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:

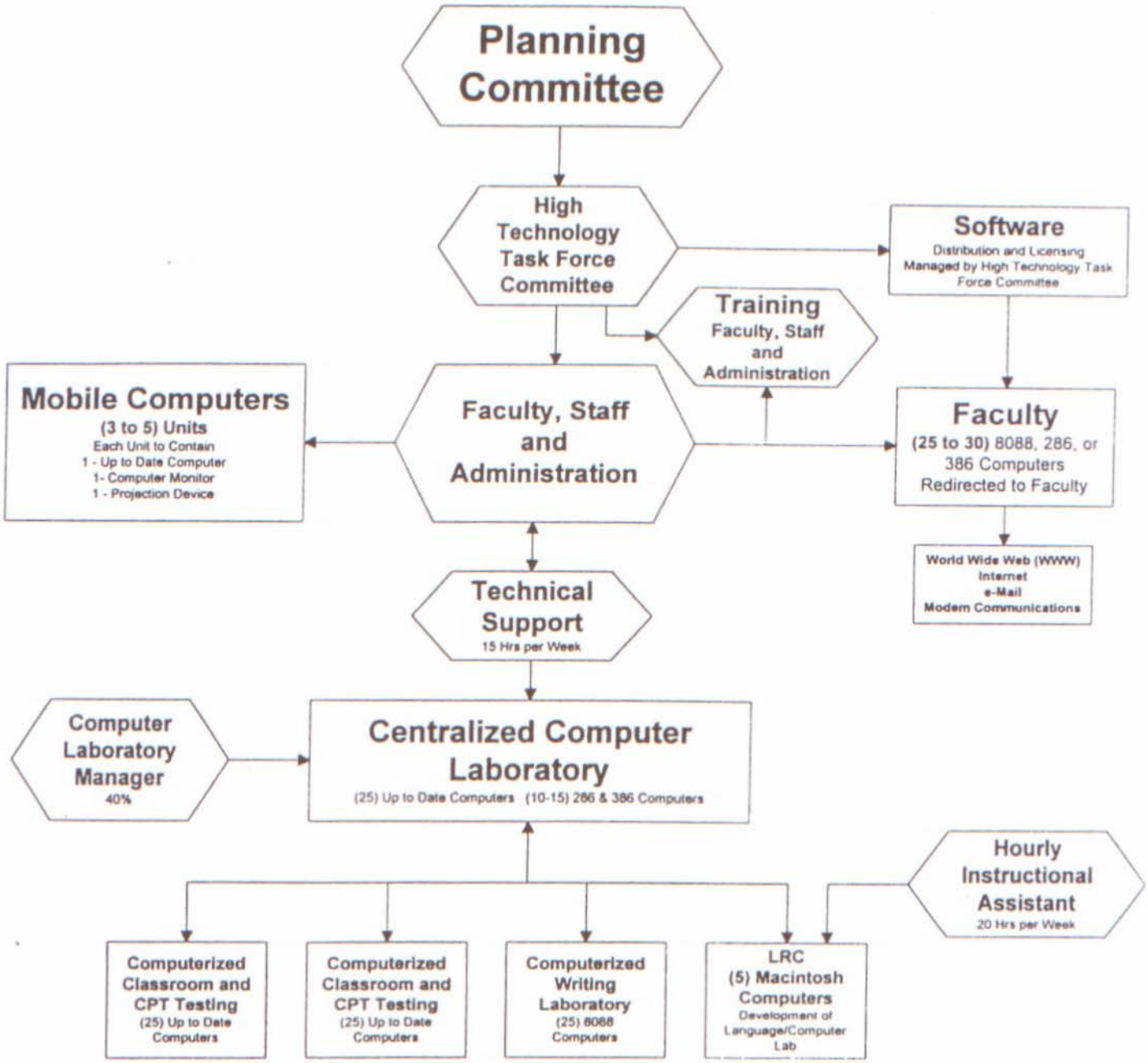
- Students and faculty will have access to up-to-date computer technology (hardware and software).
- Faculty will be encouraged to take advantage of alternative techniques of providing instruction.
- Centralization of computer classrooms and laboratories will ensure maximum efficiency and utilization 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

