VIRTUAL REFERENCE
A Work in Progress

Using new technologies and networking capabilities, libraries are transforming their reference services to bring information to the individual user whenever and wherever it is needed. This transformation in reference is truly a work in progress. In Washington State, the Statewide Virtual Reference Project focuses on creating and enhancing virtual reference services in all types of libraries throughout the state and on building the collaborative networks necessary to link library users in Washington with subject specialists and resource collections all over the world.

What is virtual reference?

Virtual or digital reference has been called many things.

Real-time online reference
24/7 reference service
Anytime, anywhere answers
Point-of-need information
In-your-face reference

Basically virtual reference is library information services delivered via the Internet. The delivery methods can include:

E-mail
Web-based forms
Simple chat technologies
Web site "pushing"
Web site co-browsing

A number of libraries are also experimenting with audio and video conferencing and with voice over IP (VoIP), especially where broadband Internet connections are available to users.

For many years, libraries have been providing virtual collections of resources via their own Web sites and delivering reference services through e-mail and Web-based forms. These delivery methods are asynchronous, not done in real-time, requiring that a user wait for the answer to a question.

Current innovations in virtual reference are centered on real-time (synchronous) interactions between librarians and patrons, using software that incorporates chat communication along with the ability to guide a user through a Web search. These technologies represent a fundamental shift in library services—transforming library materials, resources and personnel from building-based services to point-of-need services.

When did libraries start providing real-time online reference?

The history of real-time online reference parallels the history of the Web itself. The Internet Public Library, founded by Joseph Janes at the University of Michigan's School of Library and Information Studies, used a MOO (an interactive system accessible through telnet) starting in November, 1995.

In 1996, Bill Drew at SUNY Morrisville started a chat reference service, using Internet Relay Chat (IRC). Temple University libraries initiated a Web-based online chat service, "TalkNow," in November 1998, using homegrown software developed by students.

At the Florida Distance Learning Reference and Referral Center, librarians experimented with real-time online library instruction using a chat room as a virtual classroom.

In July 2000, Santa Monica Public Library became the first public library to offer chat reference.

Since these early efforts, there has been a phenomenal increase in the number of libraries offering real-time online reference. Two directories of the many real-time online reference services are maintained by Gerry McKiernan and Stephen Francoeur.

Most real-time online reference services borrow technology from e-commerce, adapting the Web contact center software used by retailers like L.L. Bean and Land's End. Use of this software was pioneered by Susan McGlamery of the Metropolitan Cooperative Library System and Steve Coffman (formerly with Los Angeles County PL and LSSI).

Susan and Steve's vision was to enable libraries to network their reference questions, developing tools and strategies for collaborating via the Web. This vision is becoming a reality in three innovative efforts:

- The 24/7 Reference Project, which tackled the issue of 24 hours per day, seven days per week service through a multi-type library consortium. Member libraries share responsibility for staffing the virtual reference desk a minimum number of hours per week, with contract librarians covering the overnight hours.

- Tutor.com's Virtual Reference Toolkit provides software for real-time online reference, as well as a Web Reference Center for after-hours support.

- Question Point, a joint effort of OCLC and the Library of Congress, evolved out of the Collaborative Digital Reference Service. Question Point provides both software for real-time online reference and a structure for library collaboration through its Global Reference Network.

What's the future of virtual reference?

As libraries move closer and closer to the vision of providing information services to users anytime, anywhere, it is important to continue to recognize trends that will shape reference services in the future.

Here are some present indicators of future services:

- Improvements to online reference software and increasing user access to broadband connections will transform chat services into richer audio and visual environments.

- Both Tutor.com and 24/7 Reference are now offering online reference services in Spanish. Service in other high-demand languages will follow.

- The release of NISO standards for networked reference will result in a number of enhancements: increased security and privacy for users, capability for easy transfer of questions, and standard subject headings for knowledge bases.

- As more data from online reference transcripts become available, there will be more opportunities to analyze information-seeking behavior and the effectiveness of various question-answering techniques.

- A "marketplace for reference services" will develop as libraries purchase the information services that they need but do not have the resources to develop in-house.

- Changing staffing patterns (use of paraprofessionals, students, and contract librarians) in tiered reference will free librarians to concentrate on higher-level reference and collection development.

Inevitably, real-time online reference will take its place as one component of a menu of services for library users. Libraries will blend these approaches to reference, depending on the needs and interests of their user communities. Reference librarians will continue to create services that accommodate the varied ways that users seek, find, and use information.

As part of this exciting and transforming work in progress, you are moving your library closer to the vision of "in-your-face" information service that revitalizes the role of the library in the communities it serves!
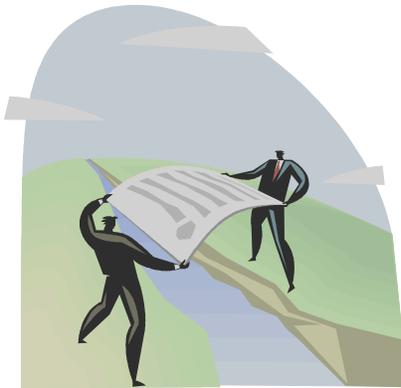
GLOSSARY OF TERMS

AskA Services—Internet-based question-and-answer services that connect users to subject experts.

Co-browsing, Escorting, Pushing—Features of the Web contact center software that allow the librarian and user to view and use Web resources together.

Knowledge Base—A distributed index of question-and-answer archives from all the individual reference services participating in a consortium. The KBs can be both local and global.

Metadata—Literally "data about data," used to facilitate the management and sharing of materials on the Web. In the virtual reference context, metadata is applied to questions to facilitate their transfer to another library or to a subject expert.

Reference Front Ends—Content-rich Web pages that will answer most users' questions before using the live chat capability. Retailers using Web contact center software assume that 80% of incoming requests will be handled by their Web pages.