DEFINING USABILITY THROUGH PRACTICE

"The worst level of Internet service that users will accept is the best level of service they have ever seen."

—Ron Dunn, Thomson Learning, National Online Conference, 1999

Faux Usability

Without a basic knowledge of usability, less formal methods can easily become part of a library's Web culture. One such method is what this author calls the usability demonstration. The usability demonstration phenomenon occurs when the designer or committee of a service shows you how a new online service functions. The usability demonstration is marked by phrases such as the following:

- "This link will pop up some kind of useful information that someone else is writing…"
- "We had to do it like this because we inherited the code that Henry had done before he quit…"
- "Picture that bottom part of the screen you just saw with the top-left part of the screen that everyone sees now…"
- "We didn't want to change this part too much because people are used to it like this…"
- "It will actually be a lot faster than this because this is just our development server…"
- And the best…"This is all fully customizable…"

Vendors are the real masters of usability demonstrations. The good ones can click a back button on a Web browser faster than you can say "404." Marketing departments cannot be blamed, since marketers and sales reps rarely have input into design decisions, and use catch-phrases to mask a growing ignorance of how or why a product was developed in the first place—the exception being product development that is driven by a sale itself.

In-house demonstration suffers from a different problem. Often in libraries, the in-house demonstration is the sole opportunity to not only demonstrate the new service, but also to summarize the entire process of the design: justification, purpose, usability, longevity, the list goes on. Demonstrators might find that they are showing how a product will be used, defending why it is needed, and fighting a new focus group all at the same time. At this stage of development, reliability often suffers as designers enter a second phase of testing: usability consensus.

Usability Consensus

When a usability demonstration goes wrong, designers find themselves tackling a new problem: usability consensus. Usability consensus can also be thought of as reverse-engineering, which is taking the finished product and working backward through its creative stages to justify its existence and its application in the library. The service designer usually blames librarians' negative reactions to new services—or drastically changed old ones—on fear of change, lack of understanding, overly empathetic connections to users, or worst of all, technophobia. The last resort of a designer defending a new product or service is to say "it's better than nothing."

On the other hand, even if blame is aptly placed on librarians, and even though something *is* better than nothing, the service designer has no data on which to base the call for consensus. Hours spent coding, high levels of administrative support, and the admiration of a few key peers might win the day, but this after-the-fact attempt at service acceptance cannot compete with qualitative and quantitative data provided by actual users, including library staff.

In many libraries, the Web is still a mediated tool for research. Self-service, distance learning, and Internet business models might be on the rise throughout information centers, but the expertise, input, and usability test results of a library's own mediators are as valuable as those of patron users.

What do usability tests show? What makes a positive user experience? Remembering that there are no hard and fast rules, the following pages offer a few good ideas to put into practice.

Positive Feedback

Making Web search engines fail is difficult. Billions of Web pages, dozens of languages, and search algorithms enhance a search to ensure positive feedback. Several online catalog developers—and industrious library programmers—are developing new approaches to what is now commonly referred to as fuzzy matching. Fuzzy matching is the ability to turn a failed search into something positive for the user. The main problem with fuzzy matching was suggested by reference librarian Karen Ciccone, who said, "Sometimes 'No titles found' is the right answer."

Unfortunately, without the aid of artificial intelligence, determining whether a library search fails because there is nothing to be found, or because the user has made a mistake is difficult. But fuzzy matching can mean more than just guessing at what the user is looking for; fuzzy matcing programs can be built to ask the user more about what is sought. For instance, a failed Library of Congress Subject Heading Search might suggest to the user that a keyword search would be more appropriate.

If a system expects last name first in an author search, failed author searches might suggest rotating the names searched. Sometimes, automatic help might be preferred, by stripping of initial articles, or the automatic inclusion of a boolean 'AND' in a multiword keyword search. Many search applications in use today spell check automatically, but library

systems prove unforgiving of misspelled terms.

No one likes to think that a Web page might replace the expertise and guidance that librarians offer, but more often users find fault with a system if they finally feel the need to ask for help. As helpful as the reference librarian might be, the system has failed the user because the user had to ask for outside help.

Jargon

A recent omnibus telephone survey of more than 1,000 adults (reported in *American Libraries,* May 2001, p.10) showed that only 49% of those polled knew that becoming a professional librarian requires a college education; only 38% knew that most librarians hold advanced degrees—hard to believe, given the vocabulary that librarians spread throughout their Web service pages (given a trend that associates a high level of unique words and acronyms with a profession that is somewhat educationally overdeveloped). Intolerance of jargon, acronyms, and clever naming conventions is a common result of usability testing.