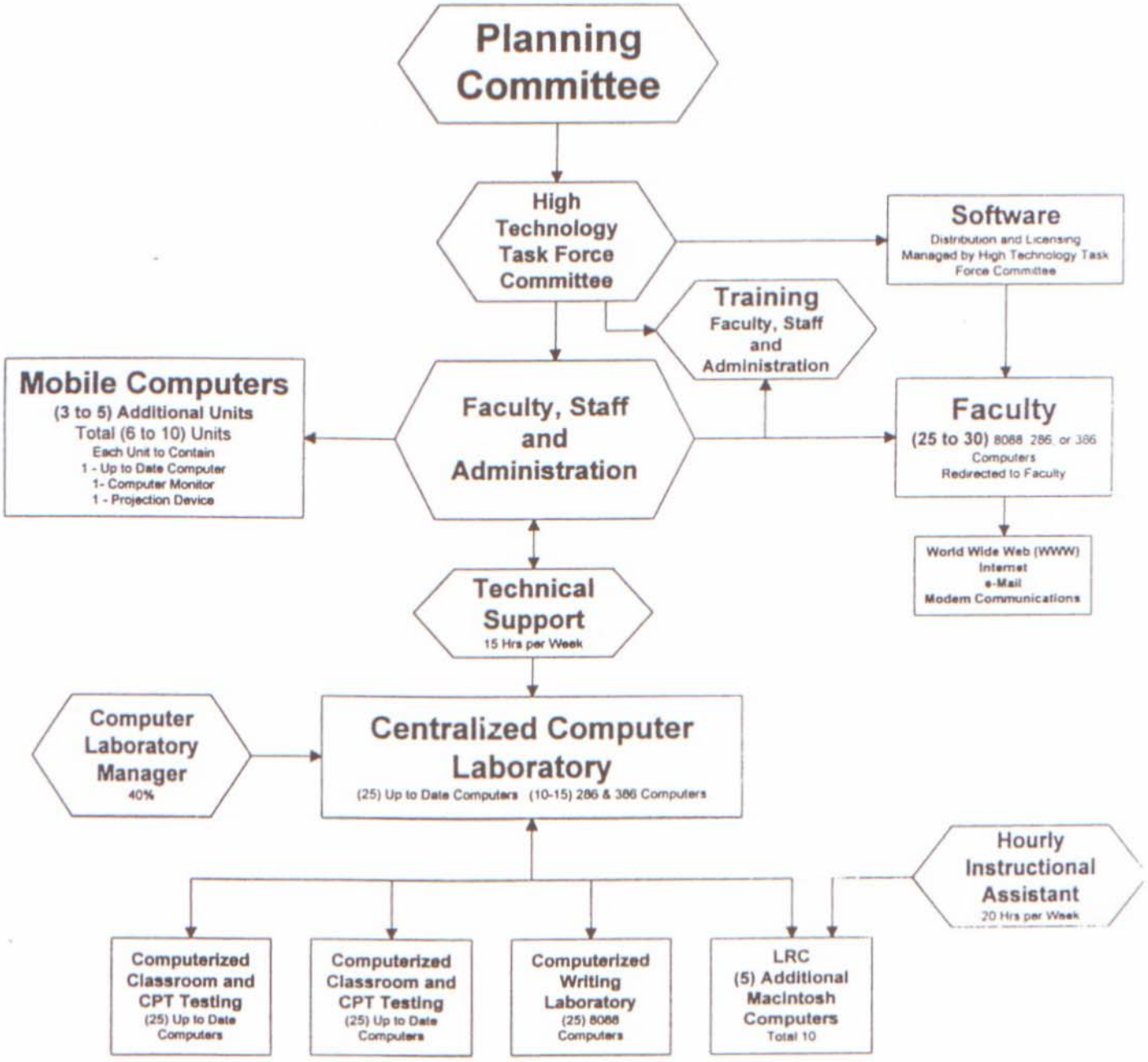
Relocate 50 Surplus Computers to Computer Writing Lab and Faculty

