Conducting Technology Training

Just as no one is born knowing how to navigate the Internet, few of us are born knowing how to train others. -Rachel Singer Gordon¹

echnology training is not, by any measure, an easy job. Anyone who has ever tried to explain to a parent how to use the DVD player's remote will understand why. But technology training is not the big bad boogeyman it's thought to be either. Between having a technology expert who's a bad trainer or a good trainer who is technologically challenged, I'll choose the latter any day. Why? The technology can be taught. Being able to train effectively is a much more difficult skill to teach. If you are coming into this as a trainer, but not an innately talented technology guru, don't worry. If you can train on other things, you can train on technology.

Rachel Singer Gordon lists five qualities of successful Internet trainers, and I think they are equally applicable to all technology trainers:

- 1. level-headed
- comfortable with technology
- enthusiastic
- patient
- comfortable with people²

Only one of these five traits has anything to do with technology, and note that it says "comfortable with," not "expert in." What's most important is that you can work well with the students and stay calm and passionate in the process.

Beautiful Beginnings

Start on time. Simple as that. Even if some people aren't there, start on time. If you wait until everyone is there, you penalize those who did show up on time by wasting theirs, and reward those who did not by letting them

know they can get away with it in the future and not miss out on anything.

Tell people the important housekeeping information immediately: introduce yourself, tell them the name of the class being taught (you'd be surprised how many people show up at the wrong class), where the bathrooms are, and when the breaks will be and check if anyone has any questions right off the bat.

At the beginning of every training session, you should explain the purpose of the training, why the students should care about what they are going to learn, what new skills they will walk away with, and why you are taking up their valuable time. Give each and every training session a sense of context. Training without context is like reading someone the last chapter of a novel and then asking them to care about the characters and plot, to understand the background intricacies. Building context does not have to be difficult. It can be as simple as having one slide in your presentation asking, "Why are we here?" Then you, as the instructor, can answer from your perspective, but don't lose the valuable opportunity to also ask your students why they are there-what do they think the purpose of the class is, how it fits into the overall goals and mission of the institution, what piece it is in the larger hole. Ask them why they came to the class, what they hope to get out of it. You will be surprised by how much you learn and how much that simple knowledge can help you shape each individual class just a bit to meet the needs of each group.

After this, do a round-robin with the attendees-ask for name and location, but also assess the learner's familiarity with the subject matter as well as what he or she expects to get out of the class. This information will not only help you tailor the class better toward the attendees, but also introduce attendees to each other and help them feel more involved and active from the very beginning of the class.

In a beginning-level class or one of the more basic classes being taught, talk openly about people's emotional reactions to computers and fear of breaking them. How many times have you heard "I'm really bad at computers"? Beginners are scared: scared of looking foolish, scared of breaking the computer. As Edward Elsner says, "Just remember, you really can't 'break' a computer-worst-case scenario: you have to erase everything on the computer and start fresh."3

It is important that you as a trainer recognize the fear and identify with it as much as possible, recalling those days when you too were a computer newbie. Reassure class members that everyone is doubtful when starting to learn a new skill, that we all somehow manage to learn what we need to get by in life, and that this new skill set is no different. Emphasize that the current training is only one step and that it's not intended to teach everything all at once-in pieces will we build the whole.

Training Tips and Techniques

There is a lot that happens in the middle of training sessions that will not be on your session outline. Questions will come up, sidetracking will occur, some students will be bored and others will be lost at the same time. No one can predict what will happen in any training session, but there are some general tips, techniques, and guidelines that, when followed, can lead to a more successful outcome for both the trainer and the students. An endless number of technology-training tips lists have been published over the last few decades. I would like to call your attention to two that I think are particularly useful, and then fill in the blanks with my own list of tips.

