to all machines using removable hard drives on

				each machine
4307		Put CISCO lab equipment to coexist with Mac lab.	31 G3 (fruit) systems 4 CISCO racks with routers and switches for the CCNA classes 6 older PC's (P2) for CCNA apps	OS 9.2.2, Acrobat reader 5, Bbedit Lite 6.1, Director 8, Illustrator 9, Internet Explorer 4.5, Netscape, Flash 7, Office 98, Photoshop 7, sound Edit Pro, Extreme 3d02
4308	Classroo m with demo	No change	G4 computer (see 4304 for config) Dell PC (128M, removable drive, NIC) 1 Sharp ceiling projector	Mac same as 4304 Pentium same as 4301
4309	Staff	Several new servers added to support the UNIX traffic	Server: G4 (resource server) Server: DELL P4 (Krypton) Server: Sun Sunfire 100 (NIS+) 4 Dell Optiplex 260 (Unix servers) Server Dell P3 (Win Print server) Server Dell P4 (Key)	Misc. server and utility software as required
MCI1	CNET cabling room	No changes	cabling and wiring equipment	N/A
MCI2	Mac lecture / lab room	Software upgrades Memory upgrades	21 G4 Imac systems HP4200N printer Sharp ceiling mounted projector	OS 10.3.3 (w 9.2.2 support), Flash, Dreamweaver, Fireworks MX 2004,, Photoshop, Illustrator, InDesign, and ImageReady CS, Office X, Norton antivirus & other utilities. Current IE,

MCI3	Mac lecture / demo room	Minor hardware and software upgrades	1 Imac G4 system 1 In Panasonic table top projector	Safari, Netscape browsers. Window Media Player, Itunes. Maya Personal learning Edition 6, POV-RAY. Same as I2
MCI4	New Palo Alto supplied PC lab	No changes here (room needs upgrading)	20 HP Vectra PC's view sonic ceiling projector	Office 2000, Acrobat reader, Norton 7, IE 6, Windows 2000 Pro.
MCI5	PC lab	Minor software upgrades	21 Pentium PCs (DELL) P3's 1 HP LaserJet 4050N Sharp Projector	Windows 2000 Pro, Netscape 7.1, Quicktime 6, Flash, Dreamweaver MX2004, Photoshop 7, Framemaker 7, ImageReady 7, Keyboarding Pro Multi media, Check Pro 2000, Office 2000, SFTP, WSFTP, free ZIP
Server room		Servers all colocated	G5 server (10.3 Panther) G4 server (print server) G3 server (10.0 apple server) Ghost server (Dell gx100) CTIS/MC Domain Server (Dell optiplex 8200 server 2000) I5 Print/Ghost Server (Dell optiplex GX150)	Server software as appropriate

MCI10	PC	Minor hardware	Pentium 4 (256MB)	Same as MC
	lecture	and software	Sharp table top projector	I5
	room	upgrades		
MCI11	open lab	Significant	12 G4 Imacs (DV model)	Mac
	(Mac	hardware	11 older G3 Macs (OS 9.2)	configurations
	and PC)	upgrades	15 older Micron Pentium 2s	same as I2
			13 New Dell P4s	Older Macs
			1 HP 8100 printer	same as 4307
			Agfa scanner station	PC
			G3 consulting station machine	configurations
				same as I5

### **CTIS OVERVIEW**

- As planned, we have added classes in "hot" areas to offset a decline in enrollment in our traditional areas. This includes new classes in network security (CNET 56A), C# (CIS 19A and 19P) and classes in web-enabled databases (COIN 91,92,94,96) and, as expected, enrollment in these classes was quite good. We also continued to aggressively advertise in the Heights.
- Many more classes have now been put online to attract a wider geographically
  diverse audience. We have also increased the number of certificates and degrees
  that can be taken exclusively online. In COIN, CAST and CIS we are very close
  to putting ALL these end-goals online.
- A LITES assessment tool has now been developed and being used for the third consecutive quarter. The institutional research office is now evaluating the data to ascertain the effectiveness of the program. Preliminary results look quite positive, especially regarding retention. The VTEA program has been granted a one year extension, allowing us an additional year to collect data without writing a new grant.
- We continue to save money by purchasing fewer copies of all of our software and using key server distribution. There was a problem in the Macromedia area this year, however, due to the reduced district volume. We had to increase our numbers to hit a college-wide funding breakpoint thereby saving less than we anticipated.
- We have been able to get hardware through third party vendors (EBAY etc) to satisfy some emergency server needs and still mirror the college standards. We anticipate this to be a stop gap measure.
- Much Measure E planning has been done to prepare 4200 and 4300 for renovation.

### BT

This program has done moderately well this year, despite the business downturn. Productivity has remained high by linking classes to other CTIS classes. The addition of the Help-desk program, however, has been a big disappointment. The OTI grant that the program was linked to ran out of money and also had fewer students than anticipated.

This caused many of the new classes in Help-desk (CNET 117, and CNDG 119) to be cancelled.

#### **CAST**

- We have added Advanced Illustrator, Advanced Photoshop, Adobe GoLive, and several other CAST classes to the list of online offerings. This has had mixed results but positive overall. Enrollment in the online classes has been great, but it seems to have reduced enrollment in the corresponding face-to-face classes. There has, however, been a net gain.
- Using the KCI during the construction has been a godsend. The instructors like the excellent facilities, and this also takes a bit of the pressure off in software upgrading..

### CIS

- Oracle has continued to evolve. We have added new classes to keep track of the new version of the software, and refined the way that we provide instructional materials to the students. Enrollment has declined in this still very popular program but it has held it's own generally.
- During the year, we have continued to hedge our bets on whether C# succeeds. We have added a second C# class (CIS 19P) to the offerings and are considering a third class. We have also provided a .NET environment for our students in the lab...

