Administrative Services
Annual Program Review Report – 2007

I. Mission and Vision of the Program:

Computing Services is a service-oriented department that provides high quality technical support, computing systems and network infrastructure for credit, non-credit and extramural programs within the Maui Community College tri-island community.

Computing Services plans, and obtains funding for, acquires, installs, and supports the appropriate/necessary equipment, software and communications for the education, training and use of suitable computer applications for instructional, academic, administrative and student support for the college's tri-island community.

Computing Services provides computing hardware and software management in support of the daily operation of the college. Functions include hardware and software support services, network infrastructure and Internet access support, computer and peripheral installation and repair, institutional research support, computer programming support, and server & maintenance support for departmental and campus unit systems. Additional functions include instructional and consultation services for computer hardware and software, network infrastructure design, and training and information technology implementation services to assist faculty and staff in the use of software/hardware and new computing systems. (See attached for Functional Statements)

II. Year's goals, plans and accomplishments

A. Goals:
   1. Increase office support from halftime (0.50) to fulltime (1.00). (SP G1, O2; G2, 02)
   2. Reorganize college IP addresses into appropriate subnets. (SP G1, O1; G1, O2; G2, O2)
   3. Modify Maximo work order system. (SP G1, O1; G2, O2)
   4. Install wireless network in the dormitory facilities. (SP G2, O2; G5, O2)
   5. Decommission legacy DEC VAX equipment. (SP G2, O2)

B. Additional goals and objectives:

6. Complete wiring and installation of network infrastructure of Lahaina Education Center. (SP G2, O2; G5, O2)
7. Upgrade network infrastructure, complete wireless coverage and increase the speed of network traffic. (SP G2, O2; G5, O2)
8. Create and fill temporary position to fulfill functions 5, 6, 8 & 9. (SP G2, O2)
9. Create and Hire fulltime technician for outreach centers. (SP G2, O2)
10. Combine Computing, Media and Telecommunications into a single organizational unit headed by a technology administrator.
11. Reduce work order turn-around time for 5th straight year. (SP G1, O1; G2, O2)

A. Accomplishments:

1. Two unfilled halftime (0.50) clerical position counts were allocated to Computing Services that allowed the college to establish one fulltime (1.00) office support position. Campus funding was allocated and the halftime clerical staff was increased to full time as of March 1, 2007.
2. IP reorganization plan to meet current needs; subnets created and/or expanded: expanded USGS servers, student office assistants and non-lab Internet access for students; moved ACT servers; USGS/PBIN subnets (Ongoing).
3. Maximo system. 34 staff members were trained to pilot Maximo in FY2006-2007, allowing a majority of campus units, departments, and various staff to submit work requests to Computing Services via Maximo. 17 clerical staff members submitted all of their department's work requests using Maximo. Next on the agenda/timeline is fine-tuning the user interface, implementation of O & M and the Media Center to Maximo, system, and development of preventative maintenance module listings for each department (Ongoing).
4. Wireless network in dormitories (Completed).
5. Progress was made in shifting functions to newer servers (i.e.: MCC Website) NEC VAX servers will not be shut down until O&M is completely incorporated to Maximo.
6. Wiring and installation of network infrastructure of Lahaina Education Center (Completed).

B. Additional goals and objectives:

7. Upgraded network switches to increase campus throughput speed. Wireless access added to a number of rooms and Buildings including: full coverage in the Laulima Building, an upgrade to the 2nd floor of the Paina Building, wireless coverage installed in the Agriculture Building, the Welding shop,

the Construction Academy shop, and wireless coverage for the 1st floor of the Kupa'a building.

8. Filled the temporary IT Specialist position.
9. Legislative funds were allocated to create and fund a Neighbor Island/Outreach IT Specialist. This position is a permanent FTE position. Hiring in progress.
10. Initial steps to combine Computing, Media and Telecommunications into a single organizational unit headed by a technology administrator were implemented with the hiring of a temporary IT/Media Center Coordinator. Individual and combined Computing and Media Center meetings have been held to smooth eventual transition (Ongoing).
11. The average work-order turn-around time increased from 2.7 to 3.0 days. The median work-order turn-around time remained at 1 day.

