GETTING YOUR FAQs STRAIGHT:

HOW TO MAKE YOUR KNOWLEDGEBASE
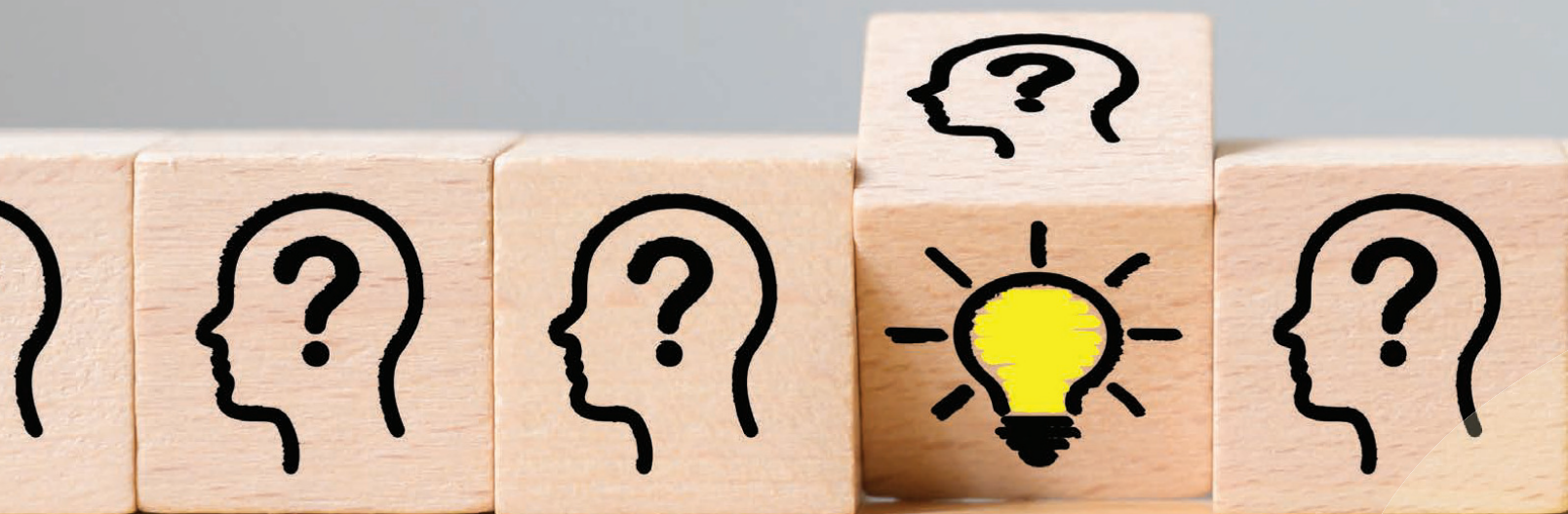
BY **MATT LABRAKE**

Even students living on campus are likely to be enrolled in at least one online course.

POWER VIRTUAL REFERENCE

As academic libraries embrace emerging virtual reference technologies and service modules to support the digital preferences of today's students, it behooves us to reflect on a more basic tool that has huge implications in preparing for a library of the future. If designed and implemented effectively, a library knowledgebase can serve to improve the efficiency, accuracy, comprehensiveness, and sustainability of virtual reference services and embedded library instruction. Additionally, per recent trends in higher education related to AI-based chatbots in distance learning, the library knowledgebase may eventually double as the "brain" of an artificially intelligent live-chat supplement serving to sustain increased demand and provide around-the-clock availability.

The Current Landscape

Even a quick survey of the current landscape reveals the three core trends at play: distance education, emerging technology, and evolving library services.

Distance education—Data from the National Center for Education Statistics shows almost one in three learners taking an online course and one in seven taking all of their courses at a distance. Berkeley College (a career-focused institution serving more than 7,000 students at seven campuses in New York and New Jersey, plus Berkeley College Online) sees even larger online enrollment trends, with 45% of students taking at least one online class. From recent high school graduates looking for convenience and flexibility to adult learners returning to school while working a full-time job and raising children, today's students are increasingly expectant of 24/7 access and support.

