

Virtual Reference

By Richard W. Boss

Virtual reference is online reference service that enables library patrons to ask reference questions through a library's Web site. The user may be at home, in an office, at school, or in a library. Some virtual reference services also place answers to frequently asked questions (FAQs), selected reference tools, and access to selected databases on the Web site. The question answering service using Internet technology is the essential component, without which the use of the name "virtual reference" is misleading.

An example of a service that uses the term "virtual reference," but is not, is the Virtual Reference Desk of the U.S. Senate (<http://www.senate.gov/pagelayout/reference>). While it provides a great deal of useful information about the Senate and its activities, there is no opportunity to ask questions of reference librarians.

History

Virtual reference was introduced more than a decade ago. The best known of the early efforts was the Internet Public Library (www.ipl.org) a service launched in 1995 by the University of Michigan's School of Information and Library Studies. Initially an experiment, it is now a well-established service that is a collaborative effort among four schools of library and information science. As of January 1, 2007, the service host for the program changed to the Drexel University College of Information Science and Technology. The service provides a variety of online resources arranged in broad subject areas, a number of pathfinders, an extensive FAQ section, and a Web form for asking reference questions. IPL has a staff of volunteers that answers questions, usually in no more than three days. IPL can be accessed directly or through a link on a library's Web site. Despite its name, many academic libraries link to IPL.

Several public libraries initiated “ask a librarian” virtual reference in the late nineties. Since that time, hundreds of public and academic libraries have joined them. For the first several years, the libraries provided an e-mail address or a Web form for patrons to ask questions from anywhere at any time. Reference librarians, usually those already working regular hours at reference desks, would work on questions submitted when the library was closed or that could not be answered immediately as time permitted. Most libraries also added other components to their virtual reference service, especially knowledge-bases online resources.

The CLEVNET consortium in Ohio launched the first 24/7 virtual reference service in June of 2001. With funding from the State Library of Ohio and the participation of many of the state’s public libraries, the service went statewide in 2004. The service is called KnowItNow (www.knowitnow.org). It had answered more than a quarter of a million questions by the end of 2006. General reference is available all hours; assistance by subject specialists is available from 9:00 a.m. to 5:30 p.m. Monday through Saturday. The service is available in English or Spanish to anyone by merely entering an Ohio zip code.

New Jersey’s Q and A NJ (www.qandanj.org) was launched as a statewide 24/7 virtual reference service in October of 2001. It was made possible by sharing responsibility among reference staffs at scores of public and academic libraries and at a reference center. There are two question forms, one for general users and another for college students seeking help with coursework. The service now also offers access to a number of databases. Unless connected from a library, a patron must enter a public or academic library barcode number to access the service. Q and A NJ seeks to answer most questions online within 15 minutes. It does not answer questions that involve extended research, but will get the requestor started.

Forms of Communication

Initially, the most common forms of communication between a remote library patron and a reference librarian were e-mail and online Web forms.

While ubiquitous, e-mail does not offer the instantaneous response that library patrons may seek. It is also difficult to conduct an effective reference interview using e-mail because many questions require clarification. It may take three or four exchanges just to determine what the library patron really wants.

A Web form is somewhat better than e-mail because it can be designed to elicit all of the needed information, including the all-important “needed by” information.

In the last four years, live, interactive chat was tried by many libraries to overcome the drawbacks of e-mail and Web forms. However, chat software was designed for one-on-one conversations among friends, not for high-volume question-answering services that must be able to queue and route questions. Nor do they offer a knowledge base of frequently asked questions (FAQs) with answers and electronic resources.

Increasingly, libraries are turning to Web contact center software. More than 50 companies have been supplying such software to online retailers such as L.L.Bean, Lands End, and major insurance companies. The software was designed for answering questions and providing interactive customer service. It queues and routes Web calls to the next available staff member, allows a staff member to push Web pages to service users, supports the building and maintenance of knowledge bases, and allows questions and answers to be captured for inclusion in a FAQ file. Many of the Web call center products also include VoIP (voice over Internet Protocol) so that voice communications is possible. A particularly attractive feature of some

Web contact center software is co-browsing. It enables a reference librarian and a patron to share the same Web pages, including online databases and other services that require authentication.

