

Section 7: Sustainability

Technology Planning: Staff Development

Overview

Technology professional development is the process of providing on-going opportunities for staff to improve their technology skills and acquire new knowledge. Professional development provides staff the time to reflect on their technology use, share what they've learned with their peers, and experiment with various technology tools so they can easily incorporate them into their daily working life. Technology training, on the other hand, is providing formal instruction about using a specific technology tool or software application. Technology training is but one approach for implementing professional development objectives to support your strategic technology plan. If your technology plan will have long-term sustainability, you must include many strategies for technology professional development.

Good staff development in technology begins with an assessment of technology learning styles, technology skill levels, and preferred format of instructional delivery. For example, there are beginners who are willing and there are beginners who are impatient or fearful. There are staff members who may be very fluent with spread sheet programs, but do not even know where to begin with finding information on the Internet. You may have a staff member who can use the basic functions of your database software program with ease, but needs more advanced training so they can design and implement a relational database.

People learn how to use technology in different ways. Some people prefer the "shoulder to shoulder method," of having someone show them. Other people can learn by reading the manual, while others may prefer a skills-based workshop or class. Before you can implement a professional development program, it is wise to lead staff through a process of self-assessing their digital literacy skills and developing their own specific professional development goals. Simply sending every out to CompUSA for a half-day software training classes probably won't work for everybody.

For any staff development program to work, your organization must allocate time for staff to participate in training sessions or other activities. Training activities should be incorporated as part of the working day. This might mean scheduling training activities during slower times of the year or adjusting workloads and deadlines so that training can be accommodated. Ideally, training activities shouldn't be scheduled on weekends or after work hours. Also, providing some sort of incentive can be useful such as incorporating technology professional development goals into job performance evaluations.

It is also important to understand the concept of "challenge of transfer" or follow-up, especially in providing training opportunities. For example, if a staff member is sent to a training workshop on how to use a spreadsheet, don't expect them to come back the very next day as a fluent user of spreadsheets. They need time to apply the skills. This is where true technology learning takes place. One of the best approaches, is to have staff who attend training workshops make a presentation to others on staff. Everyone on staff should be a turn key trainer. It is also a good idea to encourage them to seek out technical support from vendors or actually reading the manuals, identify a user support group, or provide some opportunities for ongoing assistance. Training on specific software applications should not be done in a vacuum, but linked to practical work situations and real-life problems.

A successful technology professional development program has the following hallmarks:

- * It incorporates self-assessment of skills
- * It is overtly linked to strategic technology planning goals.
- * It formally identifies baseline standards for technology skills and knowledge that all staff will be required to meet.
- * It involves staff in the design of the content and delivery and is responsive to individual needs.
- * It focuses on helping staff not only acquire or upgrade skills, but share their knowledge with others on staff.
- * It builds in redundancy so that more than one staff person within the organization has the skills to use all technology tools.
- * It takes into account different learning styles and provides different pathways for staff members to acquire skills and knowledge – from formal software applications-based training sessions to independent projects.
- * It provides an ongoing schedule of training activities.
- * It provides time for reflection, experimentation, and consolidation of knowledge.

Delivery Formats

Self-Training: Some people are capable of teaching themselves software programs using tutorials, help function, and instruction books. A good investment for any nonprofit organization is the purchase of a couple of reference books on most often used software programs.

Staff-Training-Staff: Set up ways for staff to share technical knowledge and support one another. This may include one-on-one peer tutoring, mentoring, and staff-led in-house workshops. The self-assessment form is a good way to identify expertise in-house.

Training Consultants: If lacking in-house expertise, consider a training consultant who would develop a customized program for staff.

Outside Workshops and Seminars: These include vendor-sponsored workshops, colleges/universities in your area, and computer user groups. Comp-USA offers fairly inexpensive training classes on a variety of business software programs.

On-Site Shadowing: Staff can shadow staff in other organizations.

Web-based/Computer-Based Training/Videos: A growing area is Web-based delivery of training. An excellent provider for software-based training is Ziff-Davis's ZD University which provides a wide range of technical classes from beginners to advanced at a modest cost. Computer-Based training is essentially multimedia self-tutorials for a various software applications. Vendors such as Click2Learn.com offers hundreds of titles. Video tapes can also be excellent self-training tools.

