

DRAFT- DRAFT - DRAFT

Educational Technology Services (ETS)

TECHNICAL SERVICES

Service Level Agreement

2005-2006

Introduction

Educational Technology Services (ETS) provides Information Technology (IT) support for Foothill-De Anza Community College District (FHDA). Comprehensive support can only be achieved with clear expectations and cooperation. Therefore, this service level agreement (SLA) document not only describes the responsibilities of ETS, but also describes and delineates the responsibilities of FHDA staff members who are not part of ETS.

Two Technical Services teams – one at De Anza and one at Foothill – provide support for two critical FHDA areas: desktop support and audio-visual services. Support priority is given to those who make direct instructional use of computer technology.

This SLA describes four levels of service provided by the Technical Services teams:

- **Level 1:** Fully supported
- **Level 2:** Shared support
- **Level 3:** Unsupported
- **Level 4:** Undefined – areas that cross boundaries or deal with undefined relationships

ETS prioritizes work based on the following:

1. Instructional Support
2. Multiple users affected/Outage and no workaround
3. Single user affected/Outage and no workaround
4. New installation

AV/Multimedia Evening Support:

To obtain evening support, contact your college Evening Coordinator.

Non-ETS Staff Tasks and Responsibilities

Division Representative

ETS would like each division to identify a representative to perform the following:

- Work with Technical Services to prioritize requests from their respective departments
- Participate in resolving prioritization conflicts

Instructional Associate, Computer Lab Instructional Coordinator or Computer Lab Instructor Supervisor

- Provide first-level hardware and software troubleshooting support for Instructional Labs²
- Assist with deployment of computer software “images”
- Provide “how-to” assistance for staff, faculty and students
- Perform surplus management of their lab computers, working with ETS staff

Full-time and Part-time Faculty

- Lock classroom doors when finished using a classroom to prevent thefts of or damage to equipment
- Submit software request by the specified deadline for installation of software for their class. Requests made past the deadline will be honored on a case-by-case basis. Requests made after the Quarter session begins will **not** be honored
- Test software image by stated deadline. After the deadline, there is no guarantee that modifications to the installation will be made
- Obtain usage training on multi-media classroom equipment prior to the start of the Quarter session. Requests after the Quarter session begins will be scheduled with the ETS Instructional Technology Solutions Systems Engineer as time allows
- Return used acetates to Technical Services
- Provide 48-hour notice when reserving AV equipment. There will be no guaranteed availability of equipment without this 48-hour notice. Provide complete and accurate information; otherwise there will be no guarantee of equipment availability

² *Identify the specific hardware failure/symptom/verify the problem and report to the ETS Call Center.*

Technical Services Support Tasks and Levels

LEVEL 1 (L1): FULLY SUPPORTED

This level of support is available only for jobs and support tasks of critical importance to the District. These jobs are ongoing and require specialized knowledge of District equipment, resources, requirements and goals. Staff will maintain essential technical certification training to support and maintain the equipment. Technical Services staff has administrative rights to computer equipment at this level. *Note:* Repairs take priority over other requests. Emergency requests are submitted through the Call Center, the same as all other requests. Response to emergencies is handled as quickly as staff is available, usually within one hour.

Computer Hardware

We provide complete lifecycle support for District-standard hardware for computers under three years old (under warranty). For computers and printers with an expired warranty, repairs will be evaluated on a case-by-case basis, based on cost and equipment age. *Note:* Repair costs will be the responsibility of the owner (division/department) of the equipment. Hardware repairs for classrooms and labs take priority over other requests.

