IF I HAD A HAMMER! TECHNOSTRESS AND THE LIBRARIAN

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A lighthearted look at a very real problem facing most libraries and librarians today—with anecdotal examples and some possible solutions.

Last Spring, at a meeting of the New England chapter of American College and Research Libraries (ACRL), I was overwhelmed by the sense of frustration and aura of depression that dominated the meeting. A University colleague who had recently attended a meeting of the Music Library Association (MLA) reported similar observations.

Some of the comments overheard were as follows:

- "The darned system went down, right in the middle of my search. I had to start all over."
- I no sooner get one system down pat, when they come along and upgrade it and I have to learn it again."
- The printers keep jamming, one of the CD drives died, another printer needs a new cartridge and there’s a line of people needing help.

If these comments could have been ascribed to a lack of resources of chronic staff shortages, or even to a certain library, they would have been more understandable. In reality, they reflected the feelings and frustrations at technologically oriented MIT as well as the smallest of the Liberal Arts colleges.

Why then this ambivalence, the high level of stress and frustration? Why the thrill of easier and expanded information access coupled with the mistrust of the technology itself?

Actually, there are a variety of reasons, some of which accompany the introduction of all new technology and others unique to the advent of computers in libraries.

OBsolescence: The first and probably the most obvious is the fear of professional obsolescence—that libraries and librarians will cease to exist due to electronic information sources and commercial access to those sources.

Admittedly, automated systems have dramatically changed the traditional patterns of library work. In some areas, electronic information has resulted in a de-skilling trend (Harris 1992). Areas, such as Cataloging, where a high level of de-professionalization has occurred and Information Access (Reference) have suffered from the increased shift to a reliance on electronic resources. The connection between information access and library services has become more and more indistinct as more access to information is offered commercially to individuals through such agencies as America Online and AT&T (Malinconico and Schuman 1992).
Added to this, the continued prediction of a paperless society, where books will be abandoned for full-text electronic publishing, has its own implications for a profession that has so long dealt with traditional sources of information.

RATE OF CHANGE: A second source of stress is the greatly accelerated pace of change in technological areas. Librarians have always strived to plan carefully and in an organized fashion. In a world of services and information that changes almost daily, it is easy to feel that we have too much to learn in too little time.

“We find ourselves constantly trying to be quickly responsive and adaptive to change, while at the same time faithful to the long held tenets of library service and access.” (Euster 1995)

Mosaic speedily followed by Netscape will soon give way to Java. Lycos and Yahoo are swiftly abandoned for Alta Vista and Virtual Library. New databases, enhanced products, more sophisticated search methods, and updated software all contribute to technostress. A constant process of learning and unlearning can leave librarians breathless and frustrated, struggling to maintain even a semblance of keeping up. It is the cumulative effect of many minor improvements of the trauma of a major upgrade that leads librarians to “tear their hair out,” a frustration also felt by patrons. (Becker 1994)

TRAINING & TECHNICAL SUPPORT: In many institutions, brief training sessions of two to three hours are offered when new systems or software are put in place. There may be additional access to some sort of support unit or person (often, just a savvy student) and in the case of CD-ROM, access to a Technical Help Desk. Librarians are often expected to be able to deal with functional machine problems as well as keeping up with all the software updated of several systems. Hitting the right key for the wrong system is an experience I’m sure we all have in common.

For many, there is no resident computer support and problems must be handled long distance, tying up already scarce staff, until the problem is solved. According to a recent survey in Library Personnel News, there was a definite expression of a need for “massive retraining of librarians in the field,” not only a how-to on CD-ROMs and using the Internet, but knowledge of setting up and troubleshooting networks (Shoaf 1996). In this same survey, 90% of respondents marked “a greater need for training and staff development,” while only 10% marked “about the same need for training and staff development” and no one selected “less training and staff development.” Of the sixty-nine respondents, sixty-six reported that their library had a formal staff development program.

Among the report’s conclusions are the following:

- Libraries will have to plan more training programs in the future.
- Budgets will have to be increased for training and development funds.
- Equipment needs for training and development will increase.
- Libraries not offering training in the technological skills will be at a disadvantage when these changes require new employee skills.
TIME & PATRON EXPECTATIONS: Last are the problems of time and growing patron expectations. A common complaint among library staff is a sense of being overwhelmed by having too much to do and at too fast a pace. Clark and Kalin (1996) in their article “Technostressed out” put it this way:

Somehow we have to set our work rhythms to correspond to the steady, quick pace of the computer...The faster our machines, the faster our workflows; and the higher our expectations for productivity...Information technology provides the capacity to do several things at one time. In reality, we are capable of focusing on only one thing at a time, yet we find ourselves juggling six open applications on our computers, subscribing to too many listserves and sending and receiving more E-mail than we can handle.