Among the most widely used Web contact center software packages for libraries are Ask A Librarian from Tutor.com (www.tutor.com/products/aal.aspx) and VRLplus from Docutek (www.docutek.com/products/vrlplus/index/html). Tutor.com, which has been offering homework assistance and tutoring for a number of years, purchased its virtual reference product from Library Systems & Services in 2003. Tutor not only offers software, but also back-up online reference staffing. Docutek is a subsidiary of SirsiDynix. The cost of the products varies greatly based on the size of the library and the number of reference librarians that can be online simultaneously. It may exceed \$10,000 for libraries that wish to have multiple reference librarians online simultaneously.

A library that already has a virtual reference service and wishes merely to offer live chat, should consider boldchat (<http://www.boldchat.com>), a software package that leases for as little as \$25 per month.

The typical hardware requirement is a small Web server costing no more than \$4,000.

Knowledge Bases and Linking Tools

A library or consortium may choose to build a knowledge base as part of a virtual reference service. There are tools to facilitate the effort. The most widely used appears to be the Librarian's Index to the Internet (www.lii.org). LII has organized information into 15 broad categories and hundreds of sub-categories. A library can utilize the index as a basis for organizing its own knowledge base. It can also use the many links that LII has created to information sources.

AskA+ Locator (<http://www.vrd.org/locator>) organizes sites by subject matter. The list is in alphabetical order by subject, and then title name. Links take searchers to the resources. The service was started by the Syracuse University Information Institute in 1997. OCLC has been collaborating with it since 2002. As of early 2007, the VRD has moved to WebJunction, the online community dedicated to emerging technology and training needs of librarians. The URL remained unchanged as of early 2007.

Solo and Collaborative Reference

Virtual reference can be provided by a single library (the “solo” approach) or it can be a collaborative effort among many libraries.

The Solo Approach

When the service is provided by a single library, the service usually is available only to its own patrons. Access to online resources and a means to submit questions typically is 24/7, but responses to questions submitted after library hours are usually returned no earlier than the following day. Some libraries have found that it is more realistic to commit to two-day service. The main advantage to the solo approach is that a library determines its own policies and procedures; therefore, no compromises with other libraries are necessary.

Some libraries that have taken the solo approach accomplish 24/7 virtual reference by contracting with a commercial service that employs librarians.

The Collaborative Approach

A collaborative approach may involve as few as two libraries. When that is the case, 24/7 response is difficult to achieve, but it may be possible to extend the response hours when the libraries have different hours because of differences in budgets or because they are in different time zones. More commonly, the two-library approach involves libraries with different

collection strengths and staff subject expertise. The libraries will need to agree on policies and procedures. Particularly important is agreement on the level of service because a library's reputation may suffer if the level of service extended by its partner is better or worse than its own.

The most common way to achieve 24/7 response is to participate in a consortium of libraries over a large geographic area. That spreads the burden more broadly and results in greater collection resources and staff expertise than just two libraries can achieve. It does mean that a library has to adopt the policies and procedures of the consortium even when these are not consistent with its own preferences. At least 15 state libraries were sponsoring statewide virtual reference service as of mid-2007.

In any collaborative virtual reference, the issue of access to licensed databases must be examined. Many licenses limit access to patrons of the subscribing library. Unless the participants limit access to the databases to which both/all subscribe or relicense the databases as consortium subscriptions, the patrons in the participating libraries will not have comparable resources available.

Examples of Collaborative Virtual Reference

There are a number of collaborative reference services, most coordinated by state library agencies. That of New Jersey has already been mentioned. Colorado's (www.askcolorado.org) is available in both Spanish and English). Any Colorado resident may access the service 24/7. The task of responding is shared by 43 participating libraries, including public, academic, school, and special libraries. The Colorado program was launched in 2003 with funding from the Library Services and Technology Act (LSTA) and contributions from the participating libraries. The software used is Ask A Librarian from Tutor.com (www.tutor.com/libraries). Tutor.com also provided Ask Colorado with after hours service and Spanish language service from its "Librarians by Request" service until mid-2006. At that time, the entire service was outsourced

to Tutor.com.