#### **CNET**

- Our CISCO CCNA and CCNP academies are now operational. Enrollment has exceeded all expectations. The academy is now housed in room 4307, which it shares with the low-end Mac lab.
- The CNET program has now been solidified into a single Enterprise Networking degree and certificate path which has helped our students a great deal. We have merged the UNIX administration material into this path which better meets the demands of industry
- The MCSE program has now evolved into the Window 2003 environment and all the class descriptions have been altered to reflect this change. The lab has also been updated (and moved to room 5931)
- The A+ curriculum has been trimmed and combined with the Help Desk and Technical Support degree path (in BT). More work needs to be done here.

### COIN

- The new web-enabled database program is now integrated into the overall Internet Technology degree
- The Ecommerce curriculum now has a capstone project class which better prepares our students for industry work
- Bioinformatics has been refined and the class offerings trimmed down a bit to allow our students to get through it more quickly. The degree path has now gotten state approval.

#### Plans for 2004/2005

#### **CTIS**

There are three major areas that will be dealt with in various ways during the upcoming year

- Measure E continues to have a large impact on the division and will continue to do so for the majority of this academic year
- Enrollment continues to be lower than hoped for and there will be a number of efforts to address that issue directly
- Technology continues to evolve in what we teach and in the equipment we will need... this will effect class offerings and curricula.

Two of the three main CTIS buildings will be down for renovations for the upcoming academic year. Building 4200 is currently vacant and about to be renovated. It is scheduled for completion sometime near the end of the Winter quarter. At this time we will be moving all of the computers and people in the 4300 building to new locations in 4200... this includes 5 laboratories, the servers in the staff room, and the staff, all in (hopefully) the Spring break. Also, we will need to ready 4300 for renovations at that time. Having a reasonably smooth transition will take quite a coordinated effort.

Enrollment continues to decline... down approximately another 10% since last 03F. The good news is that declines of 25-28% seem to be over and perhaps we have hit some sort of bottom. We are able to sustain our full time staff, but the price we pay is the decimation of our excellent adjunct faculty this and last year. During the 04/05 academic year the division will mount a three pronged effort to build enrollment: First, we will be working with the marketing office to mount an advertising campaign covering MORE than just the Heights. Second, we will increase our outreach to High Schools and industry. Finally, we will update our curriculum to include the areas that are "hot" right now, to increase student interest. Details in the final arena will follow in the department breakdown.

### BT

Except for our keyboarding offerings, which are taught as self-paced, we are moving the full program online to make it more easily accessible to at-home and out-of-work students who have a difficult time arranging transportation and baby-sitting so that they can come to campus. To improve productivity and to ensure that these classes "make", we are linking them to other similar classes (e.g. BT 59 is linked to CIS 60). In addition, we continue to work with OTI to renew their computer trouble shooting and Help Desk grant which works in tandem with one of the BT certificates. This provides a stepwise progression for BT students from small certificates to AS degrees, and also indirectly helps the enrollment in the A+ program, which shares many of it's classes.

#### CAST

• We are rewriting the Multimedia certificate to more accurately reflect the evolving nature of the workplace. More emphasis on web-based solutions using Flash.

- More classes are being put online this year, including Go Live, In Design, etc. The online classes seem to reliably have much better enrollment, especially in the Office suite area.
- We are moving the 3D program to the "hot" Maya software. This is costly but we will try to work out a donation with the vendor.

#### CIS

- The popular Oracle Academy program will continue to evolve in support of the ever-changing software. The Oracle corporation is currently revising it's major database release to version 10g... and this will require a major class rewrite as well as a curriculum revision.
- Additional Mini Grants need to be written to find funds to support training of faculty. We were quite successful last year in getting this money from Carl Perkins.
- In the programming arena, the success of C# continues to be in question. To hedge our bets, we are rewriting the classes to provide an easy entrée into the three class sequence for this language to mirror the situation in JAVA and C++.
- Microsoft has continued to push the .NET environment quite hard. This will require a rewrite of the VB curriculum and classes
- We are moving to place one of our CIS full time faculty members (Jamie Doll) in the position of focal point for UNIX. She is now spearheading the effort to migrate the classes to LINUX with has become quite popular and in-demand.
- By the end of this academic year, we should have the full UNIX curriculum online. This has been a challenge, especially for the system administration classes. By advocating for a new server, capable of supporting User Mode Linux (UML) it looks like we will now be able to put these classes online as well.
- Informatics is being strongly pursued by CIS this year. We are creating curriculum and classes for this hot new degree path and are in the process of filling out a state application for TOPS code this year. This is a major effort and is being coordinated as a cross-divisional exercise.

#### **CNET**

- The CISCO academy (CCNA and CCNP) is completely operational. It is temporarily housed in room 4307 and will shortly move to another temporary home in 4222. It's final "resting place" will, hopefully, be room 4308 in the renovated 4300 building. Designs for the building have now been finalized.
- We are adding a network security curriculum to the CISCO academy this year (the first class, CNET 56A is already in place). Mike Murphy is spearheading the effort. He is also working on a district wide grant to help create a capstone "project-based-learning" class online. This has been completed but has not yet been offered.
- The MCSE and MCSA programs must evolve this year to adapt to the new Windows 2003 offerings by Microsoft. This will require class and curriculum changes. This program is now located in room 5931 and will move to 4300 when completed.

- Chuck Johnson is creating a wireless curriculum both prior to and during his upcoming PDL this spring. The new class will be ready for next academic year.
- The A+ program will be streamlined to better fit the needs of certification-bound students. Several of the classes will be combined and better focused on the needs of the program.