Resources

TechSoup: (http://www.techsoup.org/pop_printer_article.cfm?articleid=127) Integrating Technology Training Into The Organizational Culture by Mary Duffy

Suggestions to Enrich Any Training Plan

(http://www.mapnp.org/library/trng_dev/gdlns.htm) by Carter McNamara, The Management Assistance Program for Nonprofits

Secrets of Success: Making Technology Professional Development Work

(<http://staffdevelop.org/secrets.html>) by Jamie McKenzie

The Encyclopedia of Educational Technology (<http://coe.sdsu.edu/eet/>) Bob Hoffman General Editor. Includes a section on cognitive approaches/theory.

Adult Technology Learning (<http://staffdevelop.org/adult.html>) by Jamie McKenzie for the K-12 perspective. Also, check out "**Motivating Adult Learners**" (http://adulthood.about.com/education/adulthood/c/ht/00/07/How__Motivate_Adult0962932409.htm?iam=dpile&terms=%2Badult%2B%2Blearners) from about.com. Making the Net work has a collection of **training games** (<http://www.makingthenetwork.org/pgame/index.htm>)

SmarterOrg (<http://www.smarterorg.com/>) is the best jumping off point to explore e-learning with a nonprofit viewpoint. To get the corporate perspective, go over to ASTD/Learning Circuits and explore the **E-Learning Map** (http://www.astd.org/virtual_community/Comm_elrng_rdmapp/e_lrng_comm.html) To get the K-12/University view, visit **Converge Magazine** (<http://www.convergemag.com/>). TechSoup also a great resource list of **e-learning** (<http://www.techsoup.org/resourcelist.cfm?resourcelistid=28>) providers.

How To Help Someone Use A Computer (<http://dlis.gseis.ucla.edu/people/pagre/how-to-help.html>) by Phil Agre is an excellent guide for providing "shoulder-to-shoulder" support.

Staff Skill Self-Assessment

This tool will help identify current skills and training needs. It will also help map out a plan for one-on-one staff-to-staff training that you can engage in prior to obtaining outside help. This assessment tool is a general survey. It covers technology learning styles, basic computer skills, Internet skills, and Office Productivity skills. If you want more specific software skills tests, Technology Profiles offers detailed testing for specific software packages. (http://www.techprofiles.com/test_list.asp)

Please judge your level of achievement for each of the following skill areas. This tool is to help you do a self-analysis, determining what areas you need to additional training and practice -- and which areas you could serve as a resource to other staff members.

Technology Learning Styles

Which of the following **three** methods best match your technology learning style?

- I use the tutorials that accompany the software program, help functions, and manuals. I take notes that I can reference later.
- I like to have a simple project or task to complete that doesn't have deadline pressure and I can "play" with the software to discover how to use it.
- I like to be able to ask other users questions or call a help line
- I like to have another user show me how it works
- I like to take a formal hands-on training workshop with an outside trainer
- I like to take a hands-on workshop lead by someone on staff
- I like use an exercise book in a computer lab with someone there I can ask questions when I need it.
- I like to watch a video
- I like web-based classes that happen over the internet
- Other: (describe)

REFLECTIONS: TECHNOLOGY LEARNING STYLE

Based on your responses to the questions in this section, how would you learn technology best? What would be the ideal professional development format to meet your needs?

Basic Computer Operations

Circle those skills that you feel you have mastered

Mouse Skills

- I know that the mouse is used for interacting with objects on the screen.
- I can point, click, drag, and double-click with the mouse.
- I know the different functions of a single- and double-click and when to use each.
- I know keyboard shortcuts to several mouse actions and I regularly use them.
- I can adjust mouse settings in the control panel.
- I know the functions of the right mouse button and when I can use it (PC users only).

Graphical User Interface Skills

- I know how to pull down a menu and how to click a radio button or check box.
- I can resize windows or drag them from one screen location to another.
- I can open or close a window or folder.
- I can minimize/maximize windows and launch programs using the desktop shortcuts
- I can launch programs using the Start button (Windows) or Apple drop-down (Mac).
- I can scroll both horizontally and vertically, and I can use different scrolling methods.
- I can arrange and re-name icons and identify different types of icons.
- I know how to use keyboard shortcuts to accomplish tasks.
- I can adjust the appearance of the desktop and create shortcuts.
- I can change the views in the windows.
- I can customize palettes such as the Launcher.

