

2010 – 2011 Program Review

INFORMATION TECHNOLOGY SERVICES TECHNICAL SERVICES

May 22, 2011

Program Description – Technical Services is a service unit in Information Technology Services. The unit:

1. Acquires and distributes new computing equipment including PCs and Printers.
2. Creates and deploys OS and application program images onto staff workstations
3. Deploys virtual desktop workstations and virtual file servers
4. Performs warranty repair service on all PC workstations
5. Repairs printers and scanners
6. Processes old equipment declared to be surplus.

Program Goals – Technical Services helps El Camino College utilize technology to provide students with the greatest opportunity for achieving their educational goals; faculty with the resources and support necessary for continued excellence in instruction; administrators and staff with the most efficient and effective work environment for overseeing daily institutional operations; and the community with effective, efficient, and timely responses to their needs for information, training, and instruction.

This activity supports:

Institutional Strategic Initiative B:

Strengthen quality educational and support services to promote student success.

Institutional Strategic Initiative F:

Support facility and technological improvements to meet the needs of students, employees and the community.

The unit goals for this program review are:

1. Verify each help desk ticket with a personal contact prior to the visit.
2. Reduce the average number of days required to close service ticket to 5 business days or less.
3. Reduce the time required to deploy new staff workstations from time of receipt in the warehouse to 60 days.

Program Environment

The operational hours of this unit are 40 hours a week; 7:45am to 4:30pm Monday through Friday. The unit exercises the following:

1. Operational responsibility for 1,161 of 1,800 PCs and printers located in the academic computer labs in Humanities, Fine Arts, Industry and Trade Tech, and Student Services (two staff).

2. Maintenance and repair responsibility for all 1,800 PCs and printers installed in the academic computer labs and library.
3. Maintenance and repair responsibility for 1,000 staff and faculty workstations and peripherals (five 12-month & one 10-month staff).

The unit manager supervises 8 full time staff; 2 Computer Lab Specialists responsible for the academic classrooms and computer labs in Humanities, Industry and Trade Tech, and Fine Arts and 5 Computer Systems Support Technicians who support the 4,000 CPs and printers connected to the college's student and staff networks.

Data Resources

ITS Program Review depends on five sources of data to help assess program effectiveness:

1. **Help Desk statistics** – This program review does not draw upon any data more recent than 2010-11. Since 1998-99, ITS has relied on its own in-house developed help desk software to measure the effectiveness of services being provided. The emphasis was on recording the service request, handing it over to a technician to resolve and documenting the outcome. The software has no real analytics for anything other than counting job tickets and recording the time to close. In 2010, ITS decided to write a SQL version of the help desk software and link it to the SharePoint portal. In early 2012 it became obvious that new help desk software, then in beta test, would not meet design expectations. ITS is looking at commercial service management software capable of the following:
 1. Utilize the power of SQL Reports to obtain more detailed information about the services users are requesting and how the unit is responding.
 2. Provide information about who is asking for services; track the data by division, unit, individual requester, and request type.
 3. Integrate the requesters into the service management process with verbal notification that the request had been received, the date and time of the visit, and a follow-up satisfaction inquiry.
 4. Categorize the various types of service requests to reveal patterns in the issues and opportunities for user training.
 5. Compile service information into an “expert system” that first responders can use to resolve issues on the spot.
 6. Integrate with Microsoft Systems Management Server to obtain accurate hardware and software inventory information.
2. **Colleague fixed assets inventory** (no value: surplus equipment remains in the database; 10% 1999 or older; 27% 2004 or older; 15-20% entry rate errors for what remains; no data entry standards and mistaken pull down data categories).
3. **Unofficial inventory of student computer labs (ITS)** – This is a hand inventory taken when hardware is deployed and conducted on an as needed basis thereafter. Can be used to track time to deploy new inventory as well as to determine the refresh cycle. Gathering this data will be automated in the proposed “service management” tool.