Relocate 18 IBM Compatible 486 Computer to Classroom and Lab

Relocate 16 IBM Compatible 386 Computer to Accounting Classes and Lab

Technology 2000

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

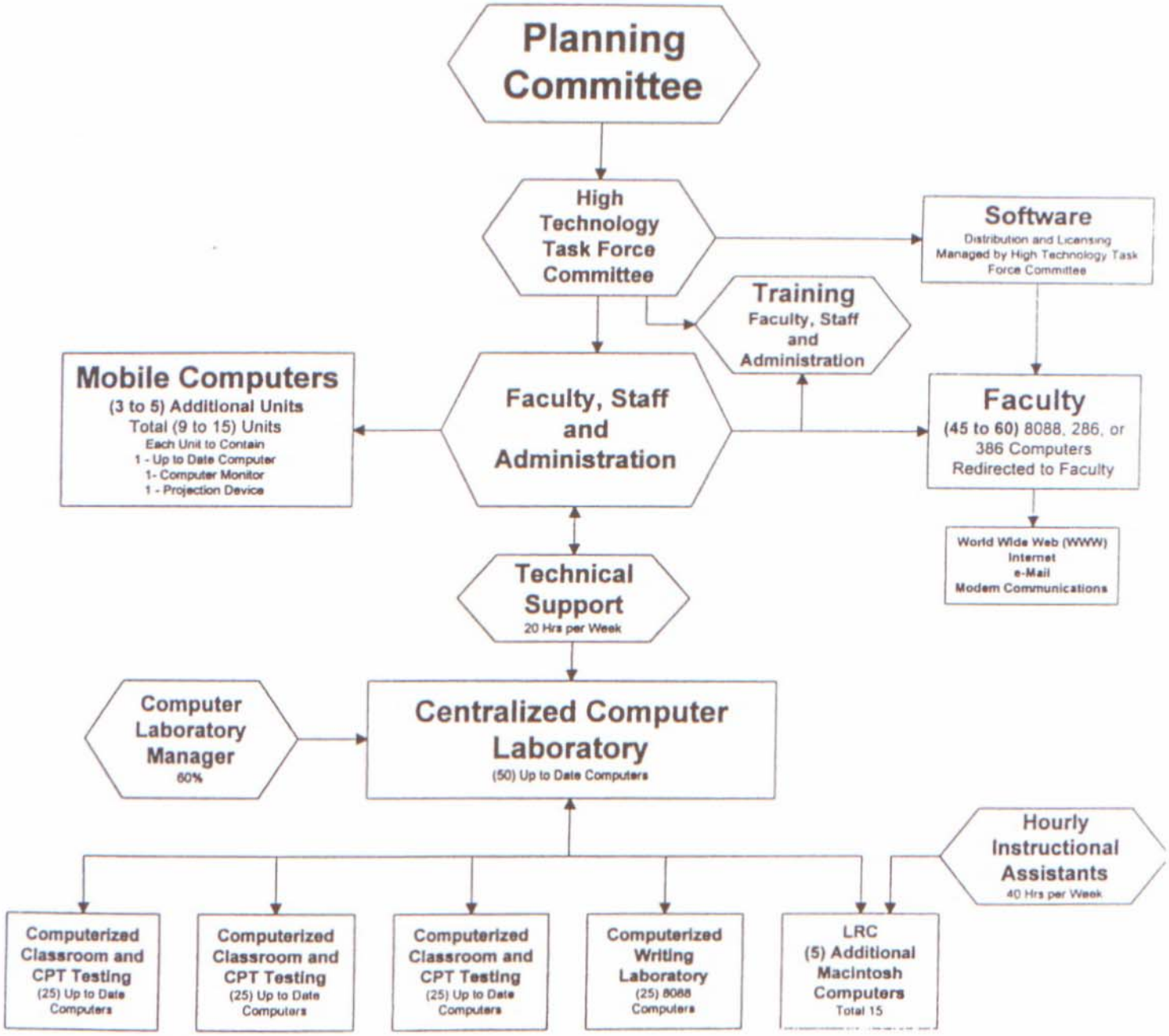
Continue Network Faculty Computer Communications to Internet and World Wid Web