File Management/Operating System

- I know how to insert/eject a floppy disk or CD.
- I can format a floppy or zip disk and I know how to write protect a disk.
- I can save a file to a new location from inside the application.
- I can copy a file to a new place using the file manager.
- I can copy a file to a new place from almost anywhere using a shortcut & dragging.
- I know the best place to save a file (i. e. floppy, hard drive, network drive).
- I know the difference between closing/minimizing/hiding a window and quitting a program. I know how to go back to open files when I can't see them on the desktop.
- I know how to quickly 'find' a file.
- I can copy and paste between documents from different applications.
- I can work comfortably in at least one operating system: I can locate and use control panels. I understand the directory tree of multiple disks. I know how to organize the directory tree for efficiency. I know how to monitor the space remaining on a drive.
- I can work comfortably in more than one operating system (List: _____)
- I delete unnecessary files from the computer when appropriate.
- I know how to backup data and have a systematic plan in place to backup files regularly. I also know how to restore files from a backup.
- I understand file extensions and differences between file types.

Setup and Basic Troubleshooting

- I can power-up and shutdown a computer appropriately.
- I know how to check computer, monitor, and wall outlet for power connections.
- I can set up a stand-alone computer such as a Windows or Macintosh computer.
- I can install stand-alone application software.
- I can perform a soft reboot of the operating system with keystrokes.
- I regularly use utilities such as defragmenter, scan disk, or rebuilding the desktop.
- I recognize typical symptoms of software problems and I can often diagnose.
- I know how to tell if the network is available to a computer. I know to check the cable.
- I know how to find out how much RAM and hard drive storage space a computer has.
- I can troubleshoot basic things before contacting the technology specialist.
- I can configure and troubleshoot the network software.
- I regularly update and use a virus checker.
- I know when it is time to call a technology specialist.
- I can connect a projection device such as a TV or LCD projector to a computer.
- I can install new hardware such as modem, network card, or speakers.

Printing Skills

- I can determine if a machine has a printer and cable attached.
- I can load paper.
- I can use software to select a printer.
- I can change toner/ribbon, and can clear paper jams.
- I understand how to change the default printer.
- I can change print parameters (i.e. paper orientation, margins, proportions, etc).
- I can troubleshoot local printer problems.
- I can troubleshoot a network printer job. I understand what a print spool does and how to manage it. I can install a print driver. I can add a new printer to a local computer.
- I can set up and manage a network print queue.

Ethical Use Understanding

- I know that some copyright restrictions apply to some software and web documents.
- I clearly understand the difference between freeware, shareware, and commercial software and the fees involved in the use of each. I know the programs for which my organization holds a site license. I understand how I can use information gathered from the Internet without violating copyright laws.
- I am aware of other ethical issues involving technology use such as privacy and can explain the issues to colleagues.

REFLECTIONS: BASIC COMPUTER OPERATIONS

Based on your responses to the questions in this section, what are your technology professional development goals? How would improving your skills and knowledge in this area help you do your job more efficiently? Do you feel that you could serve as a mentor or coach to other staff members in this area?

Internet Use

Browser Operation

- I can start up the browser, but because I don't regularly use it, I'm not sure where to click or how to get different Web sites.
- I can start up my browser and use the basic commands to surf the Web, but I'm not very efficient.
- I am able to bookmark Web sites that I have visited and would like to revisit.
- I can organize by bookmark into folders and make educated guesses at many URLs.
- I can over-ride default page colors to facilitate printing.
- Can navigate web site quickly without getting lost or accidentally leaving the site. I can use the web browser's 'Find' tool to search contents of a given page.
- I know the name and version of the browser software.
- I can save local copies of Web pages and graphics on my hard drive. I know how to collect portions of text or images from Web pages for inclusion in presentations or other documents.
- I know how to clear my browser cache and customize the settings.
- I know how to use keyboard shortcuts to make navigating more efficient.
- I know when I have to download a plug-in application.
- I understand almost all the error messages from the browser and can continue browsing without problem.

