Technology Training Program

Ongoing technology education can be useful in attracting and retaining qualified staff. Libraries that decide to promote technology training will have better hires, increased retention, improved customer service and more. However, technology education programs can be difficult to design in the world of ever-changing equipment and software.

The first step is market research. Conduct a survey and needs analysis. This is one of the most important steps and is critical to the success of the program. The survey should be designed to gain information on respondents' perceptions of their own skills, experience and knowledge.

Technology team members should meet with administrators and managers in individual or focus group sessions to discuss some basic issues including:

- The target audience.
- Current staff skill levels.
- Staff motivation levels and any previous training experiences.
- How was training delivered in the past and did it work?
- Are there sufficient funds for the training program?
- How do the staff learn most effectively?

Once these issues have been addressed, the training team should start the next series of key steps. The team should plan ahead by establishing a timeline, listing members' duties and creating a meeting schedule. Appropriate training facilities need to be identified. Create a checklist of desired options including workstations, connections, acoustics, air quality, etc. to review potential sites.

After compiling the findings from meetings with administrations and survey data, the technology team should draft out and finalize a curriculum policy. With this information, the team can identify potential vendors and consider options.

Once all of this has been done, the library should promote the training program through site visits to branches, presentations, fliers, and e-mail reminders.

A 25 member library system in Florida created a technology program that sought to recognize the unique needs of adult learners. The elements of their integrated approach could be useful to other planners considering creating their own program.

They decided to offer three options: Web-based training, instructor-led classes onsite, and vouchers for staff to use in attending off-site workshops. They selected a vendor that provided electronic evaluation both before and after the training sessions to identify weak points and track improvements. Courses were downloadable to be used at the staff member's convenience and to be kept for reference. The planners wanted a program with an electronic reference library and a regular selection of new courses each month. The vendor had to offer both instructor-led and electronic training. On-site classes must be kept to a size of 12 students or less with certified trainers.

The program was well received by staff and widely used. The managers receive monthly reports to track the program's usage.


Systems Office Priorities

For a library systems office to work effectively there must be a clear set of priorities. Without these the systems office staff will become reactive instead of proactive and end up responding to a never-ending series of crises.

Libraries depend heavily on automated systems, electronic equipment, and electronic resources. If they fail, even temporarily, the library and its patrons feel the absence acutely. The systems office must be able to respond promptly to areas of urgent need, but staff must first know what these needs are.

It is tempting to add a new priority without considering the ramifications of the decision. In some libraries, everything is a priority, which means that nothing is truly a priority. Some decisions are even made based on a few user comments rather than a thorough survey of staff and user needs.

The first step in establishing a set of priorities is to work with the mission statement. All library activities should originate from this statement. It can be helpful to create a team to oversee the planning and prioritizing process. Working with a group of key personnel instead of an individual will help to produce a more bal-

LIBRARY CURRENTS (ISSN 0741-4188) is published monthly by Practical Perspectives, Inc., at 8634 Ephraim Road, Austin, TX 78717; (512) 773-0278.

SEND CORRESPONDENCE TO: P.O. Box 202108, Austin, TX 78720-2108. Edward Seidenberg, Owner & Publisher. Sharon J. Seidenberg, Subscription Manager. E-mail: librarycurrents@austinxtx.com

Send editorial correspondence to Jill Snapp, Editor, 305 Lakeway Trail, McKinney, Texas, 75069. E-mail to: jsnapp@prodigy.net.

Subscription: $55 per year in the U.S. For Canada and all non-U.S. addresses, add $5. Subscriptions must be prepaid. Copyright © by Practical Perspectives, Inc. Reproduction, in whole or in part, by any means, without written permission, is strictly prohibited.

Missing issues: Please report the non-receipt of an issue within 90 days of normal receiving date; missing issues requested after this time will be supplied by the regular back-issue price of $5 per copy prepaid for the U.S., Canada, and Mexico. $6 per copy for all other countries.

Periodicals Postage Paid at Austin, TX.