#### COIN

- Bioinformatics is undergoing continued refinement
- Web admin and Web programming will be added to our growing list of degrees and certificates that can be accomplished online. This will be done with the UML server.
- The eCommerce program will be better integrated into the offerings of the BSS division and a joint program developed. Mimi Will is taking on this task.

### **Description of Hardware and Software Needs**

The items mentioned below are generally in support of the above plans. As last year, I will divide the needs into:

### **General Instructional Equipment**

- With the various moves coming up, all the rooms will need it's furniture suite considered. Some rooms will need new furniture (like the MCSE lab and the A+ lab) and some will need new chairs (safety concerns here especially for the stools)
- We will be moving our existing collection of projectors to be ceiling mounted in both 4200 and 4300. May need some additional projectors.

### **Networking and Connectivity Equipment**

• The CISCO academy requires new hardware this year. More of the latest routers and switches are needed as well as supporting PC's to talk to them.

### **Computer Hardware**

- The new open lab in the "renovated" 4301 will need a complete suite of PC's and Mac's... all of the equipment was surplussed (older Beige G3's and P2 computers). This will require on the order of 20 PC's and 20 Mac's... not to mention the furniture needs.
- At the Middlefield Campus, the 16 Micron computers in the open lab are now 6 years old and need to be replaced. The Macs in the open lab also need to be replaced with 10 iMacs.
- At the Middlefield Campus the printer in I11 and the projector in I10 needs to be replaced, and a Beige G3 consulting machine needs to be replaced as well.

### **Computer Software**

- Upgrading and maintaining the current versions of all of our software will be a continuing battle. This year we will need to update our 2-year licensing agreements with both Adobe and Macromedia.
- We will need to renew our Oracle academy and purchase the new software.

### **Staff Support Equipment**

• Misc. utilities for system setup, monitoring, configuration control, repair, init and formatting as required.

### **Electronics and A+ Support equipment**

• Equipment to support the A+ program as well as a source of stuff that they can "ruin". This is an ongoing need.

### Participants in the Development of this Chapter

This chapter was developed with the help of input from the faculty and staff within the division.

### **Counseling Division and Admissions and Records**

### Accomplishments of 2003/2004

Installed student tracking system in Career/Transfer Center

Installed numerical key pads for securing confidential student social security numbers in Admissions and Records and Counseling

Implemented on-site scanning system for grades and student records in Admissions and Records

Contracted scanning of historical documents (grades, class rosters, census sheets) in Admissions and Records (1998- present)

### Plans for 2004/2005

Expand usage of student tracking system for Counseling and Career/Transfer Utilize student tracking for MIS reports for Matriculation and Transfer Purchase new computers for faculty/staff with outdated(4 years plus) equipment/software

### **Description of Hardware and Software Needs**

Replacement of front desk computers for greater memory and quicker data access

### Participants in the Development of This Chapter

Penny Johnson, Bill Lindke, Kathy Adams, Karen Oeh

### Fine Arts and Communication Division

### Accomplishments of 2003/2004

Phase 1 of of completing IDEA Center hardware and software upgrades completed. Streamline software needs and schedule 2-3 year upgrade plan for usage in IDEA Center and all rooms supporting our electronically enhanced programs.

Addressed technology needs with all Measure E renovations and new Construction for Fine Arts Phase II.

Designed new degree and certificate programs in Video Arts.

### Plans for 2004/2005

Completion of IDEA Center equipment which includes upgrading the final 5 G-3's to iMacs.

Convert IDEA Center printing to "Go Print" system, and eliminate course fees for those classes

Identify equipment needed for a digital conversion of KFJC broadcast system Identify specific equipment needs for expanded darkroom and color processing; Photography department - 6100 building remodel.

Convert 1219 into a multi-media Speech classroom/lab

Identify and purchase new software for Music Theory to be incorporated into the IDEA Center

Purchase scanners for Division office to reduce paper storage.

### **Description of Hardware and Software Needs**

4-8 iMacs in new 1219 Speech classroom/lab

5 new iMacs to replace antiquated equipment in the IDEA Center

2 printers compatible with "Go Print" software and hardware in IDEA Center Instructor workstation in 1219

Data projector, speakers, dvd, video camera, amplifier, microphones for 1219

5-pack Sebelius software for Music Theory/composition

2 Scanners for Division office

### Participants in the Development of This Chapter

Duncan Graham, Lauren Velasco, Preston Ni, Joe Ragey, Shawn Townes Mark Anderson, Robert Pelzel, Kate Jordahl, Rick Knepp, Anthony Gatto, Paul Davies

### **Foothill Global Access**

### Accomplishments of 2003/2004

New Degree programs, growth, and other activities in FGA:

- 1. Enrollment in FGA supported courses, web-enhanced, hybrid, and fully online, continues to grow as is participation in the program and services by faculty. We now have close to 10,000 students logging into ETUDES in about 250 sites.
- 2. The availability and support for ETUDES have enabled us to make it the standard at Foothill and for about thirty colleges statewide. Many colleges joined our alliance and switched from eCollege and WebCT to ETUDES this year.
- **3.** Our **nine AA online degrees** have extended educational opportunities to many students, as evidenced by the high enrollment and demand for online classes. Several division deans are exploring the design of online certificate programs.
- 4. With the support of the Institutional Research Office, we began exploring technologies and processes needed to implement campus-wide student evaluations for online classes. More pilots will be conducted during the fall of 2004.
- 5. Student participation in the **Franklin University** and Foothill Alliance Program is growing. In addition, we signed a new agreement with the **University of Illinois** in **Springfield** which will enable our students to get BA online degrees.
- 6. The **Cyber Teachers' Institute** (summer 2004) continues to be strong training ground for faculty who are interested in venturing onto web-based teaching. CTI has 92%+ retention with faculty from across the state participating in it.
- 7. Statewide efforts include the offering of ETUDES training courses (on-site and online) to faculty across the state and extending our best practices workshops on pedagogy system-wide to other California Community Colleges.
- 8. The use of **ETUDES** has grown dramatically. In the fall of 2002, 5 colleges were using the software for a total of 5,000 students. By fall 2004, faculty members from 50 colleges use ETUDES for a total of 22,000 students (includes Foothill).
- 9. Under the leadership of Vivian Sinou, Foothill-De Anza was awarded a \$600,000 grant to adopt, build upon, and implement the **Sakai** open source tools for the California Community Colleges and the ETUDES Alliance. Foothill-De Anza partnered with the Sakai project and will borrow the source code for its next generation version of ETUDES (ETUDES-NG). Dean Sinou serves on the Sakai Board of Directors, representing the ETUDES Alliance and community colleges.
- 10. Another effort led by Dean Sinou and Foothill Global Access is the **SOFIA** initiative (Sharing of Free Intellectual Assets) that will publish exemplary courses and will make them freely and openly available on the World Wide Web.