Internet Research

- I know how to do a basic search on at least one search engine, but I don't know how to narrow and refine my search. I often get lost, distracted, or overwhelmed.
- I know how to do Boolean searches and use more than one search engine. I can find almost anything I need that is available on the Internet quickly and efficiently and I can evaluate the quality of the information.
- I have read the help files and knows the entire command set of several different search engines. I can use meta-search engines. I can teach others how to conduct power searches. I know the strengths and weaknesses of various search engines.
- I regularly scan the Internet for new resources related to my job and let others on staff know about them.

Email Use

- I sometimes feel intimidated by using email to communicate.
- I know the basic mechanics of using my email program to send and receive messages from colleagues, constituents, or friends.
- I know how to send documents as attachments.
- I know how to use the address book and send entries as email attachments
- I know how to use folders to organize my email.
- I know how to sort email messages by sender, date, or subject.
- I know how to filter or use rules to direct messages to specific folders
- I feel confident using text to communicate with many different people on a variety of topics. I know how to write for the medium.
- I know how integrate email with other technologies such as voice mail, phone, and fax. I feel lost when I can't check my email at least once or twice a day.

Discussion-Style Listservs

- I am not aware of any good work-related resources.
- I have subscribed to a couple of lists or participated in a couple of conferences, but I don't know how to make using them efficient. I often get overwhelmed with too many messages and end up deleting them.
- I know how to use filters to put listserv messages in sub-folders before they hit my inbox.
- I know how customize my settings to get digest versions of list messages.
- I have found that lists can be an efficient and economical way to collaborate with colleagues.
- I have seen listservs that work and listservs that don't, and I feel that I have some understanding of what distinguishes a list that efficiently fulfills its goal from one that doesn't.

Web Publishing Skills

- I can create documents using a word processor and use the word processor's save as command to create HTML documents.
- I know basic HTML codes and how to use them in a simple HTML editor or textpad program.
- I can view source code from others' pages and modify codes for my use.
- I can convert graphic formats and do some basic graphic editing.
- I know how to optimize graphics for web display.
- I know how to create standard navigation features for a web site. I can design the flowchart of how the information will be linked for the end user.
- I can write HTML from scratch.
- I can create a form to put on a website and set up an action for the submit button.
- I know how to use an FTP program to move files from my desktop to the Web.
- I am proficient with using at least one web design program (such as GoLive, Dreamweaver, or Frontpage)
- I am fluent in HTML code and I have some understanding of other web-programming methods such as Javascript, Perl, CGI, or Java.

REFLECTIONS: INTERNET USE

Based on your responses to the questions in this section, what are your technology professional development goals? How would improving your skills and knowledge in this area help you do your job more efficiently? Do you feel that you could serve as a mentor or coach to other staff members in this area?

Office Productivity Software

Word Processing

- I can apply fonts, change font sizes, use features like bold or underline, and use the spell checker.
- I can customize the indentation of paragraphs, set margins and page properties, and use the formatting ruler.
- I can set and customize tabs and adjust the viewing percentage on the screen.
- I can insert page breaks and create columns.
- I can create headers and footers, and add automatic page numbers.
- I can create text boxes and insert files, objects and tables.
- I can customize how tables and columns appear, including text wrapping, background colors, etc.
- I can export to different file formats and I understand how to save a file so that I can email it to somebody who doesn't have the same program I have.
- I can do a mail merge to create customized letters that include information from a spreadsheet or database
- I can create templates
- I can create and print an envelope
- I can use a word processor to format a flier or eye-catching document in complex ways and make it look really great.
- I know when it's okay to format a document in Word and when I should consider using a page layout program instead.

Presentation Software

- I know how to storyboard a multimedia presentation.
- I know how to create a simple presentation using my own text and images.
- I can format the slides to look the way I want and I can import slides from other presentations
- I know how to add multimedia effects such as animations, videos, and sounds.
- I know how to apply good design using restraint with movement and amount of text, choosing light text on dark backgrounds, etc.
- I can produce speaker's notes, print outs, and screen versions of a presentation.
- I know how to create and use a presentation effectively without relying on each slide to provide all the information I'm talking about.

Spreadsheets

- I understand the use of a spreadsheet and can navigate within one.
- I can create a simple spreadsheet which adds a column of numbers.
- I can use a spreadsheet to make a simple graph or chart.
- I use a spreadsheet and I know how to add labels, formulas and cell references.
- I can change the format of the spreadsheets to anything I need or want.
- I know how to export spreadsheet data into other file formats or insert or insert into word processing documents.
- I know how to program multiple spreadsheets with macros to do advanced financial analysis.