Emerging technology—Across the higher education landscape, technological innovation is booming. Librarians are keeping pace, leveraging emerging technologies such as virtual reality (VR), augmented reality (AR), 3D printers, blockchain, and AI. As campus libraries evolve to incorporate makerspaces (featuring digital media labs, the Internet of Things, and robots), it's important to pay equal attention to our virtual library service offerings.

Evolving library services—Berkeley College Libraries offer mobile-friendly collections of databases; ebooks, digital magazines, and streaming media; a robust embedded librarian program; and interactive instructional learning objects available at the point-of-need in the learning management system (LMS). Additionally, Berkeley librarians provide an array of virtual reference options for our distance learners and a growing population of campus-based students who prefer to seek help online. These services include live chat, videoconferencing, and text-messaging support available 90 hours a week; online appointment booking; course-integrated discussion boards in the LMS; and a wealth of tutorials and research guides. We expand our services regularly as new tools become available; recently, we incorporated proactive chat widgets, platform-integrated screensharing, and automated text-messaging response functionality.

Virtual reality headsets for loan are just the start of a library's immersive future.

As our students become even more native to the digital landscape in years to come, academic libraries must continue to embrace emerging technology to expand our virtual reference offerings. Just as some libraries now meet students in 3D virtual worlds, soon we may be donning mixed-reality headsets to provide support in fully immersive computer-generated environments. We might find ourselves supplementing live chat with AI and developing integrations with voice assistants (such as Alexa and Siri).

FAQs—The Backbone of Virtual Reference

Let's step back 20 years and reflect on one of the original forms of online support, a knowledgebase of FAQs. A thoughtfully designed knowledgebase can improve the efficiency, accuracy, comprehensiveness, and sustainability of virtual reference and embedded instruction, while serving to make an academic library future-ready.
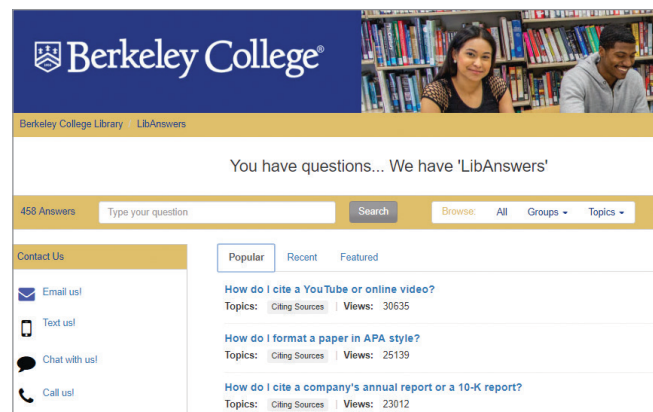

FAQs are the foundation of the library's knowledgebase.

The *Oxford English Dictionary* defines a knowledgebase as a "store of information available to draw on." Indeed, the Berkeley College library knowledgebase serves as a central information hub for our students, faculty, staff members, and librarians alike. Boasting media-rich FAQs created intentionally to support common inquiries and troublesome assignments, tagged with metadata to increase discoverability, and embedded throughout the library's instructional materials and electronic resources, the library knowledgebase is a go-to place for our college community. Over time, librarians have been coached to leverage FAQs to increase speed and precision in synchronous virtual support, providing greater opportunity for scaffolded instruction and authentic learning.

In 2014, Berkeley College Libraries decided to overhaul our knowledgebase, choosing Springshare's LibAnswers as a platform. Our Virtual Reference Committee was charged with the design and implementation of the new knowledgebase, allowing a team of online and campus-based librarians to work collaboratively toward this purpose. Five years later, the FAQs in our revamped library knowledgebase get tens of thousands of views each month, resulting in an enhanced virtual reference experience for both our patrons and librarians.
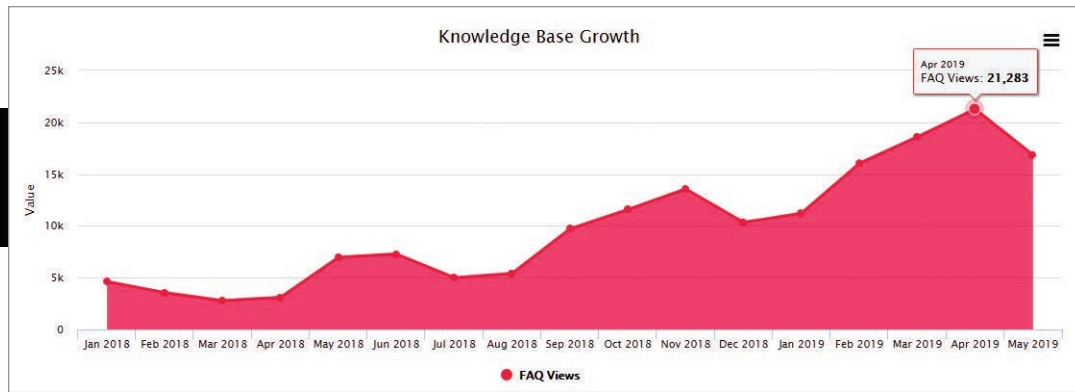
Use of the Berkeley College knowledgebase spiked after the library revamped its FAQs.

