Dealing With the New Technology: An Instructional Primer

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Preface

When instructional librarians are faced with training library staff and/or patrons in electronic systems, it is probably not unusual for them to begin looking for "how-to" articles in the professional literature. In fact such a search may be a reflex action. Having faced this very situation over the past year, having had very modest previous experience in this area, and being somewhat apprehensive regarding my ignorance and the job facing me, I reflexed thus. Now, having passed through the initial planning, preparation and implementation stage, I would like to outline the "real" "how-to" of training for the new technology.

The "Real" Problems

The real problems that instructional librarians confront in the process of training for computerized systems are those which go beyond any narrow conception of their roles as librarians or teachers, or of the library as a distinct institution. The crucial problems do not revolve around which video projector or LCD display gives the most satisfactory results, or where to obtain a useful set of overheads, or a syllabus, or the like. The real problems lie in the systems them-selves and in our attitudes towards the systems and are not uniquely library problems at all. Rather, they are problems which face our society in general.

The central problem, quite simply, is that we are intimidated by technology. We act as if in subservience to technology, and this condition is as frequently present in our highest administrators as it is in our most unsophisticated patrons. Further complicating this condition is the discrepancy between the promise of technology and our expectations, and again between our expectations and the product that is actually delivered. Ambivalence comes with the territory. One ought to have high hopes for the new technology; one ought, also, to be rather skeptical regarding products currently on the market. Reasonable progress is the result of this hope and skepticism along with a basic understanding of one or more systems and along with the ability to articulate the needs of librarians and patrons.

It is possible to overstate the influence of the intimidating nature of the new technology in the library world as apposed to the general population. Librarians, buried under the avalanche of materials produced by the "information revolution," have

long anticipated the arrival of electronic information handling systems. Ostensibly search systems would get them out from under the weight of "too much" information, of too large a haystack in which to search for the needle. Before these systems were even a reality, they existed as an unarticulated need in the mind of librarians, especially public service librarians in research institutions. What reference librarian has not felt helpless or frustrated when faced by research demands that traditional library systems cannot handle? So, although some in the profession are hoping to retire before they pay the "dues" required by the acquisition of knowledge necessary to take advantage of computer systems, most look forward to the new systems with great eagerness. But if we are not intimidated by the new technology, what indeed are our problems?

Our true dilemma is the result of the discrepancy between our understanding of the promise of the new systems and the way in which the systems actually manifested themselves in practice. It is also the result of our longstanding professional timidity.

The arrival of the first electronic database in a library is a singular moment in an institution's history. It marks the point at which technology is harnessed to bring order to the masses of materials produced by the information revolution. If the system being introduced is reasonably well designed, this may be a most felicitous moment in the existence of a library. However, as the third, fourth, or fifth system is introduced, each with its own distinct protocol, each with its own quirks and shortcomings, the illusion of uncomplicated access to research materials is forever laid to rest. Somewhere along the line, one loses a facility with the first protocol while acquiring the fourth or fifth. One's perception of these new systems as a simple way to bring order and clarity to research ends (at least in the short run) in frustration.

Further complicating this fall into the real world is the traditional humility of the profession which is only intensified by our sense of subservience to, though not fear of, the new technology. We accept systems as they are designed and sold, as a *fait accompli,* as if we possessed no rights or intelligence that might permit reasonable adaptation of the systems to make them suitable to our goals. To my knowledge, there is *no perfect, or at least no reasonably perfect system, that is up, running and fully implemented.* Few systems are very close. We share in the responsibility for "bad" systems.

In the profession generally, and specifically in public services, we have acquired the bad habit of ignoring the patron's needs and our own best interests. This is not true in the sense that we callously disregard them, but we have found that representing these points of view often meets with frustration, and we have become unable or unwilling to clearly articulate these interests. Over the years we have acquired the habits of defeat, we do not think enough of ourselves and our positions to clearly articulate our needs and then to aggressively represent them. This is as much true within the library as it is outside the library. Outside the library we lower our expectations until they match the product currently being sold: the system doesn't have cross references, very well then. .; the keyword/Boolean module doesn't function as promised, oh well . . .; our institution doesn't have the funds to implement enhancements, well O. K., you know better than . . . . Item by item we capitulate until our entire agenda is compromised.

If these problems of subservience generally compromise the best intentions of the profession, they certainly undercut public services. Perhaps distinctions between public and technical services are not real; after all, services produced through the activities of both staffs are useful to the public. However, in an age when the ability to quantify both problems and responses is considered the benchmark of modernity, and at a time when economic cutbacks based on quantifiable values are a reality, the work that public service departments perform is in serious jeopardy. Because the repetitive tasks performed by technical services are quantifiable and readily ordered by electronic systems, technical service areas have often driven the computerization of libraries. As a result public service librarians have lost esteem and a sense of purpose. They have become medicine men in the age of the neurosurgeon. That part of the profession charged specifically with articulating the need of scholars and patrons is often confused or silent. If public service libraries are not being locked our of the design process, they lock themselves out. This failure of confidence often results in the casual acceptance of systems that seem to evidence little understanding of the needs of our patrons.