Database Use

- I can locate information in a database that somebody else made.
- I can add or delete data in a database.
- I use databases to collect and analyze data.
- I can create a simple database from scratch defining fields and creating layouts to support queries.
- I can sort and print the information in layouts, which are useful to me.
- I use databases to track information about my program or area.
- I can automatically generate appropriate letters or forms.
- I understand how to use and structure a relational database.
- I know how to import/export data into other file formats.

Graphics Use

- I can open, create and place simple pictures into documents using painting, drawing or image editing programs.
- I can open, create, modify and place graphics into documents.
- I can manipulate and interpret graphics using professional design software (such as Photoshop).
- I can create and draw graphics using software such as Photoshop or Illustrator and I know when to use which type of program.
- I understand when to save a file in a particular format (e.g. tif, jpg, gif, bmp)
- I understand the difference between vector and raster images.

REFLECTIONS: OFFICE PRODUCTIVITY TOOLS

Based on your responses to the questions in this section, what are your technology professional development goals? How would improving your skills and knowledge in this area help you do your job more efficiently? Do you feel that you could serve as a mentor or coach to other staff members in this area?

This tool is adapted from the following Technology Skills Self-Assessment Tools:

* Mankato (MN) Schools Scale for staff technology skills assessment and technology competencies identified by the National Council for Accreditation of Teacher Education and the Association for Educational Communications and Technology.

* Utah Technology Awareness Project: Technology Skills Rubrics

*This tool is based on Mankato (MN) Schools Scale for staff technology skills assessment and technology competencies identified by the National Council for Accreditation of Teacher Education and the Association for Educational Communications and Technology.

IT Staffing, Consultants, and Volunteers

As a small to midsize nonprofit arts organization, you will probably not be able to justify hiring a full-time technology staff person. You will, however, need to think about who is going to be responsible for implementing your technology plan. You will most likely get by with combination of a percentage of staff time, outside consultants, and technology volunteers. Above all, formally acknowledge that effective use of technology requires staff support and do not to leave it undefined.

The key is designate a "TRP." TRP stands for "The Technology Responsible Person" a phrase coined by Npower in its excellent article "The IT Staffing Puzzle"

(http://www.npower.org/consulting/Resources/IT_Staffing_Puzzle.PDF). The TRP is the person who can take responsibility for the organization's technology infrastructure. With a smaller organization, it will probably be a percentage of an existing staff person's job in combination with some outside consultants. It is important to include these responsibilities in the job description as well as provide training for this person to handle common technical support issues. In addition to the TRP, you may also need a technology specialist consultant who can troubleshoot more complex problems.

What does a TRP do? Well, it depends on your specific technology goals. But here are a few examples:

PC Support	<ul style="list-style-type: none">-Assist with selection/purchase of equipment-Install hardware/software-Identifying/fixing PC problems
Network Admin	<ul style="list-style-type: none">-Install/Maintain/Troubleshoot/Updates-User Rights/Security-Internet Connection-Documentation
Web Site	<ul style="list-style-type: none">-Design/development-Maintenance-Marketing/Promotion
Database	<ul style="list-style-type: none">-Design/development-Troubleshoot
Training	<ul style="list-style-type: none">-Help Desk/Questions re: software-Training for groups/one-on-one

IT Staffing Matrix: How many do you need?

Staff #	Complexity of Systems			
	Simple	Moderate	Complex	Sophisticated
1-10	< 1/2	1/2	1/2	1
10-25		1/2	1	1 1/2
25-60		1	1 1/2	2

Key

1/2 = half-time

1 = 1 full-time

Simple= One platform only; standard office productivity

Moderate = Add LAN; Internet e-mail; business apps

Complex = add Internet connection, custom apps, web site

Sophisticated = add Wan; several custom apps

Source: Seitel & Leeds Associates Presentation

All Staff: Baseline Technology Skills & Knowledge

The baseline standards for technology skills and knowledge for most nonprofit organizations would probably include the following content areas:

- Basic Computer Knowledge and Terminology
- Microsoft Windows 95/98 or MacIntosh Operating System
- Basic System Troubleshooting
- Word Processing Skills
- Basic Understanding and Use of Spreadsheets
- Basic Understanding of Databases and Data Entry Skills
- Communications Skills Using E-mail
- Using the Internet and the World Wide Web

Using Consultants

The decision to hire a technical consultant requires an assessment of your in-house expertise, your financial resources, and the time commitments of your staff. If you determine that your organization needs to the services of an outside consultant, you should specifically identify and write down: 1.) What you want the consultant to do? 2.) What specific experience, knowledge, or expertise you feel is necessary to do a good job. Try to be as clear as possible about what you need. This information, plus any essential background information, can form the basis of a "Request for Proposals," that you can send to potential candidates or post on various nonprofit technology networks.

