

VIRTUAL REFERENCE:

WHERE DO ACADEMIC LIBRARIES STAND?



In spite of the types and sizes, academic libraries must find ways to cope with the shortage of staff and budget cuts, while still providing their best service against all odds.



By Sharon Q. Yang
and Heather A. Dalal

This study investigated the current practice of virtual reference (VR) on the web by academic libraries of 4-year colleges and universities in the U.S. and Canada. The authors performed a content analysis by examining websites and collecting data on VR on the websites of libraries, based on a random sample of 362 institutions from *Four-Year Colleges 2013*. The research took place in the late spring semester 2013.

WHAT IS VR?

Virtual reference (VR) is defined as a “reference service initiated electronically, often in real-time, where patrons employ computers or other Internet technology to communicate with reference staff, without being physically present.”

Reference and User Services Association (2004), “Guidelines for Implementing and Maintaining Virtual Reference Services,” available at ala.org/rusa/resources/guidelinesvirtrefguidelines [accessed Feb. 27, 2014].

The methodology differs from that of a recent report published by the U.S. Department of Education's National Center for Education Statistics in January 2014. The report, "Academic Libraries Survey," included VR. The method for gathering data was a questionnaire sent to the directors of 3,793 academic libraries in 2012. The findings indicate that in 2012, 75% of the academic libraries supported VR. About 27% to 59% provided chat, and 24% provided text messaging. The results contained in this paper, conducted in a different way, fall within the range of the survey results, corroborating and verifying the evidence. Other related studies are included in the reference section.

The research described in this article is unique, because there are no previously conducted comparable studies in terms of goals, scale, scope, and methodology. The findings from this study can be extrapolated to the total population (college and university libraries in North America).

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METHODOLOGY

The targeted population in this study includes all the 4-year colleges and universities in North America (U.S. and Canada). For this purpose, the authors chose *Four-Year Colleges 2013* as the population base. It has the most comprehensive listing of 4-year colleges and universities in North America and is most likely to represent the population for this study. A total of 362 institutions were randomly selected. This is 14% of the study's total population.

The randomness in sample selection guarantees the unbiased representation of the findings about the population as a whole. A 14% sample size produces findings that represent the real population with a confidence interval, or margin of error, of +/- 5 at a 95% confidence level.

The authors examined the library's website for each of the 362 institutions in the sample, gathering information that identified the library's operating hours and determined the following:

1. Whether the library provides or advertises reference on the main webpage, along with and the terminology used to describe the reference services
2. Whether the library provides chat and related information—such as chat box location, chat provider (in-house vs. consortia), chat hours—and the chat program used
3. Whether the library provides other forms of virtual reference through email, phone, text messaging, instant messaging (IM), video-chat conferencing, and interactive knowledgebase, etc.

The authors also gathered information about the institutions from *Four-Year Colleges 2013*, including the size of the library population served (number of undergraduate students), annual comprehensive cost for students (tuition and room/board), highest degree offered, and type of institution (private, public, and for-profit). The data analysis was accomplished by simple mathematical tabulation and analysis of variance (ANOVA), a statistical method to compare two or more groups for significant differences.

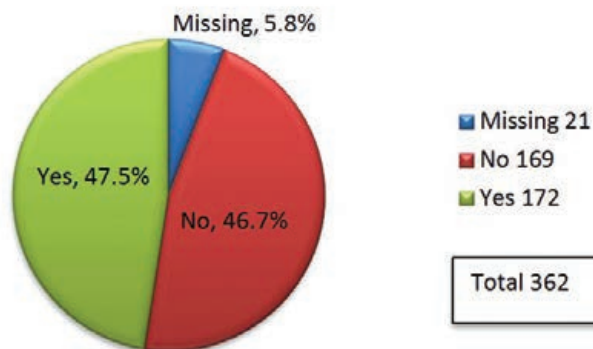
The State of VR in Academic Libraries

The results are presented on the following pages in a visual format, highlighting key observations for helping libraries benchmark themselves against their peers.

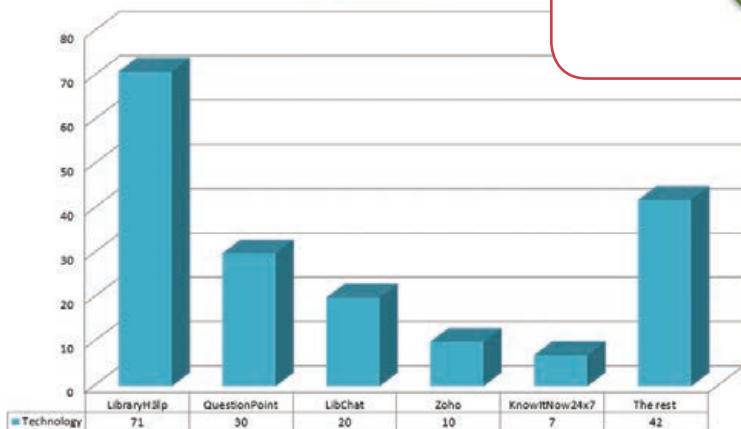
CHAT SERVICES

About 47% of academic libraries provide chat reference service (vs. 27% to 59% in the "Academic Libraries Survey"). Roughly 46% do not provide chat reference. The "missing data" refers to 5.8% of the libraries in the sample, which either had no institutional or library websites available online or had sites that were not accessible without a login.