4. **Student logon data** – ITS is tracking the number of students logging onto the portal and the PCs in the academic computer labs. This data is an indirect indicator of service reliability, accessibility, and ITS’s ability to keep student services up and running.

5. **Enrollment Data** – Available under “Stats & Reports” on the portal. The “Room Book” and the 2 “Enrollment” reports measure the effectiveness of the computer labs in meeting the college’s academic goals.

Program Effectiveness

Help Desk Activity - One indicator of effectiveness is measured by help desk activity; the number of help desk tickets assigned and closed during the period, the number of hours required to close all the tickets, and the average time required to perform the work. The table below shows the data for each of these measures for three academic years beginning in 2008-2009.

	2008-09	2009-10	2010-11
Tickets Assigned	2786	2746	1634
Tickets Closed	2665	2711	1575
Average Time to Close	5.5	6.45	8.85

This data shows a decline in the number of issues making it to help ticket status and an increase in the time required to resolve each issue. Until a more sophisticated service program comes online, speculation about what is happening is risky.

Student Logon Data – Library

Beginning Fall 2011, ITS began tracking student logons in the library. This chart shows the data for all the labs in the library for that semester.

Library LMTC - Sept. 1 - Dec. 16, 2011						
Month	LMTC 31 (Open Access)	LMTC 36 (Reading Lab)	LMTC 42 (Open Access)	LMTC 44 (Open Access)	LMTC 46 (Open Access)	Total
Sept.	9,999	257	2,066	2,354	1,166	15,842
Oct.	9,979	203	2,220	2,138	1,252	15,792
Nov.	9,326	227	2,550	2,327	1,423	15,853
Dec.	10,228	89	1,348	1,179	767	13,611
Total	39,532	776	8,184	7,998	4,608	61,098

Several things are significant in this data:

1. Students used the facility throughout the fall semester
2. Usage was constant; there were no peaks and valleys.
3. There were only 2 weeks between the beginning of December and the end of the semester and yet nearly 1,000 more students logged into the LMTC 31 than during the previous three full monthly totals.

Student Logon Data – MyECC Portal

ITS closely monitors the fall registration period from first day to register in mid-May to first census in early September. This 118 day period experiences the largest logon surge of the year. MyECC student SharePoint portal, which launched in July, 2007, attracted staggering numbers of students during this period. Upgrading the student information system server and related systems doubled student logons in 2010 and increased them by nearly a million in 2011. Technical services plays a major role in preparing and monitoring the infrastructure to ensure that students have access to the portal. It's success is in part their success.

Two charts below, “Student MyECC Logons Fall Enrollments Daily Count” and “Student MyECC Logons Fall Enrollments Total Count by Year” shows the enrollment comparisons over six years from 2006 through 2011.

Changing Conditions

The unit organization and job descriptions were drafted for a service model that assumed a standalone PC desktop and dedicated printer. Later, these devices were network enabled for internet and email services. Between this program review and the next program review, the service concept will change dramatically. Physical PCs and file services will give way to virtual “zero” desktop clients connected to many virtual servers residing in a much smaller number of physical servers.

Technical Services staff will spend far less time “repairing” PCs and ensuring their connection to local printers than they do now. The emphasis will shift to maintaining the PC's presence in the network, resolving active directory and domain issues, deploying virtual machine ware servers and desktops. The unit will be need new or revised job descriptions and substantial training for them to migrate from the desktop environment to the back end network environment.

Conclusions & Recommendations

1. Deploy a new service management program (help desk) and continue to refine the new equipment deployment process and the others tasks performed by this unit..
2. Prepare for a migration away from physical desktop computer and file servers.
3. Evaluate the staffing and organization of Informational Technology to ensure the unit is adequately staffed and trained for its mission as the district's leader in planning and integrating technology into the school's academic and administrative business practices.

**Student MyECC Logons
Fall Enrollment First Day to First Census
Total Count by Year**