- **Desktop PCs:** Troubleshoot, repair, replace, upgrade, maintain and ensure availability for faculty, staff and student-used PCs
- **Desktop Macintosh computers:** Troubleshoot, repair, replace, upgrade, maintain and ensure availability for faculty, staff and student-used Macs
- **Laptop computers:** Troubleshoot, repair, replace, upgrade, maintain and ensure availability for faculty, staff and student-used laptops
- **HP LaserJet printers:** Troubleshoot, repair, replace, upgrade, maintain and ensure availability for faculty, staff and student-used laser printers

Computer Software

License Management

ETS provides software license management for District-wide use software or instructional lab licenses purchased and maintained in large quantities. *Examples:* Eudora, Meeting Maker, Macintosh and Windows operating systems, Microsoft Office, antivirus software, Macromedia and Adobe software applications.

Operating Systems Supported

- Macintosh OS 8.x
- Macintosh OS 9.x
- Macintosh OS X.x
- Windows NT 4.0
- Windows 2000
- Windows XP

OS Support

Entails research, installation, testing, patching, upgrading, repairing, compatibility and feasibility testing of OS on an appropriate hardware platform.

Applications

- **Adobe Acrobat Reader:** PC and Mac
- **Eudora:** PC and Mac
- **Internet Explorer:** PC and Mac
- **Meeting Maker:** PC and Mac
- **Microsoft Office:** PC – Office 97, Office 2000, 2003, 2004 (Word, Excel, Access, PowerPoint)
- **Mac:** Office 98, Office 2001, Office X, Office 2004 (Word, Excel, Access, PowerPoint)
- **Netscape Communicator:** PC and Mac
- **Norton Antivirus (Anti-virus; Anti-spyware):** PC and Mac
- **Safari:** Mac

- **FireFox:** PC and Mac

Application Support

Entails research, installation, testing, patching, upgrading, repairing, compatibly and feasibility testing of an application on an appropriate hardware platform. Priority will be given to repairs, classrooms and labs.

Other Hardware and Software Tasks

License Management

Technical Services monitors license compliance for non-site-licensed software (e.g. – Dreamweaver, Visio, MS Project and Photoshop). Evidence of license must be shown prior to installation.

ADA Compliance

Upon request, Technical Services installs hardware and software in accordance with ADA legal requirements.

Inventory Control/Management

- **Receiving:** Un-box, inspect and dispose of packing materials
- **Etching:** Engrave property numbers on new equipment
- **Recording:** Serial numbers and service tags
- **Tracking:** Maintain records regarding equipment placement and movement
- **Creating and maintaining:** Create and maintain field records (end-user, location, etc.)

Maintaining Connectivity

Connected hardware: Hardware external to central CPU case.

- **Keyboard:** USB and serial
- **Mouse:** USB and serial
- **Monitors:** USB and serial
- **Printers:** Only HP

Network Hardware: Hardware accessed via TCP/IP

- **Printing:** District-standard networked printer is HP
- **Network resources:** Local mapped drives – TCP/IP configured properly, able to elicit NBT (authentication) response
- **Email client:** Eudora properly installed and configured to reach server
- **Meeting Maker:** Properly installed and configured to reach server

Imaging

Total “re-imaging” of lab computers take place during the summer and winter breaks.

Due to the increased number of labs and the limited number of days, minimal changes are made during spring break.

Platform Imaging: PC and Mac Platforms

- **Create image:** Custom build and install software on an iconic machine
- **Install image:** Install on a test machine
- **Test image:** Conduct final in-place install – the last test of the image that has been tested throughout the process
- **Deploy image:** Roll out image to client machines – test install, evaluate post-install (main deployment tool is Ghost)
- **Reconfigure image after initial deployment:** This step may or may not be necessary

Multimedia Equipment and Audio Visual (AV) Services

The AV team meets the needs of staff, instructors and event managers by providing equipment that enhances the experiences of our staff, students and guests. Reservations for AV equipment will be honored with a 48-hour advance notice only. You must provide complete and accurate information otherwise there is no guarantee of equipment availability. Due to the increased number of locations, delivery of equipment is no longer available. However, some equipment must be delivered, set up and taken down by ETS, especially speakers for special events such as graduation and 'night of magic'.