### Plans for 2004/2005

Continue on all the programs described in earlier section.

- 1. Hire staff and consultants for the Sakai/ETUDES-NG project to ensure that the grant timelines and community (ETUDES users) needs are being met.
- 2. Adopt, build upon, and implement Sakai local for the needs of the district and our Alliance. Identify and prioritize tools that must be developed prior to adoption.
- 3. Develop a migration plan and strategies and the necessary migration utilities to assist colleges and faculty with the transition from ETUDES to ETUDES-NG.
- 4. Collaborate with the Sakai Core team and other partner colleges and universities, especially in relation to building tools, sharing resources, and expertise.
- 5. Re-design the user training and documentation and support resources to help ETUDES users learn the new system and migrate with the least resistance possible. Design courses on best practices and instructional design for faculty.
- 6. Hire staff and implement the proof-of-concept Sofia pilot grant. Select, review, repurpose, and publish ten to twenty courses in ETUDES or .NG by the end of year. Outline the next phase of the project (five years) and submit large grant.

### **Description of Hardware and Software Needs**

The current ETUDES servers that support 22,000 students will be kept at the Verio Data Center in San Jose throughout the transition period to the new system.

New production equipment or managed services will be purchased at the Verio Data Center in San Jose for the ETUDES-NG/Sakai software. The costs for these servers and software will be covered by the Hewlett grant during 2004-05.

Office hardware and desktop applications for the developers of the Sakai grant. Development software and equipment for the software developers (Sakai grant) Software licenses for training and staff development for developing multimedia presentations for web-based courses to be imported into ETUDES-NG, such as RoboDemo, Impatica, and AcuLearn. Software to be used for training. Equipment and software for staff and consultants for the Sofia grant. Web hosting for the Sofia grant, ETUDES support site, media, and FGA. Campus license for Turnitin (plagiarism) service.

### Participants in the Development of This Chapter

Vivian Sinou, Dean of Distance & Mediated Learning

### Language Arts Division

### Accomplishments of 2003/2004

Due primarily to financial constraints, we were not able to achieve most of the goals we set for 2003/04. We were not able to replace the remaining Mac G-3s in our lab (6303); we were not able to secure laptops and projectors for faculty to take to classrooms; we were not able to replace the Division Assistant's computer, which has continued to cause problems despite a memory upgrade; and we were only able to purchase one CD player for our foreign language and ESL classes, not the five that we had planned.

We did pilot English 1B as an on line course. Rosemary Arca sought input from other English faculty and followed the guidelines put on the course by the department regarding mandatory face-to-face discussion sessions and face-to-face exams. As requested by the department, Rosemary researched the retention and success rates of her on-line sections compared to other sections of English 1B and found that both rates were higher in the on-line sections. She also found that while more students dropped the on-line section in the first two weeks than dropped face-to-face sections of English 1B, the overall drop rate was much lower for the on-line section. The assumption is that many students dropped early when they discovered that the on-line section would not be the easy class they were expecting.

Rosemary's on-line section of English 1B also won accolades from her peers around the state. Rosemary had submitted her course to the SOFIA project, a pilot open courseware initiative launched by the Foothill DeAnza District and funded by the Hewlett Foundation. Five reviewers were selected to review each course submitted to the project. Reviewers were selected based on their application and a letter from a supervisor attesting to their discipline expertise, the strength of their teaching, and their online teaching experience. Rosemary's peers were very enthusiastic about the quality of her class, both in terms of pedagogy and technology.

Reviewers found Rosemary's course well organized, well written, and very comprehensive. They indicated that the course material was elegantly presented with images complementing the text. The found the lessons to be thought provoking models of critical thinking. The interactivity for thought and discussion were integral to each lesson, not just a supporting part of the lesson. The learning activities were mapped to the clearly defined behavioral objectives, ensuring that a student going through the course would meet the objectives by nature of the lessons.

One reviewer commented, "The collaborative components and opportunities for interaction offered to students make this course a model for other online instructors looking for creative ways to engage students." Another reviewer concluded, "This course is a superb model of effective online instruction. Skeptics of online teaching must be made to take this course to experience a model online course."

A second planned pilot did not take place. Due to the unexpected resignation of Priscilla Butler, we were unable to pilot a hybrid version of ESL 177, Advanced Vocabulary Development for Reading and Writing.

Linda Lane, during her sabbatical, constructed a web site to accompany English 110, Introduction to College Writing. That site has now been linked to our Language Arts Division web site for students needing assistance with their writing.