Network First Computer Classroom

Purchase Modular Furniture for Classrooms 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

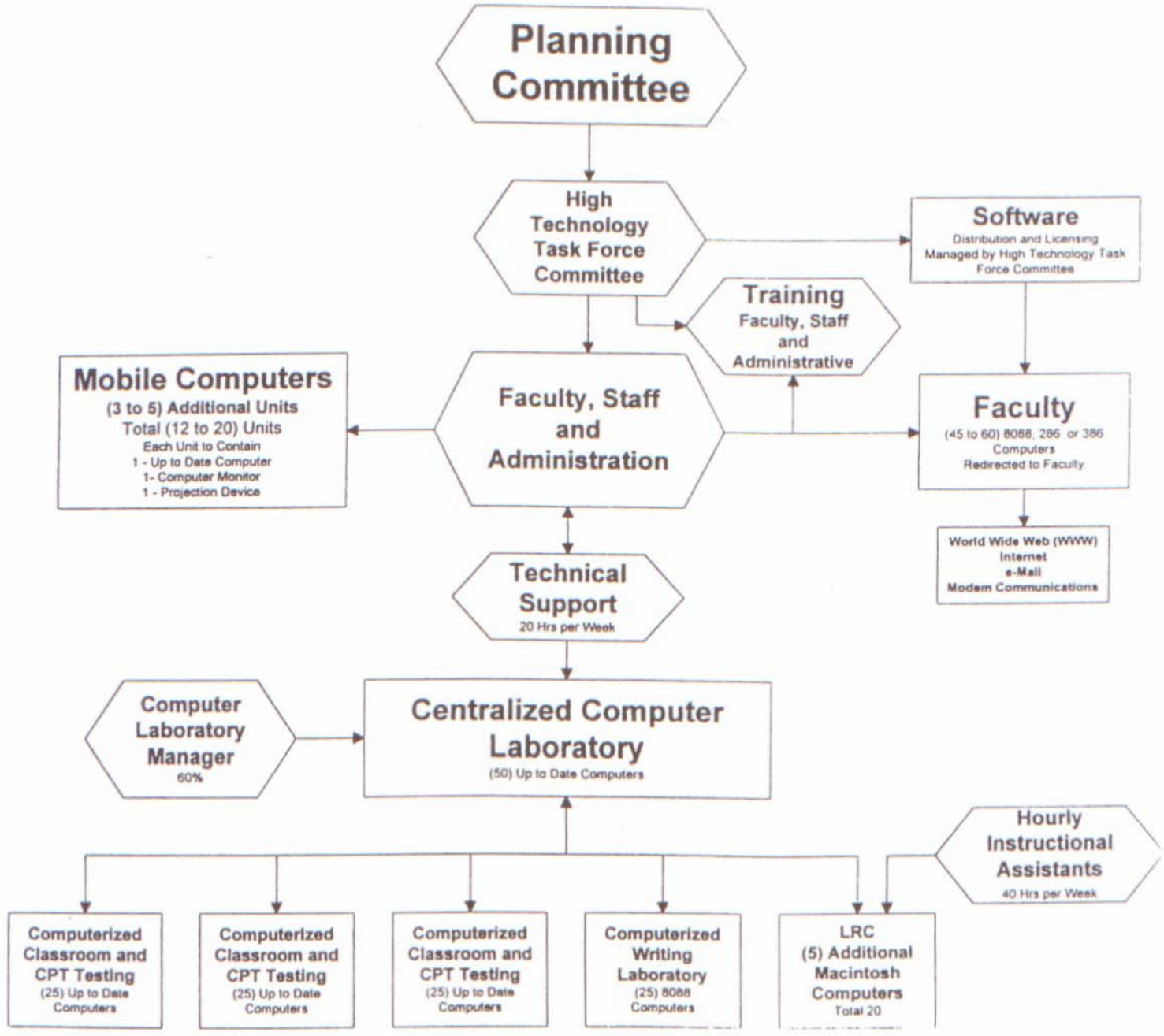
Continue Network Faculty Computer Communications to Internet and World Wide W