III. Analysis of qualitative and quantitative data.

A. Qualitative Data. A survey was performed this year. Data is included in the table attached. Data reflects satisfactory performance in the following categories:
Campus Internet access: 78% satisfactory rate
Computer labs and classrooms: 72% satisfactory rate
Software: 68% satisfactory rate
Campus email and website access: 85% satisfactory rate
Staff assistance: 81% satisfactory rate

B. Quantitative Data.

1. The number (FTE) of technical staff increased with the addition of the .50 time office support to 1.0 FTE. This occurred late in FY2006-2007, which is reflected in the data. Work orders completed increased by approximately 25%. Categories A thru H show a marked increase; in particular A, G and F. The Neighbor Island IT Support Specialist is expected to increase computer support services to the outreach centers.
2. Average work-order turn-around time increased from 2.7 to 3.2 days, though the median work-order turn-around time remained the same: 1 day. This increase in turn-around time may be due to the marked increase in work orders performed, unavailability of parts, consultation for customized services, or a number of other unspecified reasons.

IV. Next year's goals, plans and objectives.

A. Goals:

1. Reorganize college IP addresses into appropriate subnets. (SP G1, O1; G1, O2; G2, O2)
2. Modify Maximo work order system. (SP G1, O1; G2, O2) Fine-tune user interface to implement O & M and Media Center into Maximo. Develop preventative maintenance module listings for each department (Ongoing).
3. Hire temporary (casual) technician for functions # 5, 6, 9, & 11. (SP G2, 02)
4. Decommission legacy DEC VAX equipment. (SP G2, O2)

B. Additional goals and objectives for this year:

4. Complete wiring and installation of network infrastructure for Building Q. (SP G2, O2; G5, O2)
5. Upgrade Molokai, Hana, and Lanai computing infrastructure, including network connections, IP addresses, wireless coverage, and new computers and peripherals. (SP G2, O2; SP G3, O1;
6. Establish Internet access to Molokai Farm. (SP G2, O2; SP G3, O1)
7. Upgrade network infrastructure, purchase and add new Cisco network switch. Once installed, the campus will see increased network traffic speed, and have a redundant/back-up switch in the event of a main switch failure (Ongoing). (SP G2, O2; G5, O2)
8. Install new wireless server and complete campus-wide wireless coverage plans. (SP G2, O2)
9. Combine Computing, Media and Telecommunications into a single organizational unit headed by IT/Telecom administrator.
10. Reduce turn around time for work orders to match FY2005-2006 statistics (2.7 – 3.0) (SP G1, O1; G2, O2)

V. Resource needs and priorities.

A. Needs:

1. Increase in position counts. Late afternoon and early evening frontline support is needed to assist students with user-name and password access issues, to assist students and faculty with wireless access and personal laptop configuration, to assist with faculty training and assistance with migration from WebCT to the Sakai course management system, and UHUNIX related issues. As noted in attached table, faculty, student, and staff

software and user support increased by 34% in FY 06/07 (F). If this position were added, evening computer support would increase user satisfaction as well as assist with the increase in demand for user support. (SP G2, O2)

2. Modify Maximo: Additional IT support is required to assist in building procedures, safety, inventory and preventative maintenance databases for Maximo. Currently, one IT specialist handles both the Maximo Data Management System and the campus network infrastructure. A 1.0 FTE position would be assigned to the duties prefaced in Sections 1 & 2.
3. Due to an increase in network use, which includes a growing demand for online instruction support, a two-fold expansion in campus wireless access points, (with more growth to follow), and an anticipated growth in network capacity (due primarily to new technology that utilizes both wireless and wired IP access), additional network hardware installation support is required to maintain the existing IP network infrastructure and peripherals. Switches, hubs, workstations, laptops, and other IP addressable tools have seen an increase on campus by approximately 20% (H, D). In the past few months, new faculty has been hired, additional programs have been introduced to the college and our new Student Life Building has been brought on line. A new MCC Science Building is planned to break ground in 2009. These campus upgrades have significantly impact Computing Services operations. In addition, new technologies used for learning, including streaming media and Web 2.0 modalities, and additional hardware and software upgrades for online course instruction will place additional demands upon Computing Services. In the past year, work orders have increased by approximately 20% (A). The amount of work orders left unfinished at the end of the year increased by approximately 50% compared to FY05/06 (B). A second 1.0 FTE position would allow for current and anticipated growth of the colleges' computing infrastructure. Work orders left unfinished at the end of the year would decrease substantially and the anticipated increase in work orders could be supported.
4. Equipment to track network data throughput should be considered. This would allow network bit use to be tracked and integrated into quantifiable data. This data can then be used to better assess actual network growth and demand. New laptops and miscellaneous testing support equipment for computing staff would improve network reliability, trouble-shooting, and day to day operations. (SP G2, O2)