This intolerance does not mean that users are unfamiliar with acronyms and discipline-focused jargon. The problem is that the acronyms and jargon are usually specific to the library discipline, which is not familiar to the average user. For example, an engineer would likely be familiar with IEEE, The Institute of Electrical and Electronics Engineers; a listing of IEEE resources on an engineering pathfinder probably needs no explanation. But that same engineer likely would not know what ILL or OPAC means.

Librarian Mark Spivey identifies four manifestations of library jargon (Spivey, p.4):

1. Short descriptions and nouns for library resources and services (such as Reference)
2. Library acronyms (such as ILL)
3. Vendor's labels and marketing descriptions (such as Global, Elite, Master)
4. Embedded explanations (see below)

Below is a list of examples that covers acronyms, librarianisms, and phrases that just plain don't make sense when you say them to a patron; next to these words, acronyms, and phases are glib translations:

Service / Resource	**Translation**
Bibliographic Instruction	How do I…?
ILL (Interlibrary loan)	Get it for me
Charge / Discharge	Check out / return
OPAC	Library catalog
Any name for an online catalog	Will nonlocals understand a cute name?
ERIC	Higher education resource
Academic Search Full Text Elite	Full-text now
Boolean operators	All these words / Any of these words

Collections	Library materials
Indexes	Not the ones in the backs of books
Reference	Ask a librarian
Reserves	Course readings
Periodicals	Magazines and journals

The degree to which library jargon interferes with a reference interview transfers directly to the Web service trying to describe that service. Spivey's essay concentrates on what he refers to as embedded descriptions, the latest library attempt at increasing Web usability.

A remedy for unclear vocabulary is to embed descriptions and explanations throughout library Web pages. Some libraries might link terms to an entire glossary of terms. A warning: such a glossary may be rendered impractical by an alphabetical sorting of terms for which most users have no context or understanding.

Spivey's study concludes that embedded explanations can help, but only when the meaning of a label or acronym and the label or acronym itself are in close proximity. "Libraries can become sensitive," he argues, "to the degree that their professional and vendors' vocabularies impede the comprehension of an educated public." (Spivey, p. 2)

The solution could simply be to connect more closely with the audience. Public services staff, used to handling educated and uneducated users, are often disconnected from the creation of the virtual environment that will act in their stead. Moreover, the users themselves are not consulted before a virtual service is released.

Many designers do not develop Web pages with the unsophisticated user in mind. Library vendors, the producers of a growing proportion of library interfaces, rely on library feedback to enhance usability. Designers produce interfaces for educated users, even if libraries must educate the users to use them. Libraries act to shield vendors from user confusion. When a library encounters a poorly designed product, third parties are blamed, bibliographic instruction is altered, or a different product is purchased, with little or no emphasis on making the existing interface more usable.

Writing for the Web

The way people read on the Web is that they do not read at all. Simply put, users prefer to scan. Nielsen's six-shooter on writing for the Web is most clearly stated in one of his older alert-box columns:

www.useit.com/alertbox/9710a.html

- Highlighted keywords
- Meaningful subheadings (not clever ones)
- Bulleted lists
- One idea per paragraph
- The inverted pyramid style, starting with the conclusion
- Half the word count (or less) than conventional writing

The nature of reading is not lost on publishers of most technical documentation; otherwise, all such publishing would occur online and book-

stores would not profit from selling technical literature. A long time will pass before everyone reads and enjoys reading on the Web. Although technology has taken steps forward, libraries have managed to keep their collective eye on content. Regardless, some Web managers continue to hope for a time when technology will catch up to content, rather than vice versa.

Many have waited with faith for a time when large pipes of delivered bandwidth, fast processors, and 19-inch monitors on every desk and in every home would obviate the need to consider the least common denominator user. A cruel irony has invaded those with such faith—PDAs (Personal Digital Appliances), cell phones, and their ilk will change, once again, how people read and how people write for the Web. No longer constrained to desktops, or even laptops, appliances small enough for pockets and wired for use almost anywhere will require new thinking about how to design and maintain Web content.

Research on the Web

Of course, library users come to a library Web site for more than locally created Web publishing. Research on the Web represents, in a way, the flip side of writing for the Web. Nielsen and other usability experts largely ignore noncommercial sites whose main business is directing users to external Web sites. To this day, library Web sites serve primarily as gateways to third-party information resources. Usability experts, on the other hand, take great pains to caution Web site designers against locking users into their sites.

Fortunately, libraries are already past the battle of linking their sites to external information. With the exception of book catalogs, local databases (especially for special collections), and a small percentage of self-published materials, libraries have become great purveyors of information that they no longer own outright, a usability challenge discussed further in Chapter 7.