The next step is to take collect names of possible candidates. Brainstorm possible consultants with your Technology Team, board members, or executive directors from other nonprofits. Brainstorm possible places to post the RFP on the Web, including Nonprofit focused listservs and bulletin boards. Ideally, you want to be receive sufficient number of proposals and identify the 3-5 best proposals and interview those candidates. The process of reading and comparing proposals can be very informative for your Technology Team.

Use the interview process to see how well the potential candidates can explain technical concepts in terms simple language. One of the hallmarks of a good technical consultant is superb communication skills. Can you understand how they are answered your questions? If not, you probably don't want to work with them. Look for a consultant with extensive hands-on experience with the specific technology you need. You're not paying someone to learn. Note the difference between a "vendor" (someone who is representing a particular software or hardware product) and a true independent consultant (someone who has expertise or knowledge not dependent on a specific product.) In the end, with all things being equal, the choice may come down to personal chemistry. Can your organization successfully work with this consultant?

The Nonprofit Genie FAQ about interviewing technical consultants includes a good list questions you should explore during the interview. Once you selected a candidate, be sure that you write a detailed contract including deadlines for deliverables. Also, be prepared to invest some time at the beginning to define your working relationship and expectations. Model the behavior you expect from the consultant.

Resources

TechSoup's Support Staff Worksheet: Use these more detailed questions to help you think through technology staff support needs.
(http://www.techsoup.org/pop_printer_worksheet.cfm?worksheetid=50)

Coyote Communications, How To Support Your Computer/Internet Systems
(<http://www.coyotecom.com/database/support.html>)

Npower: The Technology Responsible Person (PDF)
(http://www.npower.org/consulting/Resources/IT_Staffing_Puzzle.PDF) explains what type of technical/staffing support is required to sustain technology in nonprofit organizations.

Idealist (<http://www.idealist.org/>) is great place to post technology job openings and to find other nonprofit technology job descriptions.

Consultants

TechSoup's section on consultants
(<http://www.techsoup.org/articles.cfm?topicid=8&topic=Consultants>) provides some excellent advice on how to identify and work effectively with a consultant. There is resource list of technical assistance providers
(http://www.techsoup.org/pop_printer_resource.cfm?resourcelistid=24) that work with nonprofits organized by state. (And while you are on a quest for tech assistance providers, hop over to **Helping.Org's** "Finding Computer Help Near You"
(<http://www.helping.org/nonprofit/findinghelp.adp>) for additional leads.

The Nonprofit Genie (http://search.genie.org/genie/ans_result.lasso?cat=Consultants) FAQ about working with outside technical consultants.

Management Assistance Program library has a collection of articles and links titled "All About Consultants," (<http://www.mapnp.org/library/misc/cnsltng.htm>) although geared towards all types of consultants to nonprofit organizations, most is applicable to working with technology consultants.

Consultants OnTap: Advice on Selecting a Consultant (<http://www.ontap.org/advice.html>)

OneNorthWest has a fact sheet about **Working With Web Consultants**
(<http://www.onenw.org/toolkit/webconsultant.html>) that provides specific advice on the topic.

SpiderSchool's **case study of a web project**

(http://www.artswire.org/spiderschool/nyfa_webplan/index.html) includes some tips and sample RFP for hiring a web graphic designer.

Volunteers

TechSoup's **volunteer section**

(<http://www.techsoup.org/articles.cfm?topicid=7&topic=Volunteers>) is a comprehensive collection of articles, resource lists, message boards, and links about finding and working with volunteers. The article "**Defining A Volunteer Project**"

(<http://www.techsoup.org/articlepage.cfm?articleid=54&topicid=7>) provides a brief description of common types of technology volunteer projects.