Network Second Computer Classroom

Purchase Modular Furniture for Classrooms a Lab

Technology 2000

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

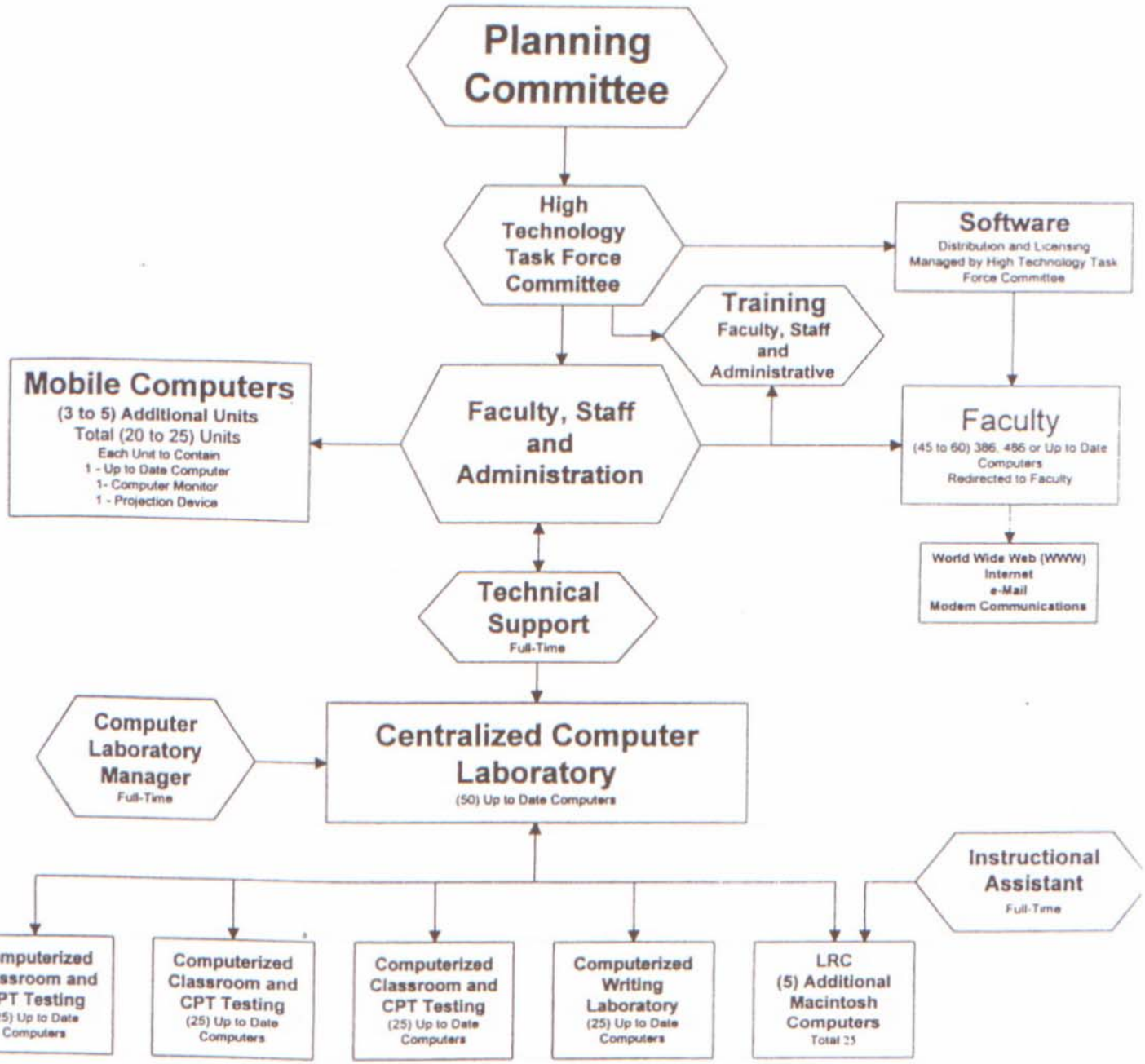
Continue Network Faculty Computer Communications to Internet and World Wide V

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