POSTMASTER: Send all address changes to LIBRARY CURRENTS, P.O. Box 202108, Austin, TX 78720-2108.
anced set of priorities. In small institutions, all staff can be involved in reviewing the priorities. A facilitator is also necessary to be sure that everyone on the team is heard.

The team begins by making a list of all the existing priorities and the tasks of the systems office. The entire list is reviewed by asking "If we could do one, and only one, which would it be?" This is the top priority. The statement is broadened to two tasks, then three tasks, and so on to determine the sequence.

The administration must support this effort and be willing to find the resources necessary to meet the recommendations of the team. After the tasks are prioritized, the team can consider the resources required to meet them. Team members must be careful not to shift the emphasis from what should be done to what can be done. There is a risk that staff will make priorities based on what they think can actually be accomplished with existing resources. This limits the team and the library from meeting its potential.

The priority list can be used to generate resources by demonstrating the widespread support for the task and the value to the library. This can be used as ammunition in fundraising sessions.

The team should also consider how to handle the rapidly changing needs and technology. New issues and systems should not be immediately made into priorities without first considering them in relation to other tasks. The team must decide at what point the new task should be reviewed and prioritized.

The advantage of a priority list is that it clearly states what gets attention first or what gets the most attention. Staff should not focus on the projects that are easier or of personal interest.

With the rapid changes common to the systems office, the staff should ask themselves if a task is needed before starting a new project, even if it was on the priority list. The team should create a regular evaluation process to review the entire list, but more frequent reviews of specific tasks are very valuable. As part of the evaluation process, the team should consider what was accomplished and if the systems office was able to follow the selected priorities. If not, why?


Meaning-Based Searching

A new generation of information handling tools is changing the way search services retrieve data. Linguistically based programming is trying to duplicate human language processing. Although some systems stop at simple levels, such as finding stems of words or seeking plurals, others are going much farther.

Developers are also showing a tendency to include the user in the search process. Instead of just accepting one input from the searcher, the system involves the user in a dialogue to refine the search. These new systems depend on many parts: reference tools, statistics, dictionaries, interactive tools, synonym lists, and user models. All of these work together to improve the search process.

Several problems remain. One of the foremost obstacles is the query itself. Many people do not ask what they really need to know, and most queries are too short. Search programs are starting to help the user pose their queries by returning questions that clarify meaning.

Some words have ambiguous meanings, such as java for coffee or software. Many searches are about a person, place or thing, and names can have many variants. Manual indexing can link data for all variants, but it is time consuming. What about distinguishing between articles that are about the subject in the query versus ones that just mention it in passing?

If search systems can be designed to recognize regular patterns of language, the searching process will improve. These natural language processes (NLP) are coming of age in programming. An example of this is phrase detection. Using phrases helps to focus the search; "swimming pool," "car pool," or "pool hall" are examples.

Another NLP improvement is disambiguating or choosing the right meaning. Information systems can distinguish between meanings by looking at the context surrounding the term. Although this works well in documents, it can be difficult in queries due to their brevity. In these cases, the system will ask users which meaning they want.

Automatic categorization is a third NLP advance. It divides documents into categories, which aids in refining searches and browsing. Humans can write the classification rules or the systems can deduce the rules themselves.

Query expansion can be used to broaden the search while still keeping results focused. With this NLP tool, the system will add synonyms to a short query to expand the number of articles returned, but this can also refine the search by clarifying the definition of the term selected by the user.

Concept mapping is another way search programs can improve the process. When a user enters a query, it is pure luck if they hit on the right combination of words used by the author of a document they need. Concept mapping is a way to cluster words and ideas. For example "white" can also mean "ivory," "blanc," or "off-white."

All of these tools can benefit the user, but finding them can be confusing. Many systems say they use "natural language," but in reality they may only use one or two enhancements. Librarians need to be aware of these advances and monitor search programs to see which techniques they use. NLP products hold the potential to dramatically improve the quality of information retrieval.