NPower's list of **technology volunteerism**

(<http://www.npower.org/resourcesandlinks/TechVolunteerism/TechnologyVolunteerismMain.htm>) links will lead you to resources for those interested in volunteering to help non-profits with technology, and those wanting to use such volunteers effectively. Be sure to review Jamie Green's presentation "**How to Work With Technology Volunteers**"

(http://www.npower.org/Presentations/How_to_Work_Successfully_with_Tech_Vol_files/frame.htm)

Helping.org 's "**Finding Computer Help Online: Volunteers**"

(<http://www.helping.org/nonprofit/onlinehelp.adp#volunteers>) takes you to several volunteer matching sites and resources about virtual volunteering.

Ergonomics

Ergonomics is the study of work. The word "Ergonomics" comes from two Greek words "ergon," meaning work, and "nomos" meaning "laws." Today, however, the word is used to describe the science of "designing the job to fit the worker, not forcing the worker to fit the job." Ergonomics covers all aspects of a job, from the physical stresses it places on body and to environmental and emotional factors which can effect hearing, vision, and general comfort and health. The goal of ergonomics is to make work more comfortable and to improve both health and productivity. To meet these goals, the capabilities and limitations of workers and their tools, equipment and furniture are considered in conjunction with how they relate to particular job tasks.

Applying ergonomic principles will help you reduce the problems associated with Repetitive Strain Injuries. RSI is a description of muscle problems that includes many different diagnoses such as carpal tunnel syndrome. The muscles in your fingers, hands, wrists, elbows, shoulders, neck and back are subject to injury from poor posture and other habits while operating a computer. Many factors may contribute to RSI problem, including physical fitness, body size, muscle tension, work habits, stress, long hours, lack of breaks, bad ergonomics, and poor posture. RSI problems are very painful and, if left unchecked, can lead to irreparable damage and long-term disability.

As part of your technology planning process, your organization should take a look at ergonomics in your workplace. You should not only think about appropriate furniture (work stations, adjustable chairs, keyboard trays, etc.), but also look at staff work styles. Remember, ergonomic solutions have to be customized for the individual's comfort.

Physical: Achieving a good fit between you and your computer workstation can make you more comfortable. It can also make you more productive. Varying your tasks throughout the day will help to avoid fatigue.

Environmental: Eliminating glare on your monitor screen makes it more comfortable and easier to read information displayed on the screen.

Emotional: Occasional breaks, taken throughout the day in conjunction with stretching exercises, help restore your energy and increase productivity.

3M Self-Help Site (<http://www.3m.com/cws/selfhelp/index.html>)

Cornell University: Ten Tips for Adult Computer Work Stations
(<http://ergo.human.cornell.edu/ergoguide.html>)

RSI Home Page (<http://www.engr.unl.edu/ee/eeshop/rsi.html>)
Test Your Knowledge of Ergonomics: **A Quiz** (<http://www.intouch-2000.com/hes/ergoquiz.htm>)

Policies

The use of technology will change the way your organization does its work and communicates with the outside world. You will need to form policies that respond to these changes. Technology policies exist to protect the organization against the loss of productivity, possible lawsuits, and wasted resources.

Technology policies are formal written guidelines identifying appropriate work-related use of your organization's technology. Technology policies help staff understand what the organization's technology can be used to do and what it cannot be used to do. The technology team, working with staff and decision-makers, will need to craft clear policies. It is also important to understand that technology policies aren't something your organization writes once and forgets about until it has a problem. It is important, at minimum, to at least have the Technology Team review policies annually to keep up with changes in technology.

Technology policies are typically developed for the following areas/activities:

- Internet Acceptable Use (Email/Downloading/Web Browsing)
- Web Site Privacy Statement (Collection of electronic information from individuals)
- Local Area Network (Security/Confidential Documents)
- Software Agreements/Licensing
- Acceptance of Donated Equipment and Disposal of Outdated Equipment
- Telecommuting

Email/Acceptable Use

Compupol (<http://www.compupol.com/>) provides "out of the box" written policies on using computers on a variety of topics. You can get two for free, but the cost is \$9.95 per policy. Think about the time savings!