Libraries That Provide Chat



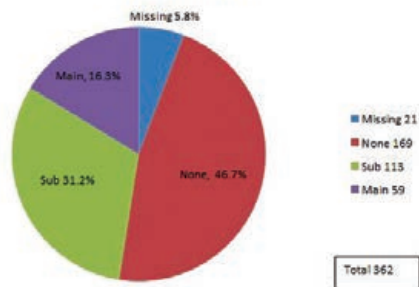
Chat Technology



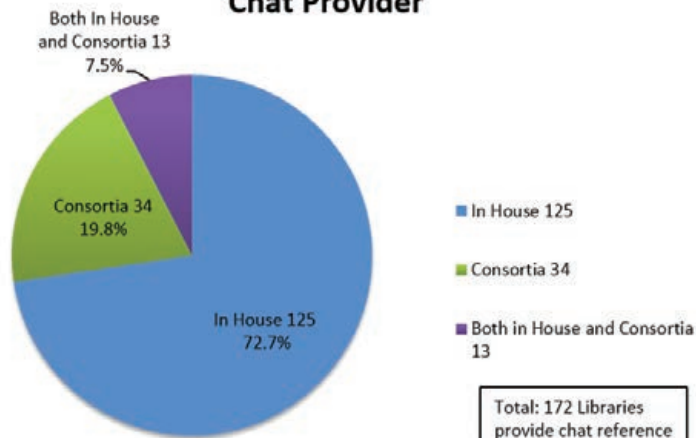
The most popular and top five chat programs are LibraryH3lp, QuestionPoint, LibChat, Zoho, and KnowItNow24x7.

About 16% of the libraries placed the chat box on their main library webpage. Roughly 31% of the libraries placed the chat box on a subpage of their website.

Chat Location



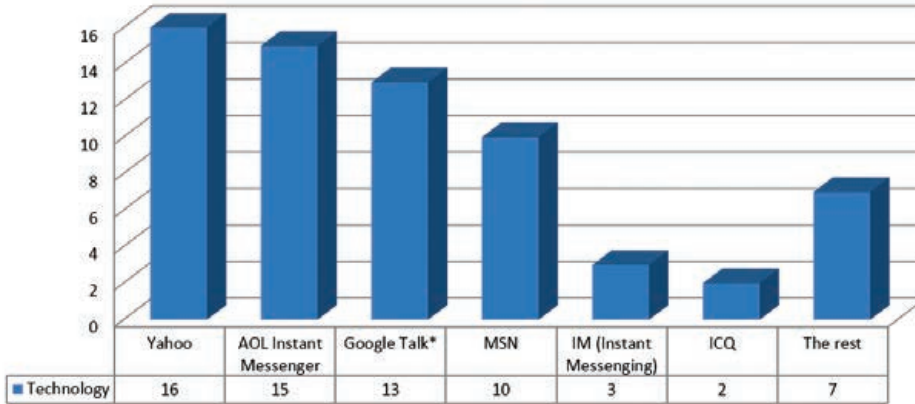
Chat Provider



Of the libraries that offer chat reference services, 72.7% use in-house staffing, while 19.8% offer chat via a consortium effort. Thirteen libraries (7.5%) have both locally staffed and consortia chat reference staffing.

OTHER VR TECHNOLOGIES

Popular IM Technologies

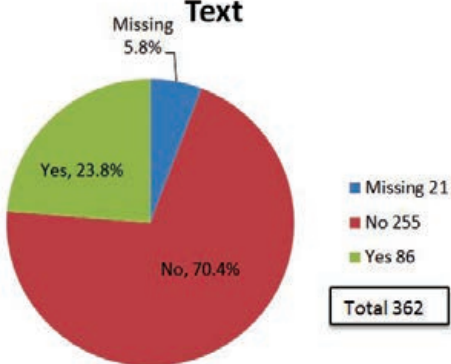


*Google Talk was the active Google supported service at the time data was collected. It is now discontinued and replaced with Google Hangouts.