#### Plans for 2004/2005

Make better use of the web as a marketing tool:

- Enhance the division web site and update pages on a quarterly basis.
- Promote division faculty by encouraging all full-time faculty and all regular parttime faculty in the division to have a web site.
- Promote course offerings by developing descriptions for the web site

Make better use of the web as a pedagogical tool:

- Encourage and facilitate the use of web sites to enhance courses.
- Revise our English and ESL handbooks and make sure that the handbooks are readily accessible to faculty on line.
- Continue to collect and evaluate data on on-line sections compared to face-to-face sections of our classes.
- Compile a list of on-line resources for faculty and staff to refer students to for help with their language skills.
- Develop on-line resources and activities to supplement and enhance class texts.

Make better use of the web as a communication tool:

• Enhance communication within the division via web logs (blogs).

Develop innovative classes with the use of technology:

• Rosemary Arca and Brian Lewis are developing a "New Literacies" team-taught reading and writing class. The class is designed to introduce skills not only in college level critical reading and expository writing but also the "new literacies" of designing documents, using blogs for discussion, analyzing visual images, creating multimedia projects, and thinking critically about web information. This is a project-based learning class where students will use the latest technologies to create digital "stories" and "arguments" about their educational experiences and to share strategies for a successful college experience.

### **Description of Hardware and Software Needs**

Purchase three CD players for use in ESL and foreign language classes.

Replace the remaining 18 G-3 Macs in the Language Lab (6303) with the latest standard Macs with standard software.

Upgrade Macs in 6303 to OS X.

Make it possible to dim lights in Mac lab and PC lab.

Add an instructor's station in PC lab.

Purchase cables to use with projectors.

Upgrade software in LA Lab.

Replace Division Assistant's computer, which is now more than three years old and is causing problems.

Participants in the Development of This Chapter Karen Alfsen, Rosemary Arca, April Flowers, Scott Lankford, Brian Lewis, Keith Pratt

### Library and Learning Resources Division

### Accomplishments 2003/2004

### **Public Services:**

Ask A Librarian virtual reference service was piloted and implemented through the Library Home Page. The Ask A Librarian service will provide reference service to students remotely and will greatly benefit our distance learning students and faculty.

Websites by Topic was developed to link discipline subject areas to internet resources to assist our students in instruction. Instructional Resources that links specific courses and faculty curriculum to websites was incorporated into this heading. Websites by Topic is accessed through our Library Home Page.

The Public Access SIRSI InfoView client was added to the reference workstation. It will provide additional information to librarians on which books are still in process. This will assist students and faculty in locating books and other resources that may still be in Technical Services.

11 iMacs, (DV G4 1 Ghz Processor from District Standards list), were ordered with 512k SDRAM. Seven will be placed in the newest study carrels and two will be placed in the Quiet Study area.

15 optical mice for the iMac's were ordered to replace the optical mice in the Public Access area as they fail to perform properly.

### **Circulation:**

One additional Circulation G3 Check-Out terminal with port and and barcode reader was added to the Circulation Desk. An HP deskjet printer, HP 6127, was received and networked between two of the Senior Library Technicians for circulation.

Ownership for all Circulation reports were given to the Circulation staff to run. An updated Barred user and Blocked user report was developed to indicate all delinquencies including minimum fines.

#### **Technical Services:**

Three new Dell computers with flat screens were received for the three senior library technicians in Technical Services. The Senior Library Technician for cataloguing moved to the latest version of OCLC, the web-based Connexion. An HP desktop printer, HP 5650, was received for formatting the spine labels for library and media center materials. A DVD player was received to allow for cataloguing DVD materials.

The Senior Library Technician for periodicals has moved to fully implementing the SIRSI serials modules after Faxon defaulted on its financial obligations and was taken over by EBSCO. Periodicals are being checked in using SIRSI and routing will be implemented once check-in is completed. An additional port was activated in the serials area.

### **Systems Administration**

An iMac was received from Library 25 with a Zip Drive. There is a need for a CD-ROM-DVD drive for all SIRSI documentation.

IBM Solutions took over the maintenance of the SIRSI Library Server beginning in May 2004 for a three-year period.

The SIRSI system was updated to accommodate increased staffing logins. The Serials module was implemented to include check-in. Reports for all departments were updated, revised and created to include new statistical information and patron information. EPT, printer problems, were identified and resolved.

Pricing for implementing the Authority Control module was discussed and received from SIRSI. Due to the financial condition of the college, it was decided to wait for implementation in better economic times.

Network problems were identified and solutions were developed or are in the process of being generated. This is an ongoing situation.

### LIBRARY CLASSROOM 3523

20 iMacs were added from Library 25. 10 original iMacs were redistributed and were replaced by newer models.

8 ports were activated to accommodate the additional iMacs.

### Plans 2004/2005

### **Technical Services:**

A receipt printer is needed for Serials routing. SIRSI will be contacted for a price. A Deskjet, HP 5650 or similar model, is needed for cataloguing to replace an old and aging desktop printer.

### **Systems Administration:**

The plan will be to prepare to move to the Workflows Mac OS X SIRSI client that is in development. The possible release time will be Fall 2005. This will be an updated and revised version of Workflows that will not be platform dependent. MAC OS X that is UNIX based offers much more efficiency and compatibility than previous MAC operating systems. Macintosh equipment recommended for SIRSI implementation of this version of Workflows will be ordered. We will not proceed until all major reports of the Macintosh Workflows client will ensure a somewhat smooth transition.

Workflows training with De Anza will be scheduled, if possible, to train all staff on all the SIRSI modules using the Workflows client. The Workflows Client will be tested and input from other sites will be discussed in relation to major problems that inhibit efficiency and workload. The Workflows version to be used will be pre-tested on the Test SIRSI server.

MAC OS X SIRSI peripherals such as barcode readers and receipt printers are still being developed.

