

COMPUTER LAB INSTALLATION CHECKLIST

This checklist presumes that you've done a Needs Assessment and know that a computer lab or technology program is needed. You should also understand what the purpose of lab, who your audience is and what type of programming you'll offer. You should only invest in the hardware and software that is applicable to your audience and be confident that it will be utilized.

WHEN BUILDING A NEW COMPUTER ROOM THINK ABOUT:

- **Counter top space:** If you're building out counters make sure there's enough room for your monitors and key boards. If you are using folding tables don't use ones made of plastic. They will bow after time.
- **Layout:** Map the layout of the lab. Don't place two computers in the corner, it will be difficult for people and chairs to fit. Consider setting it up so the monitors face the inside of the room, as opposed to classroom style to make it easier for the instructor or volunteers to move around and answer questions. Plus, classroom style may be intimidating for those who have bad memories of school.
- **Lighting:** If you intend to use a projector you may want the ability to dim the lights. If you have big windows, be sure to install blinds.
- **Network:** Do you want to wire the lab or create a wireless network?
- **Bandwidth:** The more computers (and people) on your network the slower your internet will be, especially if people are watching videos or downloading files.
- **Power:** Make sure that you have enough outlets and watts to power the computers, monitors and other electrical devices.
- **Temperature/ventilation:** Computers may malfunction if they overheat. Make sure you have good ventilation and preferably air conditioning if you're in a warm climate.
- **Locks:** Consider investing in locks and cables to lock the equipment down. You may want to install brackets that can connect the cable lock from the computer/monitor to the wall.
- **Installation:** Setting up and configuring the computers is a perfect opportunity to use a group of technical volunteers.

THINGS TO THINK ABOUT WHEN BUYING NEW EQUIPMENT

What will the computers be used for: Senior basic computing? Youth multi-media? This will greatly influence the type of computers you will buy. Below are specs for basic, mid-range and high-end Windows configuration. The prices were collected in May 2009.

If you are considering taking a donation, make sure that you have the necessary admin password to login and reconfigure. It will be easier for you to maintain the lab if the computers are all the same make/model. You shouldn't take equipment that is in disrepair, unless you can resell or repair. Consider only taking computers that are Pentium 3 or higher.

Specs: Basic

Intel® Celeron® 440 (2.00GHz, 800FSB)
1 GB RAM
1 yr basic warranty
If you qualify for TechSoup Stock,
Don't purchase OS with computer (or get lowest cost OS)
Windows Vista Business (\$10)
Office 2007 Pro Plus (\$20)
If you do not qualify for TechSoup Stock
Vista Business +\$99
Office 2007 Small Business +\$279
DVD/CD-RW
160 GB hard drive
Standard audio/video
Standard mouse/keyboard
19" inch Flat Panel, VGA
\$484 + tax/shipping (\$837 w/ retail Vista Business & Office)

Specs: Mid-range

Intel® Pentium® Dual Core Processor E5200 (2.50GHz, 2M, 800MHz FSB)
2 GB RAM
3 yr warranty
If you qualify for TechSoup Stock,
Don't purchase OS with computer (or get lowest cost OS)
Windows Vista Business \$10
Office 2007 Pro Plus \$20
If you do not qualify for TechSoup Stock
Vista Business +\$99
Office 2007 Small Business +\$279
DVD/CD-RW
250 GB hard drive

Standard audio/video
Standard mouse/keyboard
256MB ATI RADEON HD 3450 (Dual DVI/ VGA /1 TV-out), low profile
19" inch Flat Panel, VGA/DVI
\$817 + tax/shipping (\$1165 w/ retail Vista Business & Office)

Specs: High-end

Intel® Core™2 Quad Q6600 (2.40GHz/1066MHz/2X4MB L2/375W)
4GB RAM
3 yr warranty
If you qualify for TechSoup Stock,
Don't purchase OS with computer (or get lowest cost OS)
Windows Vista Business \$10
Office 2007 Pro Plus \$20
If you do not qualify for TechSoup Stock
Vista Business +\$99
Office 2007 Small Business +\$279
Dual 256MB PCIe x16 nVidia Quadro FX570, Dual Monitor DVI Capable
DVD+/-RW
500GB hard drive
Standard audio/video
Standard mouse/keyboard
22 inch Widescreen, VGA/DVI
\$2,000 + tax/shipping (\$2,358 w/ retail Vista Business & Office)

Additional Software

Adobe Design Premium cs4.0
Retail: \$1,799
Non-profit: \$599
TechSoup: \$160

THINGS TO THINK ABOUT SECURITY

- Locks: may lower insurance if you secure the CPU
- Zip-ties can be used to secure mouse/keyboard/headphone cords together. This will also help keep them tidy.
- Drill a hole in the hardware casing to secure with a cable lock.
- Tie a knot in a cable and place lock through it.
- Separate the internet connection and network between your staff computers and the lab computers.

OTHER EQUIPMENT YOU SHOULD THINK ABOUT

- Projector with cart and lock
- Card readers for different memory cards
- Scanner
- Printers
- Headphones
- Speakers
- CD burner
- Digital cameras
- Extra USB drives
- Accessibility: alternative mouse such as track ball, larger monitors, keyboard with larger printed letters
- Video
 - External hard drive
 - Cameras
 - Firewire

FREE SOFTWARE YOU SHOULD THINK ABOUT INSTALLING

(Presuming it is a Windows machine)

MS SteadyState (disk protection)
Firefox/Internet Explorer
Skype
Google Earth
Google Sketch-up
Acrobat Reader
Gimp (photo editing)
Scribus (desktop publishing)
Open Office
Tux Paint
Tux Type
AVG Antivirus

Players & Plug-ins

Windows Media Player
Real Player
QuickTime
Flash
Java
Shockwave
MS Silverlight

THINGS TO THINK ABOUT TO MAKE ONGOING TECH SUPPORT EASIER

- Get all same hardware
- Budget for maintenance
- Try to replace the computers every 3-5 years
- Collect spare parts like keyboards and mice

RESOURCES

TechSoup: www.techsoup.org & www.techsoupforlibraries.org
Communities Connect Network: communitiesconnect.org
NTEN: www.nten.org
Idealware: idealware.org
NPower: www.npower.org