Services

- **Checkout services:** PC and Mac laptops, portable LCD projectors, audio equipment, remote controls, cables, overhead projectors, slide projectors, VCRs, etc.
- **Equipment maintenance:** Clean up and basic repairs on loaner AV equipment
- **Inventory:** Track purchases and equipment deployment
- **Stocking:** Re-supply consumable (e.g., lamps) items and maintain equipment availability
- **Purchasing:** Pricing, vendor research and cost analysis
- **Receiving for all Technical Services:** Manage incoming inventory
- **Equipment security:** Includes cabling, lockdown boxes and consoles
- **Scheduling service:** Involves equipment flow scheduling
- **Consultation:** Provide expertise to departments and administration regarding AV hardware and software applicability and purchases
- **Emergency response:** Respond to urgent calls for support of classroom and presentation equipment issues
- **Equipment usage training:** Instruct faculty and staff on proper use of AV equipment
- **Routine and scheduled maintenance:** Classroom multimedia equipment and AV equipment cleaning and preventive maintenance work
- **Multimedia equipment and AV repair L1:** Perform equipment diagnostic tests, minor repairs, equipment replacement and bulb replacement

Equipment Provided

- Overhead projectors
- LCD projectors
- Screens
- Microphones
- Stands
- Cabling
- Public address systems
- Slide projectors
- TVs
- DVD players
- VCRs
- Loaner PC and Mac laptops

Technical Services Infrastructure

The Technical Services team must perform a substantial number of critical, ongoing and progressive tasks to ensure our ability to respond to our users' demands. As technologies and problems change, our abilities must develop and improve to address a continually changing mission.

Technical Research

Staff spends substantial time researching technical solutions to problems with viruses, spyware, security holes, and desktop connectivity problems.

Testing Environment

Technical Services technicians create and maintain test environments for Macintosh OS 9, 10.x, and Windows 2000 and XP platforms for both training and testing purposes.

Technical Certifications

Technical Services staff members are certified by examination on Macintosh hardware and software so that we can provide service under warranty. This requires annual re-certification and ongoing study. Many are also Microsoft M.C.P.'s or M.C.S.E.'s. Dell hardware certification will be in place beginning in 2005-2006.

Purchasing/Price/Vendor Research

Hardware and Software

Technical Services staff members spend substantial time researching vendors – both locally and on the Internet. Attempts to ensure quality of replacement parts, reliable vendors, and lowest prices for hardware and software are goals that require an ongoing effort.

Security

Technical Services provides support for both data and physical security. *Note:* Response to security compromises may be delayed due to the increase number of computers and incidents. This means equipment will be out of service longer.

Target Areas

- **Viruses and spyware:** Research and testing on anti-virus and anti-spyware software and repairs
- **Hacking:** Clean up hacked machines, reducing vulnerability to future attacks
- **Illegal software:** Check machines for improper file sharing or “cracked” software
- **Illegal access:** Monitor the desktop for signs of inappropriate remote access or illegal local accounts
- **Lock downs:** Reduce the likelihood of hardware loss via physical hardware (includes AV/multimedia equipment), or installing or assisting with installation of security hardware
- **Lock downs – OS (ports):** Shut down access via restricting logical ports on the OS

- **Lock downs – applications:** Restrict access to applications and data via passwords or user accounts
- **Consulting:** Consult with police and the campuses regarding desktop security; with Security regarding losses
- **Researching, testing and purchase:** Purchase hardware security devices, for example

Other Services

- Provide essential support for the Call Center (when staff is out ill, on vacation or taking personal time)
- First-level server support may be immediately escalated to the ETS Systems team
- IS application support may be immediately escalated to the ETS Information Systems team
- “How-to” support: The Call Center will refer users (lab assistants or instructional associates only) to online help or formal vendor training

LEVEL 2: SHARED SUPPORT

This area is defined by tasks or processes with which Technical Services has involvement, but not full ownership or responsibility. It also describes hardware and systems for which we provide some support, but not full lifecycle support. The shared support may be with another FHDA department or a vendor. Administrative rights to computer equipment may be shared. If the user or vendor installs software that renders the equipment inoperable, Technical Services will re-image the equipment to the District standard image.