Equipment needed for the planned move include:

### **Circulation:**

1 printer

4 receipt printers

7 barcode readers/scanners

7 G5 computers with flat screen monitors

### **Systems/Automation Librarian**

G5 computer with CD-ROM-DVD drive

### **Open Media Lab**

Two G5 computers

1 receipt printer

2 barcode readers

1 laser printer

New RS 6000 server with new IBM operating software

### **Training on all Modules**

Eleven additional Public Access G5 workstations will be ordered as money becomes available (nine for the main library area and two for the Quiet Study area – one upstairs and one downstairs).

#### OPEN MEDIA LAB

Acquisition of DVD players and software.

Replace 6 aging Micron computers

Replace aging Media Center Desk computers

Continue with Close Captioning project.

Weed videotape collection

Continue to streamline and make efficient the GoPrint print system.

There is a continual request by students to add more PC's to the Media Center, this would require additional Ethernet ports.

Two DVD players, one for the Study Room and 1 for a floor carrel.

Two Mac computers for Media Center Desk

Six PC's to replace aging ones along the back wall

### **Description of Software Needs**

### **LIBRARY**

System OS X for the Macintosh will most likely be the operating system that the district will move to in the coming year. The new server will include the latest operating system from IBM.

### **OPEN MEDIA LAB**

System OS X for the Macintosh will most likely be the operating system that the district will move to in the coming year.

Media in the DVD format will be acquired in the coming year.

### **Training Issues**

### LIBRARY:

Training in multimedia, online resources, new databases and new developments in Internet resources designed specifically for librarians. System MAC OS X Workflows training will be needed as the library moves to this client. Libraries and online Distributed Education will also need to be considered.

### Participants in the Development of this Chapter

Penny Patz, Beverly Shead, Rusora Weller, Susanne Hinds, Barbara Harding, John Broadwin, Art Hand, Amina El-Kholi, Pam Hodges, Amy Pratt, Walter Scott, Karen Gillette, Charlotte Thunen, Roxanne Baxter Mendrinos, Linda Robinson

### **Middlefield Campus**

### Accomplishments of 2003/2004

Added the following pieces of equipment and software to the Middlefield Campus:

Three new printers (color inkjet printer) for staff members and one computer for a staff member (I-lamp)

A new inexpensive video camera that takes full size VHS tapes

2 Sylvania DVL-100C DVD/CD players with MP3

Strobe XP 450 PDF Visioneer scanner

RJ Tech 3900 DVD CD+G Progressive Scan Karaoke Player

2 Panasonic DVD-S25K progressive scan DVD

Panasonic RX-D20S CD Boombox with remote

Canon Canoscan 8000f usb 2400X4800dpi, 48 bit scanner

2 PALM Zire 72 Handhelds with software

1 Kurzweil 3000 Black and white scan/read software

1 Dell Optiplex 6X2.2.ghz Pentium IV 17 inch flat screen moniter

1 Dragon Naturally Speaking software

1 Jaws standard Edition C-609 software

1 Zoomtext 8.0 software

1 Inspiration 7.5 software

1 HP 3970L scanner

#### Plans for 2004/2005

Increase on-line access to services such as the library and financial aid.

Upgrade or add instructional/tutorial software in the Student Resource Center.

Bring wireless project to students at Middlefield Campus.

Bring the placement and testing center (20 new computers) to Middlefield Campus (temporarily until Student Center is constructed)

### **Description of Hardware and Software Needs**

Purchase an HP Tabloid Printer or something similar but less expensive

Upgrade current Nomad stations

Purchase at least two LED projectors for classrooms with narrow carts for easy and smooth mobility from storage to classrooms and in classrooms with narrow aisles.

Purchase at least one ceiling mounted projector and accessories

Purchase new TV/VCR-DVD-CD players for classrooms

Purchase amplifier with pitch control and a couple of guitar amps

3 DVD players and one DVD burners

3 SVGA/RCA jack connectable VCR's for digital camera/camcorder display

3 SVGA/RCA jack connectable 32' TV monitors for digital camera/camcorder display and to replace older equipment without this feature

1 new Pentium IV DVD/CD burn/portable unit for classroom use

### Participants in The Development of This Chapter

Al Guzman, Judi McAlpin, Charlie McKellar, and Elaine Burns

#### Office of Student Success and Outreach

## Accomplishments of 2003/2004 EOPS

Updated File Maker Pro at the front desk, for the EOPS Specialist, and the Peers. Whole modification of EOPS web page.

Creation of a front desk peer database.

EOPS orientation quiz in pdf format.

### FINANCIAL AID

The Board Financial Assistance Program made it possible for a number of improvements in the Financial Aid Office at Foothill College. Three additional staff were hired, two Financial Aid Outreach Specialist positions and one Financial Aid Coordinator. The primary focus of these positions was outreach to our local feeder schools and community, but also to our campus community. One of these positions was placed at our Middlefield Campus site. It is important to note that there has never been any financial aid assistance in terms of staffing available at this campus site. With the new staff were able to extend the hours of operation of the financial aid office at Foothill.

The purchasing of equipment was also made possible by this funding. A total of 7 new computers were purchased to include:

2 Mac's and 5 PC's, software, three printers, one laptop, and one fax machine (exception granted for the furniture). The furniture was needed for the Middlefield staff person.

Foothill partnered with our sister campus De Anza College to invest in online technology. Our shared vision was to improve efficiency and communication with applicants and recipients. This new technology has been integrated with existing online services for other key functions on campus so, that low-income students now can access more student services from our college website. The new technology also provides more online security of confidential data through the use of PIN numbers.

The results can be found at <a href="www.foothill.edu/aid">www.foothill.edu/aid</a>. The website offers online application status, view online awards, online BOG A and B application. In the works is a self-help "FAFSA Assistant" similar to De Anza which walks through the FAFSA using online video, sound and visual prompts.