Solutions

There are no effortless or quantifiable or ready-made solutions to the problems outlined above. This is not to say that these problems are "unsolvable," if by this we mean that nothing can be done to alter the situation. In fact, for most experienced public service librarians, the remedy to a great extent lies within their own powers to effect. I can think of several "steps" that may be taken in order to change the current manner of dealing with technology. These first "steps" pertain to an understanding of the librarian's role within the profession and with the ability to articulate that role with clarity and force:

1. You must know what it is that you do, why you do it, and have some sense of what your patrons do and of why and how they do it.

2. You must value your work (look upon it as more than a simple skill) and respect the work of your patrons.

3. You must accept full professional responsibility for achieving the best possible research environment for your patrons.

4. You must be able to articulate clearly and precisely your work and your needs and those of your patrons as well.

5. You must be able to articulate your concerns forcefully and with confidence.

Which is to say that we must begin again at the beginning; take off the emperor's clothes; ask ourselves who we are and what it is that we do. Until we understand ourselves clearly, we will be buried by technology. The humility of the profession is, without this sort of self examination, a false humility that can only result in mimicking technology in order to share its prestige. If, when we have thought about our profession, we have discovered something of value, then as individuals each of us must take responsiblilty for nurturing that thing of value. Having thought about our work we must be able to articulate our needs with force and clarity. That good and great humility comes from knowing what you do and sharing it freely, and not from reticence in the face of faulty thinking and intimidating "experts."

Along with the several concerns expressed regarding our own work in the profession there are several further requirements accociated with our relationship to the new technology:

6.   You must have some faith in, some hopes for, the new technology.

7.   You must have a general understanding of the new technology.

8.   You must be skeptical regarding the new technology.

9.   You must have the confidence to risk asking naive questions about the new technology.

10. You must require technocrats to respond to your questions, simply, clearly and directly, as you must respond to the questions of your patrons.

There seems already to exist a reasonable amount of faith in and hope for the new technology, perhaps, in individual cases, more than is warranted. As we begin to use each system, we should understand what the system is and how it works including what principles underlie its design. It is not enough to know that to get "A" to appear on the screen you must type "X" and "Y". With the pressure of all one' s work, it is not easy to find the time to think about these systems, but without some kind of real understanding of these products, we can only reiterate the endorsements found on sales blurbs.

Be skeptical. In one sense these are products like any other product you purchase — like the badly constructed book or the deodorant that doesn't work. The myth of the totally "user-friendly" system and the eager expectant mass of hackers in just that — a myth. Which is not to say that some of your patrons may not be relatively sophisticated regarding electronic systmes, but most will not be, and all will need some help in approaching the system.

Ask questions. How many of us have sat in a meeting on some aspect of technology and nodded our heads and not understood a word that was being said — and thus given tacit consent to the "emperor's clothes." How many of us have sat through lectures where no simple, helpful introduction to terms and concept was given until two-thirds of the way through the presentation, or not all? It is time that we all ask questions without worrying about whether or not we will be misunderstood or humiliated. What does the "ROM" in CD-ROM mean? How do the discs work? How can they be helpful in the work facing us? How may they be compared to other products, etc., etc.?

Finally, having asked a naive question, you ought to require a clear and reasonable response; just as when your patrons ask questions they ought to be given simple, clear and reasonable responses. Not infrequently "experts" indulge in obfuscation and jargon to enhance their own prestige or to hide the fact that they cannot respond to a question because they haven't thought about the issues being raised. If you have the intelligence to do well in Latin 400 or Econ 109 and retain an open mind in regard to learning a new technology, you do have the ground sense necessary to understand basic concepts and to communicate regarding your work. However, remember, that like new reference librarians, technocrats ought to be permitted to say "I don't know; I'll find out and let you know." Such exchanges are as critical for the systems experts as they are for librarians. In the absence of such an open dialogue, the new technology will appear obscure, foreign and will never realize its true potential.

Now, in regard to all of the above practical problems facing instructional librarians, I would like to offer practical solutions. Use your common sense. Survey the literature. Find out what other librarians are doing. Ask yourself what needs to be said or done and say it clearly, simply and accurately without the use of jargon. Incorporate training on electronic systems into your general instructional program, remembering that people learn in a variety of ways. Do not rely upon help screens to do all of the instruction on a system. Supplement your traditional teaching methods through the purchase of an LCD (liquid crystal diode) display device. Whenever teaching materials and screens are to be designed, take the time to do a layout that is simple, clean and uncluttered; less is more. But, remember, the real issues are those that are perennial; they are issues of thought, sweat, work and discovery, and here less is never more.