Computer Hardware

Technical Services provides a level of support that involves warranty coverage, limited repairs, assistance with replacement, or consultation on the following products:

- **Palm (or Handspring) PDAs:** Assist with synching to Meeting Maker and installing software on desktop; limited involvement with repair process
- **Fax machines:** Assist with purchase recommendations, set up and configuration; minimal involvement in repair process
- **Flatbed scanners:** Recommend, install and configure for connectivity to desktop – do not support all functionality within scanner software packages; limited repair support
- **Zip drives:** Install and configure, and install supporting software; limited repair; no responsibility for improper or ineffective use
- **External back-up drives (including USB drives):** Install and configure; install supporting software; limited repair; no responsibility for improper or ineffective use
- **Vendor-supported multi-function copiers such as Xerox and Sharp:** Provide assistance with connecting to the District computer network

Computer Software

Operating Systems Support

- **Windows 95:** Limited; will recommend upgrade; very limited repair

- **Windows 98:** Limited; will recommend upgrade; very limited repair
- **Macintosh Pre-OS 8.6:** Limited; will recommend upgrade; very limited repair
- **Macintosh OS X <10.x:** Limited support for OS 10.x that is not current; will recommend upgrade; very limited repair

Applications

This level of application support refers to District-purchased, non-standard software that is used by the departments, but has more of a “general” rather than specific nature.

Support entails installation and ensuring the application launches. It does not include troubleshooting or configuration assistance.

- Adobe products (PageMaker, Photoshop, etc.)
- FileMaker Pro
- Java applications (plug-ins)
- Keyfile
- Macro-Media products (Dreamweaver, Fireworks, etc.)
- Maui (shared support with ETS IS team)
- MS Project
- MS Visio
- TeraTerm Pro

Other Hardware or Software Tasks

Surplus Process

Work with Central Services Purchasing and Plant Services Departments and owner of equipment to dispose of no-longer-needed property. This is a multi-step process:

- **Assessment:** Evaluate usefulness of returned property - can it be redeployed elsewhere in the District.
- **Collection**
- **Recycling/recovery:** Salvage useful or reusable parts
- **Classification:** Sort salvaged parts
- **Storage:** Store salvaged parts
- **Inventory management**

Network Diagnostics

Test desktop to ensure that any network issues are not local to the desktop, but are true network problems. Test cable, check TCP/IP configuration, perform basic connectivity tests, and then escalate to Network group.

Printing Diagnostics

Test desktop to ensure that any network printing issues are not local to the desktop, but are true network problems. Test cable, check TCP/IP configuration (or AppleTalk for certain printers) and do basic connectivity tests, then escalate to Network group.

Internet Connectivity and Functionality

Test desktop to ensure that any Internet issues are not local to the desktop, but are true Internet problems. Test cable, check TCP/IP configuration and do basic connectivity tests, then refer as appropriate. We provide very limited support for configuration to support for multimedia content on the Internet.

Data Back Up

Technical Services backs up user data when repairing or re-cloning a machine. We will also consult and recommend backup devices for end users.

AV Services

Console Support

Technical Services has shared responsibility with ETS Instructional Technology Solutions Systems engineers, vendors and other on-campus services. We provide consultation during purchase, installation and securing, troubleshooting and repair support. ***Funding for repairs and new purchases are provided by other sources such as the college, donation or a bond measure.***

Security Support

Technical Services provides assistance, purchasing research and recommendations, and installation assistance to campuses and departments to secure campus Multimedia and AV property, but only on a shared-responsibility basis with the Instructional Technology Solutions Systems engineers, vendors, campus Security, Risk Management, Plant Services and each college campus.