IT4U from PASA (<http://www.it4u.org/resources/emailpolicy.html>) has links to sample email use policies for nonprofit organizations. The Education Foundation provides sample **Internet Use and Email Use** policies

(<http://www.edfoundation.org/ef2000/emailpolicy.htm>) . If you want additional examples, visit **Armadillo Collection of Acceptable Use Policies** (<http://chico.rice.edu/armadillo/acceptable.html>) although for the most part are K-12/school examples.

Privacy

A good model for a web site privacy statement can be found at on the **Heritage Forests Campaign** (<http://www.ourforests.org/ppolicy.htm>) site.

Copyright & Computer Ethics

From Now On's Internet Use Policy Articles (<http://fno.org/fnoindex.html#Internet>) and the article **Keeping It Legal** (<http://fno.org/jun96/legal.html>) by Jamie McKenzie offer good advice on these issues.

Computer Ethics (<http://library.thinkquest.org/26658/>) is a ThinkQuest site developed by students for students and includes an extensive list of resources on copyright and other ethics issues.

Ethics, Equity, and Social Issues:

(<http://edweb.sdsu.edu/Courses/EDTEC470/Module15/index.htm>) An online module for educators developed by Edweb at San Diego State University.

Funding

One of the reasons why you are probably going to through the hard work of a technology plan is so that you'll be prepared for fundraising requests. Once your plan is complete, you'll be ready to craft a fundraising strategy, research potential sources, and approach them. So, to keep you motivated, here's a preview to the ever-nagging question "Where will we ever find the money!"

Once you have the plan in place, the next step is figuring out how to present technology expenses - as a special project or part of mission-based projects. Many organizations tend to integrate technology requests into their program budgets. For example, one KIT participant approached a funder to fund its outreach program and included the cost of a computer and digital camera for that program in the request. Be creative!

Don't write requests asking for the money to support a computer upgrade. Instead, focus on your organization's mission and link that to your need for computers and other equipment. Be sure to talk about how technology can impact program outcomes - being more efficient, streamlined, reaching more people, etc. Divide your technology needs over several projects and funding sources. Estimate how much computer time a new program will require and budget in that amount the same way you might allocate a staff person's timesheet between several projects and their funding sources.

Don't limit your thinking to foundation or corporate grant proposals. Some arts organizations have successfully raised money by making a special appeal to their individual donors. One arts organization had a "boxes and wires" benefit -- and raised \$5,000 towards their upgrades. Here's another opportunity to be creative!

If you need to do research on potential funders, use the Web and don't forget to dig deeply. Also, don't forget about in-kind contributions of software, particularly the discount software program that Compumentor offers nonprofit organizations.

Places To Research Funders & Strategy

TechSoup (<http://www.techsoup.org/articles.cfm?topicid=10&topic=Funding>) offers an excellent section on funding that covers grants, online fundraising, and fundraising software. There are articles, nonprofit stories, places to post questions, and fairly lengthy **list of technology funders** (<http://www.techsoup.org/resourcelist.cfm?resourcelistid=17>) organized by state. Techsoup has one of the more comprehensive **list of in-kind and discounted software** (<http://www.techsoup.org/resourcelist.cfm?resourcelistid=18>) resource lists around.

Foundation Center's (<http://fdncenter.org/>) mission is to foster public understanding of the foundation field by collecting, organizing, analyzing, and disseminating information on foundations, corporate giving, and related subjects. You can do quite a bit of research on the Web site. The Philthantropy News Digest (<http://fdncenter.org/pnd/current/index.html>) is a weekly email publication that includes news briefs and upcoming deadlines. If you search the PND archives using the words "technology," you'll turn up lots of leads.

Technology Affinity Group (<http://www.tagtech.org/>) is a technology forum for professionals working in philanthropy. While you have to be funder to access the private area, there is a public library articles and presentations from the funder's perspective.

Charity Channel has a large list of **forums** (<http://www.charitychannel.com/forums/forums-a.htm>) on npo and fundraising topics,

including a **technology** and **cybergifts** forum. You can search the archives or join the forum post a question.

Articles

IT Resource Center's article "Enabling Technology Funding" is available on TechSoup (<http://www.techsoup.org/articlepage.cfm?ArticleId=264&topicid=10>).

Nonprofits' questions about tech funding have answers

(<http://www.pj.org/technology/techfunding0910.cfm>) By Shane Thacker on the Philanthropy News Network Journal (<http://www.pj.org/technology/>)