Some virtual reference services focus on specific areas. For example, Government Information Online (<http://govtinfo.org>) specializes in finding government information sources of all kinds, and answers questions through chat or e-mail. It is a free service that is supported by approximately 30 public, academic, and state libraries. All of the participating libraries are official depository libraries.

There are also virtual reference services that target special audiences. Among them is a collaborative virtual reference service that serves visually handicapped persons. Known as InfoEyes (www.infoeyes.org), it is a collaborative effort among approximately 20 libraries for the blind.

The National Library of Canada coordinates a nationwide virtual reference service called Virtual Reference Canada (<http://www.collectionscanada.ca/vrc-crv/index-e.html>). There are more than 320 participating libraries.

The largest collaborative virtual reference is global in scope. It is QuestionPoint (www.oclc.org/QuestionPoint), a joint effort of OCLC and the Library of Congress that is based on the Collaborative Digital Reference Service launched by the Library of Congress and 15 partner libraries in 2000. The collaboration between OCLC and LC began in 2001. QuestionPoint is not only a virtual reference service; it is a supplier of software tools.

QuestionPoint

There are two major components to the QuestionPoint virtual reference service: Reference Management Service and 24/7 Reference Cooperative.

A library participating in the Reference Management Service receives software that enables it to offer virtual reference support directly from its Web site by e-mail, Web forms, and

chat; and to create and maintain a local knowledge base. There are cooperative tools that enable a library to work collaboratively with other libraries. There is also access to a global knowledge base built by the libraries that participate in the program.

24/7 Reference is an around-the-clock reference service provided by libraries that choose to participate. A library commits a minimum number of hours of reference assistance to the service in return for access to reference groups that may be a local consortium, a statewide program, or the global network.

To join QuestionPoint, a library fill out a subscription order form on the site. There is a fee for participating. A library may join directly or as part of a statewide service or consortium. Members of statewide services and consortia pay less than individual libraries.

More than 1,800 libraries in 20 countries were participating as of mid-2007. QuestionPoint's interface is available in 14 languages. Twelve states' statewide services were linked to QuestionPoint as of mid-2007: California, Delaware, Illinois, Maine, Maryland, Montana, New Jersey, North Carolina, Oregon, Pennsylvania, Washington, and Wisconsin. In addition, there were regional consortia in Arizona Indiana, Kentucky, New York, and Texas.

OCLC regional networks offer workshops on OCLC QuestionPoint service. They are designed to provide an understanding of how QuestionPoint works, how it can fit into a library's current reference service, and how to administer a QuestionPoint account and customize it. They usually are half-day workshops.

Outsourcing Virtual Reference

A library or consortium offering virtual reference may choose to outsource after-hours virtual reference or all virtual reference. The leading vendor is Tutor.com (www.tutor.com/libraries). It has been offering 24/7 and after-hours virtual service to individual

libraries, consortia, and statewide virtual reference programs since 2003. It has been providing all 24/7 virtual reference service for Connecticut's statewide InfoAnyTime and Colorado's AskColorado since mid-2006.

Virtual Reference Guidelines

The Ad Hoc Committee on Virtual reference of ALA's Machine-Assisted Reference Section has developed a set of guidelines for implementing and maintaining virtual reference services (<http://www.ala.org/ala/rusa/rusaprotocols/referenceguide/virtrefguidelines.htm>) defining the issues that must be addressed in planning virtual reference. It is unique among the many sources available on the Web in its concern for protecting the privacy of library patrons. The guidelines are based on those developed by Bernie Sloan and set forth in her article "Electronic Reference Services: Some Suggested Guidelines, *Reference & User Services Quarterly*, 38 (1) 77i-81, summer 1998.

Training Virtual Reference Librarians

Washington State has developed a unique training curriculum that addresses core competencies for library staff providing virtual reference service. "Named "Anytime, Anywhere Answers," it is designed for both workshops and for delivery via the Web. Googling "Anytime, Anywhere Answers" is the fastest way to find information.

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