According to Donald Norman in his book Learning and Memory (1982), it takes approximately 5,000 hours of practicing a complex activity to turn a novice into an expert. With the increase in technology occurring at the same time as downsizing of staff in many libraries, it is easy to see why time is sometimes considered the enemy.

Patron expectations also haunt us. It seems that no matter the level or speed of technology we provide, many patrons continually look for more, are impatient with system down time, angry when information they seek does not appear with the first keystrokes (even though they have misspelled their search term) and often delight in comparing your technology with other libraries whose budget and human resources far surpass those available at your library.

What can the library administration do to help staff deal with all the real and perceived problems with technology that result in technostress?

Technostress, after all is really resistance or reaction to change. The issues are not technological, but human and organizational. Administrators need to prepare their staff to deal with change not technology (Clark & Kalin 1996).

The simplest way to ease technostress is to keep library staff informed of library planning. It is important for staff members to know in advance that they are getting a new computer, upgrade or database. Keeping the lines of communication open is essential when dealing with change and the stress that accompanies it. Hiring people with flexibility and coping skills is another crucial managerial role, as is the responsibility of helping all staff to learn new technical skills, even those who are not comfortable with technology. Attention should be paid to personality differences and individual methods of learning. Some staff members like to learn at their own pace, using written documentation and will resist teaching it to users before they have mastered it. Other staff members learn better by one-on-one instruction. They do not rely on the written guides as much as on their own exploration of the system. They usually prefer to learn a system in conjunction with “real users.” Staff members, participating in training programs that allow for these differences, will be more successful and productive than the often provided mass training sessions (Moreland 1993).

Training is critical in dealing with technological changes. It helps to reduce stress by reducing anxiety and allows the staff member to be comfortable with the technology. Timeliness is a prime
consideration. Training should be offered at a time that will coincide with the person’s actual need to use the technology. A training session that allows months to elapse before the actual computer or database is available, serves little or no purpose.

Time for training must also be accompanied by time for practice and exploration by the staff as part of their work assignment. This may be particularly difficult for administrators who see this type of exploration as a waste of time or who do not recognize methods of learning different than those they personally use. Time for practice can also be impacted by size of the staff and by a location remote from the training center.

Good, available technical support is paramount, and is probably the most neglected. In a library, increasingly dependent on technology, equipment that doesn’t work equals a staff frustrated because they cannot offer services that should be available (Clark & Kalin 1996). Equipment failure also exposes staff members to the anger of patrons who want to use the technology and are only too vocal in their frustration.

Support should be provided in the form of consistently upgraded software and hardware so there is a common technological base among staff members. Support should also come from a staff member or members, who can competently install, manage, troubleshoot and fix equipment. It is not exaggerating to state good technical support is even more important than the equipment itself.

In summary, library management should provide updated equipment and software. Training should be given in a timely manner, taking into account the differing personalities and skills of staff members. Staff must be allowed time to “play” with the technology, competent technical support provided and a proper physical work environment created. Stress can be managed and alleviated and the issue of professional obsolescence will fade as competency and familiarity grow. No matter if we are called librarians, information specialists or “cybrarians” we will remain as a bridge between old technology, the printed book or journal, and the new technology, computer and online information. In the words of Nancy Bolt, Colorado State Librarian, librarians will become:

“Knowledge Providers—supplying technology”
“Knowledge Gateways—providing access to the information highway”
“Knowledge Teachers—helping patrons to learn how to use the technology”
“Knowledge Organizers—presenting an organized approach to resources on the information highway”
“Knowledge Creators/Providers—providing information online that would not be available if the library did not create it”

None of these roles is essentially different from those we held in the past. If administrators take the time and energy to address technostress, to train their staffs to access the new online information sources and to allow new technology to become everyday technology (as with any other innovation from telephone to typewriter), we will be left with individuals that are a healthy combination of technologically competent and people-oriented librarians. We will be left with “technohumanists” ready to take their place in the changing library environment. (Terlaga 1996).
REFERENCES