The final project that we were able to participate in was a conversion of paper files to disc (an exception was granted). Scanning of Perkins, BOGW, and other financial aid files will make for a more effective and efficient office. Like most colleges space is at a premium and we were able to eliminate several years of paper files.

The financial aid office at Foothill College has truly been transformed. With additional staff, new and enhanced technology we are now able to provide access to higher

education not only to our campus community but our community at large, particularly our low income population.

### PASS THE TORCH

Designed Layout & Photos of Pass The Torch Graduating & Transferring Student Yearbook, 6 pages total which were printed onto a hard color copy and will be used for dissemination of our Pass The Torch model.

Digitized Pass The Torch Graduating & Transferring Student Yearbook and converted files to pdf for easy downloadable viewing.

#### RECRUITMENT AND OUTREACH

Digital camera purchased for Outreach events

The Dean and 2 Outreach Specialists' Mac computers have been upgraded to OSX

### Plans for 2004/2005

### PASS THE TORCH

To create an annual Pass The Torch Graduating & Transferring Student Yearbook for publication & internet

### RECRUITMENT AND OUTREACH

Division Assistant and 1 Outreach Specialist Mac computers upgraded to OSX Training for staff to become more efficient in File Maker Pro and Excel

# **Description of Hardware and Software Needs EOPS**

Funding will be a primary consideration for upgrades to the CAVE.

(6) G3's

Request for PC laptop

### PASS THE TORCH

Upgrade of our Adobe Illustrator 9.0 & PhotoShop 5.5 we are using outdates versions Purchase a Web compatible application for our Pass The Torch Graduating & Transferring Student Yearbook to post our Graduating & Transferring Students on our Pass The Torch home page.

### RECRUITMENT AND OUTREACH

Photo Shop and Quark software

Desktop Photo Printer that can be networked

New networked laser printer for Student Success Center

### **Participants in the Development of This Chapter**

**EOPS:** Frances A. Gusman, Jorge Rodriguez

FINANCIAL AID: Frances A. Gusman, Matilda Renteria

PASS THE TORCH: Robert Garcia, Jean Thomas, Elvia Navarro

RECRUITMENT AND OUTREACH: Frances A. Gusman, MariaElena Apodaca,

Herlisa Hamp, and Lisa Lloyd

### **Physical Education/Athletics Division**

### Accomplishments of 2003/2004

- 1. Upgrade on server in wellness center
- 2. New software for football stats
- 3. Plans completed for PE renovation tech plan
- 4. Movement of all hardware and software to facilitate Measure E moves
- 5. Wire the temporary athletic training room facility for both phones and computers
- 6. Three new online PE classes
- 7. Design of sound system for 2601
- 8. Design of sound system for stadium measure E project
- 9. Ability to input all activities in Resource 25 database
- 10. Three computers installed in Division office for student registration

### Plans for 2004/2005

- 1. Software and hardware for women's volleyball and men's soccer statistics
- 2. New computers for faculty following moves following Measure E facility changes
- 3. Convert wellness center to new software to comply with Campus standard
- 4. New printer for Sue's office
- 5. Two more online classes for PE
- 6. Installation of new scoreboard and sound system at Stadium
- 7. Redesign web pages for athletics
- 8. New VCR system for athletic film analysis
- 9. Utilize new software to submit athletic eligibility online
- 10. Conversion to online footnote system

### **Description of Hardware and Software Needs**

- 1. Hardware for two new multimedia classrooms
- 2. Two new video camera systems for athletics
- 3. New computer for Helen
- 4. Software and hardware for volleyball and soccer statistics program
- 5. New computers for faculty following Measure E moves
- 6. Sound systems for both 2601 and football stadium
- 7. Digital video equipment for athletic teams

### Participants in the Development of This Chapter

Sue Gatlin, Helen Kikoshima, Dixie Macias

### Physical Science, Mathematics and Engineering

### **Physics**

### Accomplishments of 2003/04

- 1. Purchased three Pasco computer based Apparatus.
- 2. Hired new position of PSME lab coordinator.
- 3. Purchased 2 new PC's for two Physics' labs.
- 4. Replaced and purchase two new printers for labs.
- **5.** Purchased instrumental interface for three computers
- **6.** Purchased One spectrometer for optics experiments
- 7. Purchased one "heat engine set-up for thermodynamics experiments."
- **8.** Purchased one magnetic sensor for E & M experiments in physics 2B and 4B.

#### **Plans for 2004/05**

Purchase 5 new computers Our two lab rooms are sharing 11 computers. Students have to be in large groups to perform experiments. It takes a long time and not everyone can have hands on experience. With 5 more computers, each room will be equipped with 8 stations with 3 students in each group. So everyone will be able to actively participate in each experiment.

Purchase 5 PASCO interfaces Each computer needs to have one interface to do data requisition.

Purchase Digital Camera. Our complex set ups need to be documented. The best way is to document them digitally. With multi-section labs, many people teach the same lab at different times. With effective documentation, all labs will be easily resembled.

Our current device to measure temperature is mercury glass thermometer. They are easy to break and mercury inside is a hazardous material. The lab technician needs to be trained to handle hazardous materials. Thermocouples measure temperature more accurately, quickly, and more importantly, safely.

Purchase Interactive Physics software package

10 user site license = \$1077.08

20 user site license = \$1618.34

30 user site license = \$2159.59

Simulation becomes more and more effective in some cases where there is no suitable physical set up available or the set up is costly. Interactive Physics is simulation software with which we can build virtual physics labs to teach students the other aspect of physics experiment. In this growing digital world students will be better prepared with both hands-on and simulation experience.