Multimedia Equipment and AV Repair: Warranty Support

Technical Services provides limited repair support for District-owned equipment. We escalate repair requests to an ETS Instructional Technology Solutions Systems engineer.

LEVEL 3 SUPPORT: UNSUPPORTED

This category refers to equipment, software and services not supported in any way. Items that usually fall into this category are user-purchased, vendor-supported or software for a specific departmental need. We strongly recommend the purchase of a support agreement with the vendor or manufacturer. If the user or vendor installs software that renders the equipment inoperable, Technical Services will re-image the equipment to the District standard image.

Computer Hardware (L3)

- **Non-District standard computers:** Privately purchased, non-District property; do not provide any support services
- **Printers:** Individually purchased (pro-card), local printers – if time allows, we will perform set up and configure; no troubleshooting, repair or support services
- **Specialized computer peripherals:** Digital cameras, bar-code readers, specialized scanners, label printers, etc.; for District-owned, if time allows we will perform set up and configure; no troubleshooting, repair or support services – these issues should be addressed through the product vendor.

Computer Software

Operating Systems

Not included in Level 1 and 2; do not provide any support services.

- **Linux:** Any flavor
- **Macintosh:** Pre – OS 8
- **Macintosh Server:** Any version
- **Microsoft:** Pre-Windows NT 4.0
- **Unix:** Any flavor
- **Windows XP Home**
- **Windows Server:** Any version
- **Windows .Net or 2003**

Applications

Not included in Level 1 and 2; do not provide any support services.

- **Non-District standard software:** Do not support software that falls into this broad category
- **Specialized department software:** Do not support, for example, testing software, assessment software and shop software
- **STARRSU:** Will install java applet to support functionality, but it is a vendor-supported application
- **SARS:** Will install client, but it is a vendor-supported application
- **Beta Software:** Do not support
- **Downloaded software:** Do not support unless it's on the District support list

Other Hardware and Software Tasks

Domain Issues

Technical Services is not able to address domain issues where we do not have administrative rights. Example is a division-controlled computer lab.

Multimedia Equipment and AV Services

Non-District Equipment

Do not support; no service provided

LEVEL 4 SUPPORT: UNDEFINED

Occasionally we receive requests for support outside the defined levels of support described above. If time allows, we will schedule an appointment to respond to the request. We strongly urge departments to purchase support agreements with vendors or manufacturers, especially for mission-critical services. The “Charge Back Plan” will be applied to “Revenue” departments. *Note:* “HOW TO SUPPORT” is no longer provided other than what is available on the District website under Technology, Call Center. We strongly urge users to seek formal training and support from a vendor.

Computer Hardware

The hardware that falls into this category is usually defined by location or affiliation, rather than anything intrinsic to the hardware, with a notable few exceptions.

Locations

- Bookstore: non-District standard OS and hardware
- Flint Center
- Food Services
- CACT
- OTI: Off campus
- HOPE
- Hi-Tech Center: Has its own technical staff

Specialized Hardware (Examples)

- Label printers
- Scantron scanners

Computer Software

We will escalate these applications to another ETS team, District department or recommended the requester contact the vendor or manufacturer:

- Maui (escalated to the ETS IS team)
- Brio
- Blackboard

Other Hardware and Software Tasks

- Migrating data from unsupported applications – especially database-oriented applications; reinstallation and testing (i.e. Microsoft Access, Filemaker)
- Courtesy support: Broad category of activities that occur intermittently

Computer Hardware and Software Training

Technical Services does not provide computer hardware and software training. We can provide quick answers to basic questions, but we cannot provide software-applications training or answer questions outside the repair and maintenance of computers and computer peripherals.

SERVICE NOT PROVIDED

- There is no support for personally owned, non-district purchased equipment and software.
- No support is provided for freeware and shareware software.
- Cost for out of warranty repairs will be billed back to the respective department.