Michael Stephens and Rachel Singer Gordon, in their regular column for Computers in Libraries, have a particularly salient article entitled "Ten Tips for Technology Training." Their ten tips are:

- Carry multiple versions of your training documents, both digitally and in hard copy.
- Use real-world examples for exercises. 2.
- Create an online community around your training. 3.
- Use audio/visual and hands-on tools. 4.
- 5. Create how-to handouts and more with PowerPoint.
- Promote classes with Flickr. 6.
- 7. Keep up-to-date with online resources.
- Rehearse a bit, but go with the flow. 8.
- Take a look at Web 2.0 tools and start playing.
- 10. Enjoy what you do!4

For more on each of the ten tips, check out their full article. The last tip is one that is the easiest to for-

get, especially as we are overwhelmed by our work and become more easily frustrated when our patience is running thin. I'm going to let you in on a little secret that I may regret letting you in on later (especially if you are ever in one of my training sessions!). Before each training session, I think back to my first day teaching anything other than "play school" with my sister and friends when I was seven-teaching freshman year English Composition to a room full of grumpy students only two years younger than I was. I remember the fear of failing, the worry about not seeming like I knew what I was talking about, but more than that, the joy that I was finally doing what I had set out to do in my career—teaching others. That pure, unadulterated joy at the prospect of teaching is something I try to recapture before every class. Try to recapture your own enjoyment of teaching too, through memories of a thankful student or a successful class. It will serve vou well.

The second set of technology training tips I would like to point you to are from Brenda Hough. She lists eight tips for technology trainers with a goal of "longterm technological literacy." For more information on each step, check out her article in full.

- 1. Stop trying to provide step-by-step directions.
- 2. Encourage independence.
- 3. Expect success.
- 4. Encourage exploration.
- 5. Provide context.
- Treat training as a collaborative project. 6.
- Use storytelling. 7.
- 8. Be real-world.⁵

As alluded to in the first tip, Hough has completely stopped creating handouts with step-by-step instructions. Instead, she now uses her printed class materials only "to provide information about additional resources, to share examples of usage, and to help trainees understand the larger context." Hough also stresses in her article that her shift in training handouts is really an indicator of her shift in training technique-"teaching concepts rather than steps."6

As our staff members become more comfortable with the basic skills they need to access the resources and teach our users about our services, these more abstract and less explicit handouts will become the norm. I think that right now, however, we're in a middle space where some staff still need the hand-holding, while others are just waiting for that freedom-flung launch pad to learn on their own. These less explicit handouts and training techniques work well for more advanced topics, where users are already comfortable enough with their basic skills to not need as much hand-holding as newbie digital immigrants might. I still find, though, that with basic classes like Using Files and Folders, Internet Searching 101, Make Friends with the Online Catalog, and other such basic classes that the students say again and again that the step-by-step handouts are invaluable and will find a permanent place next to their workstations as reference tools. Therefore, I have no plans to abandon them completely any time soon.

Now (drum roll please) my own list of twenty technology training tips.

- 1. It's all new to them. Remember that nobody is born knowing any of this and you have absolutely forgotten what it's like to be a beginner. Things that seem intuitive and simple to you are not simple to your learners.
- 2. Don't touch the student's keyboard or mouse. Let the student do all the typing and mousing, even if it's slower that way, and even if you have to point them to every key, one at a time.
- Play music. Use streaming online audio or an iPod docking station to play music before the session, during breaks, and maybe even during the session (slow, unobtrusive instrumentals work best).
- 4. Open the line of communication with your eyes. Sit in a chair or squat down so your eyes are just below the level of theirs (symbolic power structure here). When they're looking at the computer, look at the computer. When they're looking at you, look back at
- **5.** Talk slowly. When you know the information well, words come out faster than they would normally. Also, it's quite easy to feel rushed in trying to get through all the information and to speak quickly as a result. Slow down. If you find yourself speeding up, take a deep breath in between every few sentences and insert what will seem to you long pauses between sentences.
- 6. Don't say "no" or "that's wrong." Saying these and other similar things when you see a student click on the wrong button or do the wrong thing will make the student feel stupid, and immediately become defensive or uninterested in continuing to learn. Let the student finish what he or she is doing and then say, in the affirmative, what to do next, along the lines of "Okay, now we're going to . . . "
- 7. Check in with the students from time to time. Periodically check for group comprehension to make sure everyone is still with you. Encourage attendees to give you feedback during the class. They should feel free to let you know if you are going to quickly or too slow (wouldn't you rather know right away than to proceed while the entire class languishes or scrambles?).
- 8. Stop for questions. Don't ask trainees to hold questions until the end. They may forget their questions by that time. When you ask, count to ten in your head before moving on if no one says anything.