Purchase 2 heat engine devices for thermo experiments

### Pasco TD-8572 Heat Engine/Gas Law Apparatus \$356.14

Heat engine experiment takes long time to do. It needs both ice water and boiling water. Only time will allow the system to make it in thermal equilibrium with both the ice water and then the boiling water. Currently we have only three sets of heat engines. Students have to rush through the experiment, so other students can get their turn. If there is anything wrong, they don't have time to repeat or to find out why.

Purchase Video Tape of Engine Fundamentals Engine Fundamentals \$139.00 + tax?? Assuming 8.25% tax, \$150.47

The purchase of the large ticket items listed above will be dependent on the availability of technical improvement monies from the campus level.

#### **Mathematics:**

### Accomplishments for 2003/04

Upgraded older MACS with 7 new PCs.

For these new PCs we purchased Mathematica and Minitab software.

We upgraded the tutorial center at the Middlefield campus by purchasing and installing Minitab Software for the use of Math 10 Statistics students.

In addition we purchased 15 copies of Geometer's Sketchpad and 15 copies of maple for math center and faculty use.

Finally we purchased 3 new Dell projection systems for faculty to use for classroom demonstrations

### **Plans for 2004/05**

Scantron machine for math department use.

### Chemistry

### Accomplishments for 2003/04

The 2003/2004 year saw very little change in our technology base in chemistry. With limited funds we were able to make a few minor upgrades in our general chemistry laboratory equipment with virtually no changes to our organic or introductory chemistry programs. Most of the departmental technology money was used to maintain existing equipment or replace aging and worn out laboratory equipment.

#### Plans for 2004/2005

As our enrollment increases we have a real need to replace much of the older equipment in the general chemistry labs and make significant improvements to the organic chemistry laboratory.

The general chemistry laboratory is in immediate need of some basic equipment to keep our Calculator-Based-Lab (CBL) system operational. Over the last couple of years, the

department has slowly been upgrading the CBL system, which is approximately seven years old, to the newer, more robust LabPro system. Due to budget constraints, we have been unable to replace all of the older systems and these units are slowly wearing out. Replacement of the remaining CBL systems will ensure a more smoothly running general chemistry lab as we will be able to provide equipment that is more reliable. We often have technical difficulties during experiments with the older units. These difficulties detract the instructor from teaching and frustrate the students. Many of our data collection sensors are worn out or broken, and need immediate replacement.

We are also in need or 4 low-end PC's to run the software for our UV-VIS diode array spectrometers. These PC's need only have windows 98 or better, and could be purchased used.

In organic chemistry our most pressing need is replacement of microscale glassware and acquiring a functioning NMR (Nuclear Magnetic Resonance Spectrometer). The organic chemistry department switch to a microscale labs approximately 15 years ago. This was done for a variety of reasons ranging from less cost for chemical reactants to the more important issues of chemical pollution, safety, and hazardous waste. At the time they purchased microscale glassware kits to support this approach to Organic chemistry labs. Since then, the kits have been adapted, partially replaced, incomplete etc. A new infusion of kits is critical to maintaining this lab approach to organic chemistry. Over the past years, the chemistry department has applied for matching funds to purchase a rebuilt NMR. Unfortunately, the grant requests have not been successful. In order to maintain our course transferability, this instrument is critical to the organic chemistry series. Although organic chemistry would be the main use for this instrument, it would also be applicable to the general chemistry series. The College has already pledged \$35k for the purchase of an NMR; another \$35k from instructional equipment money would complete the purchase. The renovation of the chemistry building includes an NMR room, and De Anza already has two of these instruments available. To delay purchase of this major technology tool will put the Foothill College chemistry department further behind.

### Description of Hardware and Software Needs General Chemistry

Item Name	Cost per Item	Number Needed	Cost
LabPro Interface	\$220	8	\$1,760
Colorimeter	\$110	14	\$1,540
pH Sensor	\$74	10	\$740
AC Adapter	\$10	10	\$100
Graph Link Cable	\$29	2	\$58
Low-end PC	\$400	4	\$1,600
		<b>Total Cost</b>	\$5,798

### **Organic Chemistry**

Item Name	Cost per Item	Number Needed	Cost
Microscale Lab Kit	\$210	24	\$5,040
Lab jacks	\$59	12	\$708
Hot/Stir Plates	\$329	10	\$3,290

Strip Chart Recorder	\$500	1	\$500
Anasazi EFT-NMR spectrometer	\$68,000	1	33,000*
		<b>Total Cost</b>	\$42,538

<sup>\*</sup>Additional money to supplement existing \$35k pledge.

Total Costs: \$48,336 + \$3988 (tax) = \$52,324.

### **Earth Sciences & Astronomy:**

### **Plans for 2003/04**

Purchase of new computer systems for ES Teaching lab.

Purchase of new Color Printer for Earth Sciences & Astronomy.

Need to upgrade computers in Earth Sciences Teaching Lab to more robust machines.

Need for faster machines required to keep up with upgrades in software. This should be taken care of, in part, by partial funding of 2002/2003 fiscal year requests.

Need to acquire the color printer for both Earth Sciences and for Astronomy.

Also need to eventually acquire a slide scanner to archive aging Astronomy and Geology slide collections and to transition to 100% digital media.

### Accomplishments of 2003/04

### **Astronomy:**

Astronomy is not asking for the stars, they would just like to have a SIGN. If a technical request is required then it could be a sign with light emitting diodes.

### Participants in the Development of This Chapter

Kathy Armstrong, Richard Daley, Londa Larsen, Brian Stanley, Marc Knobel, Gene Seelbach, Sue Wang, Christopher Ayala, Nancy Seeman, Andy Fraknoi, Ion Georgiou, Chris Dileonardo, Angel Sierra, Londa Larson, Richard Daley