About 6% of the libraries provide instant messaging (IM) services for virtual reference (VR). The most popular IM services are Yahoo, AOL Instant Messenger, Google Talk, and MSN.

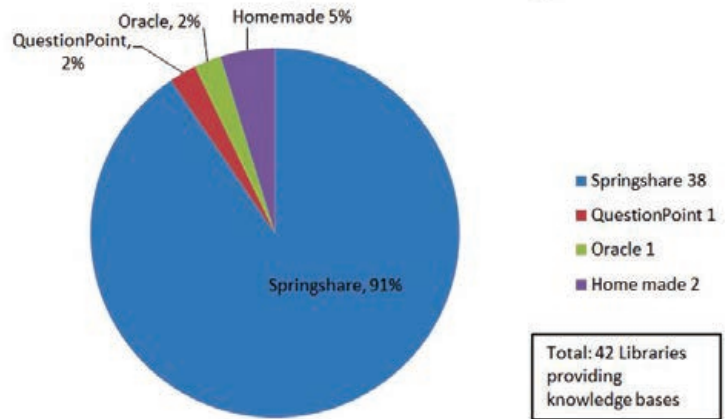
About 11% of the libraries have an interactive knowledgebase on their website. The most popular knowledgebase program is LibAnswers from Springshare.

Text

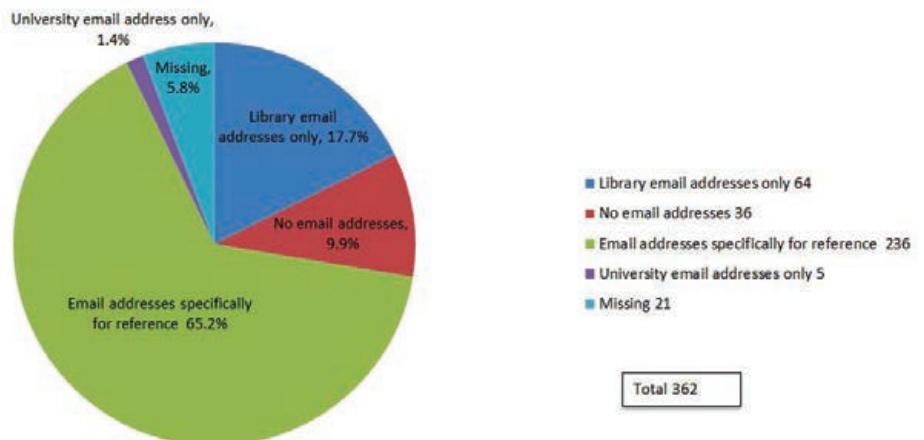


About 23% of the libraries use text messaging for virtual reference (VR).

Knowledge Base Technology



Email



Roughly 65% of the libraries provide email addresses specifically directed to reference librarians for research help. About 17% provide only library general email addresses. About 1% provide only institution email addresses, while 9.9% do not provide any email address or email form to users.

REFERENCING REFERENCE

WHAT'S YOUR PHONE NUMBER?

Of the library websites studied, the following was discovered:

- 59% provide telephone numbers specifically for research help.
- 22% provide only the telephone numbers for general inquiry.
- 3% provide only telephone numbers for their parent institutions.
- 10% of the libraries do not list any telephone numbers at all.
- 1 library provides video chat (Skype) to international students living abroad.

Sixty-eight percent of the libraries link to or list reference services on their front webpage. About 26% do not link to or list reference services on their front webpages. (This 26.2% may offer the reference services on the subpages of their websites.) The most popular terminology for listing reference services on the homepages include "Ask a Librarian," "Chat," "Ask Us," "Research Help," "Contact Us," and "Need Help?"

Reference on Main Page



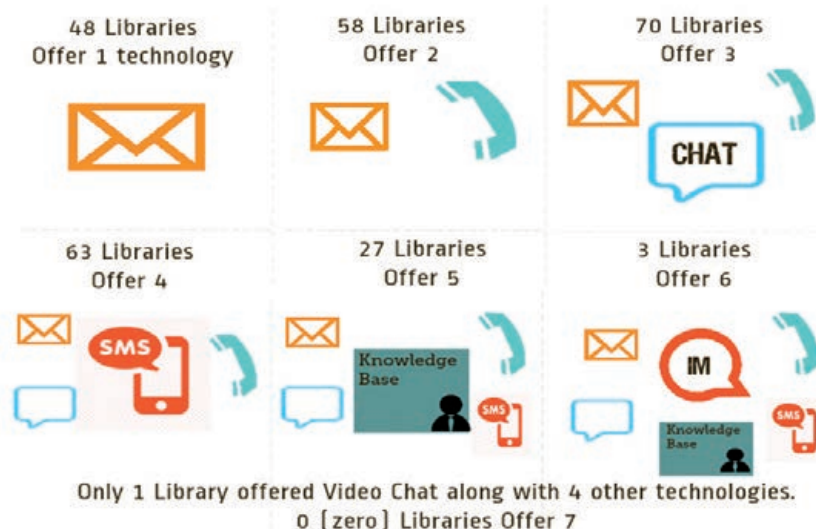
ASSESSING TECHNOLOGICAL SOPHISTICATION

A total of seven types of technologies are identified as tools delivering VR: chat, instant messaging (IM), knowledgebase, email, telephone, video chat, and text messaging. In this study, it is assumed that the use of more technologies indicates more technological sophistication.