- It takes until "three" for people to realize what you've asked and until "seven" or so to think of their questions.
- 9. Use real world examples. Encourage students to use examples from their personal lives or questions they remember from real users in exercises and practice sessions.
- 10. Have mini-rewards. Reward students for participation, getting answers right, or simply being there. Do so with food (candy works quite well), small giveaways (things you collected at conference exhibit halls perhaps), or other things that your staff will value. It's astounding what people will do for a piece of chocolate or a pen.
- 11. Watch for saturation point. There is a point in some training sessions where you can see students' eyes glaze over, when they start looking around instead of at you, and when they start to chat with each other instead of listening. At this point, you have lost them, probably to being overloaded with information. If you see this happen, take an unscheduled break then come back and ask how everyone's doing. Hopefully now they'll be ready for more!
- 12. Don't assume knowledge of any kind. Unless you have outlined certain skills or knowledge in the prerequisites for a class, do not assume that students have specific knowledge or skills. If it becomes clear that students do not have knowledge that you expected them to have for the class, that is an indication that such things should be made prerequisites the next time around.
- 13. Do not say "clearly" or "obviously." What may be clear or obvious to you is probably not clear or obvious to your students. Words like this are highly charged and can alienate students in one fell swoop.
- **14. Be concise.** Avoid using technology jargon that the students won't understand. Try to speak in short sentences that are easily understood by people new to a topic.
- 15. Stay relevant. Focus on the practical applications of the technology instead of the history of it. Students want to know what will benefit them in the immediate and practical future, not the entire history of the Internet.
- 16. Remember that your learners are adults. The student and the instructor are equals, and while the learners' ages, experience, motivation, and ability will vary, that does not make the instructor superior to the learners. In no case is it acceptable to condescend to or patronize your learners.
- 17. Be flexible. It is essential to make training sessions flexible-you will doubtless be dealing with students of varying experience and skill levels. If the bulk of the students show up and know the basics that you were going to cover in the first half of the class, be

ready to gloss over that bit (but only after making sure that everyone really is okay with that) and then go into more detail on each of the later training topics-giving students more time to practice and explore and pointing out some of the more advanced tips and tricks that you as the training and tech guru have discovered in your time self-teaching.

- 18. Show patience. When someone in your files and folders class asks "Where is my file?" we don't want to snap back "Well, where did you save it, and what did you call it?" If showing patience with your words means digging your fingernails into your palm, then so be it. Patience in a trainer is essential, even if it has to be faked from time to time.
- 19. Highlight tips and tricks. Don't overlook the simple tips and tricks that you take for granted that people should already know. I guarantee that there are staff members who don't know yet that the little percentage box at the top of your word processing program determines how big the page shows up on the screen-and that it has nothing to do with how it prints out. There are a lot of staff members who don't know that choosing "Paste Special" and then "Unformatted Text" in Microsoft Word will strip off all the nasty formatting and extra graphics from Web pages when pasting in text. It's these simple-to-you tips that class members will leave most happy about having learned.
- 20. Have a sense of humor. It's very easy to become overly serious while teaching; in fact, you are working overall. Making jokes during the class, using humorous examples, and laughing are all perfectly acceptable behaviors for a trainer. Enjoy your job!

Living with Learning Loathers

Not all staff members will be enthusiastic about participating in training. Most will value the opportunity to learn, but some will be resentful, even angry about being in a class. Glen E. Holt writes:

Do all staff want this training? Not all, by any means. Some library staff-including high-level managers-resist training just as they resist change generally. Like almost all training groups, librarians in training break down into "eager adopters, prove-its, and resisters." That makes them typical rather than exceptions.⁷

Trainers need to be ready to deal with these reluctant learners during the class in a positive way. To that end, D. Scott Brandt suggests a few ways to deal with problem participants:

- Try to see things from their point of view.
- Be firm.
- Be frank.
- Be sympathetic.8

Try to learn more outside of the class. There is generally something more at work behind these loathing learners. There is almost always a story (or more than one) about why someone doesn't want to be learning whatever it is the trainer is trying to teach him or her. Finding out what that story is will often reveal the way to get the learner re-interested in learning. If you can, talk to the learner privately to try to find out what is behind his or her reluctance to learn, or to learn this particular topic. If an overall reluctance to participate in any learning initiatives is revealed, the best approach is to involve the person's supervisor at that point and work together with the employee, hopefully to a positive end.