Functional Statements

1. Implement the Computing Plan of Maui Community College.
2. Facilitate, locally, plans of the University of Hawaii Information Technology Services and IT Offices of the other colleges in the UH system.
3. Assess college computing needs.
4. Obtain funding for software, equipment and program support through budget requests and grant proposals.
5. Acquire and install software and equipment necessary for college computing infrastructure, including network and central servers for file service and printing.
6. Configure and maintain/repair network and server equipment/software that is required for infrastructure, including wireless network and college web site.
7. Provide programming services to create unique systems or tailor purchased systems for campus-wide or system-wide use.
8. Provide advice and assistance in purchasing departmental and campus unit software, computers and peripherals.
9. Install and configure departmental, campus and outreach unit software and hardware.
10. Provide programming and server support/maintenance for departmental or campus-unit systems, such as Compass, Skills Bank, and student digital media file access.
11. Maintain and repair departmental, campus and unit computing equipment and peripherals.
12. Inform and train faculty and staff in the use of software/hardware and new systems.

Quantitative Data:

	COMPUTING CENTER	FY2002-03	FY2003-04	FY2004-05	FY2005-06	FY2006-07
A	# of Workorders completed.[1]	1152	1229	1252	1293	1798
B	# of Workorders outstanding at year end.	18	13	12	12	22
C	# of Requested data uploads/downloads completed.	135	247	253	252	272
D	# of Computer installations completed.	63	227	48	106	153
E	# of Other hardware installations completed.	57	191	56	61	65
F	# of Software installations for faculty, staff, asst.	230	389	439	167	251
G	# of Software installations for classrooms/labs	927	1333	1072	1742	3493
H	# of Computers on campus at end of the year.	1034	1096	1167	1196	1248
I	Computing Center technical staff FTE.[2]	5	4.8	4.5	4.6	6.3
J	# of Workorders completed per technical staff	230.4	256.0	278.2	281.1	285.4
K	# of Computers on campus per technical staff	206.8	228.3	259.3	260.0	198.1
L	Average days to complete a workorder	8.3	3.9	3	2.7	3.2
M	Median days to complete a workorder	1	2	2	1	1
N	# of Student UH account problems resolved.	ND	252	328	311	201
O	Computing Center non-technical staff FTE.	0.5	0.5	0.5	0.5	0.625
P	Comp Ctr Budget[3]	$242,347	$248,431	$248,431	$258,972	$492,800
Q	% Comp Ctr Budget/Overall College Budget	1.28%	0.80%	1.15%	1.00%	1.70%

[1]Workorders account for approximately 35% of Computing Services work and include those of Webmaster starting FY07.

[2]Technical staff includes Webmaster starting FY07 & Computing Coordinator prior to 10/01/06; FY2006-07 includes Computing Coordinator before retirement and part time 1/01-6/30/07, and technician overtime.

[3]Beginning FY07 the budget include Computing Coordinator's pay and Infrastructure Upgrade funds.

COMPUTING SERVICES SURVEY RESULTS

Is Internet access adequate?

32.8% completely agree
45.5% agree
10.2% disagree
1.9% strongly disagrees
9.6% no opinion

Computers in labs and classrooms are adequate

23.2% completely agree
49.4% agree
12.0% disagree
3.7% strongly disagree
11.7% no opinion

Software in classroom is adequate

18.9% completely agree
49.9% agree
13.9% disagree
1.9% strongly disagrees
15.5% no opinion

Campus Systems (website/email, etc.) are adequate

32.1% completely agree
53.6% agree
7.5% disagree
1.6% strongly disagrees
5.3% no opinion

Staff is courteous and helpful

28.1% completely agree
53.7% agree
2.8% disagree
0.3% strongly disagrees
15.1% no opinion