Staying up-to-date with technologies will help librarians find new and affordable ways to deliver reference services.

Number of Technologies Offered

Email, Phone, Chat, Text, Knowledge Base, Instant Messenger, & Video Chat



SIGNIFICANT VARIANCES—HOW DO YOU STACK UP?

Analysis of variance (ANOVA) is a statistical method that analyzes and compares the differences among the group means and determines if the differences are statistically significant. The authors used ANOVA to analyze the data. They found statistically significant differences between the groups in the areas below. Some public universities are also large institutions with more undergraduates and advanced degrees.

Chat

It was determined that chat is significantly more likely to be offered by libraries in the following:

- Institutions with more undergraduates
- Institutions offering advanced degrees
- Public institutions, as opposed to private and for-profit institutions
- Private institutions, as opposed to for-profit institutions

No visible relationship was observed between the chat services being offered and the cost to attend the institution.

Reference on the Library's Front Webpage

The study found that the following types of libraries are significantly more likely to place reference on their front webpage:

- Libraries in institutions with more undergraduates
- Libraries in institutions with advanced degrees

- Libraries in institutions with a higher cost (for students)
- Libraries affiliated with public institutions as opposed to both private and for-profit institutions
- Libraries affiliated with private institutions as opposed to for-profit institutions

Library Hours

Libraries in the following categories are significantly likely to be open more hours:

- Libraries in institutions with more undergraduates
- Libraries in institutions offering advanced degrees
- Libraries in institutions with higher cost (for students)
- Libraries in public institutions, as opposed to private and for-profit institutions
- Libraries in private institutions, as opposed to for-profit institutions
- Libraries that provide chat reference
- Libraries that put reference on the front webpage

Technological Sophistication

Increased use of technologies is not in positive proportion to the institutional characteristics. Institutions with more undergraduates, advanced degrees, or that are tax-supported, use three to four technologies for virtual reference (VR).

Conclusions


What is the lesson to be learned from this study? Assuming longer hours of operation, more technologies, and chat reference provision are indicators of better service, statistically, libraries affiliated with large, more expensive, or public institutions that offer advanced degrees are doing the best job in remote/VR on the internet. Good services are important selling points in recruitment and are indicators of quality education. The libraries in the smaller and less expensive institutions are at a disadvantage in service offerings, since VR is labor-intensive, and some programs require technical expertise and incur cost. Limited by decreasing financial resources, smaller academic libraries face challenges in providing equal

or comparable services to those libraries in large public institutions.

It may be worthwhile to explore how to overcome some of the obstacles and find solutions for improving reference services on library websites, especially for small academic libraries. In spite of the types and sizes, academic libraries must find ways to cope with the short-

Institutions with more undergraduates, advanced degrees, or that are tax-supported, use three to four technologies for virtual reference (VR).

age of staff and budget cuts, while still providing their best service against all odds. In doing so, creativity and innovation are required. Pulling resources together is one way to maintain excellent services such as organized consortia chat reference programs. Staying up-to-date with technologies will help librarians find new and affordable

ways to deliver reference services. One newer practice that is beneficial to library users is the concept of shared workspaces. Librarians can provide in-depth reference assistance with popular and freely available conferencing tools. Only through excellent services can libraries prove their relevance to the missions and goals of their institutions in the digital age. 

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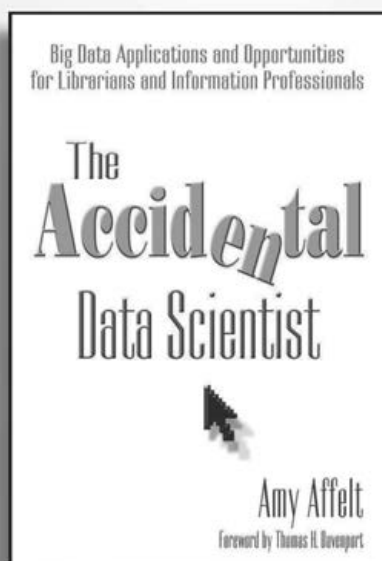
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