Elegant Endings

At the end of every training session, reinforce the importance and purpose of the training. Reiterate what students should have learned during the class. D. Scott Brandt writes:

Satisfaction comes from having accomplished something worthwhile, so you should show them how the learning is worthwhile. Demonstrate what they will be able to do in the future with the new knowledge and skills. Remind them of where they started and where they have ended and ask if they are satisfied that they have learned something and can apply it.9

You should also point users to the spot on the handout that lists further resources for information on the topic and offer yourself as a resource for questions after the class is over.

Remember the importance of reinforcing over time what you are teaching-it's not enough for learners to be exposed to a particular skill once. If they are not using it regularly, the skill will be lost. Consider asking staff to set aside time to practice their new skills after the training session. You may also want to hold a formal follow-up session, especially when teaching a new procedure. Students will have had a chance to practice and may have new questions.

Ask students to fill out an evaluation of the training. The training that is provided has to be evaluated, whether the training is being provided by one training person in your library, by multiple staff members based on expertise, or by outside consultants or trainers. Have a consistent training evaluation form that participants fill out and then send to whoever is monitoring the training quality (be it a manager, a task force, or the trainer). Why is monitoring the training so important? If employees are expected to have competencies, but are not receiving training adequate to help them meet those goals, then the employees cannot be expected to achieve them. Training evaluations can cover a number of different factors: whether the topic was covered thoroughly enough, if the instructor's presentation was satisfactory, if the user feels that he or she has learned the objectives, if the user would attend a similar class in the future, depth of content, time allotted, speed of class, and what would have made the class better. Figure 2 shows a sample training evaluation.

Notes

1. Rachel Singer Gordon, Teaching the Internet in Libraries (Chicago: American Library Association, 2001), 10.

- 2. Ibid., 13.
- 3. Edward J. Elsner, "The Public Library Helper," 2005, www .mei.net/~elsner (accessed January 12, 2007).
- 4. Rachel Singer Gordon and Michael Stephens, "Ten Tips for Technology Training," Computers in Libraries 26, no. 5 (May 2006): 34-5.
- 5. Brenda Hough, "Teaching People to Be Savvy Travelers in a Technological World," Computers in Libraries 26, no. 5 (May 2006): 9-12.
- 6. Ibid.
- 7. Glen E. Holt, "Training, a Library Imperative" in Andy Barnett, Libraries, Community, and Technology (Jefferson, NC: McFarland & Company, Inc., 2002).
- 8. D. Scott Brandt, Teaching Technology: A How-To-Do-It Manual for Librarians (New York: Neal-Schuman Publishers, 2002), 103-4.
- 9. Ibid., 22.

Workshop Title					Date					
Overal	l, I found	d the worksho	p to be:							
Poor									Excellent	
1	2	3	4	5	6	7	8	9	10	
The pa	ce of thi	s workshop w	as:							
Too slow				Just ri	ght			Too fast		
Today	I learned	d:								
a little		what I expe	what I expected		what I could absorb			more than I expected		
Please	rate the	instructor's k	nowledge	e of the su	bject mat	ter				
Poor									Excellent	
1	2	3	4	5	6	7	8	9	10	
Please	rate the	instructor's p	resentati	on style:						
Poor									Excellent	
1	2	3	4	5	6	7	8	9	10	
Please	rate the	instructor's o	verall eff	ectiveness	:					
Poor									Excellent	
1	2	3	4	5	6	7	8	9	10	
If there	were h	andouts, were	e they he	lpful to yo	u?					
not helpful helpful o				ul during cla	during class			helpful and will use again		
What v	would ha	ave made the	class bett	er for you	?					
Additio	onal Con	nments								

Figure 2: Sample Training Evaluation Form