You Can Too

Reflecting on our successful experiences and best practices, this article will proceed to address design strategies for those just getting started or looking to improve the discoverability of a knowledgebase. Following that, we'll share implementation strategies demonstrating how to leverage a knowledgebase to improve synchronous and asynchronous virtual reference.

Design Strategies—Four Tips for Developing a Quality Library Knowledgebase

1. Use data to focus your efforts. Identifying content for your knowledgebase shouldn't be burdensome. Many libraries will already track in-person reference interactions in some capacity, and most live-chat technologies will archive transcripts. Create FAQs to support your patrons with answers to questions they are asking regularly. Our Virtual Reference Committee "scrubs" questions from an array of datapoints each semester and creates FAQs to support trending questions. We use a basic spreadsheet to track content-creation efforts as new FAQs are queued for development.

2. Ensure FAQs contain differentiated content and support advanced learning. For each question, we attempt to provide a "quick," "more," and "ultimate" answer. The first sentence or two of the FAQ should give a quick answer to the question, followed by a more in-depth explanation, followed by additional information, embedded videos, and links to external websites for those who opt to expand their knowledge on a topic. Many FAQs are enhanced with screenshots and multimedia, serving the dual purpose of supporting virtual reference and embedded instruction.

3. Tag FAQs with metadata to increase discoverability. Just as you would add subject headings to a bib-

A search for "Starbucks" in our discovery system with suggested results populated by an FAQ widget

liographic catalog record, tagging your FAQs with keywords will ensure your patrons can find them. Try to think like your students. For instance, our library FAQ on how to find company information is tagged with the course in which this kind of research is taught (e.g., BUS 1101), databases in which this kind of research is conducted (e.g., Mergent), and well-known publicly traded companies (e.g., Amazon). In addition to maximizing discoverability of information in our library knowledgebase, the effort spent on adding metadata pays off doubly as we've now added an app widget into our discovery service that retrieves related FAQs.

4. Establish a peer-review process and reoccurring quality-control initiative. Following the same best practices as when publishing information to a library website or when creating research guides, review by a colleague is an easy way to avoid mistakes and enhance quality. It's also important to review all FAQs in your knowledgebase regularly. This ensures the library knowledgebase remains up-to-date and accurate.

Implementation Strategies— Four Tips for Capitalizing on Your Efforts

1. Use FAQs to support virtual (and in-person) reference and instruction. Having diligently created FAQs to support common inquiries, you can now leverage your hard work when supporting your patrons. Asking a student to "take a look at this information and let me know if you have any questions" may eliminate the need for you to walk through the same steps for the hundredth time in a given week. As Berkeley librarians have become increasingly aware of the value in our expanding knowledgebase, we've seen a gradual decrease in the average time spent

chatting. Additionally, librarians who are less versed in a specific subject area can draw on the expertise of their colleagues by reviewing FAQs to ensure accuracy in their responses. Ultimately, we can see that librarians are spending more time teaching higher-level information literacy skills in their interactions with students when FAQs are used for basic support.

2. Embed FAQs everywhere. One of the more innovative features of LibAnswers is the ability to create custom widgets of FAQs that can be embedded at the point of need. Throughout our electronic resources, instructional materials, and LMS, students and faculty members will find answers to the most common questions at their fingertips. As we continue to place instructional and how-to FAQ widgets in databases, libguides, tutorials, and online courses, we see students becoming more and more self-sufficient in finding needed information on their own.

SWOT analysis libguide with embedded FAQ widget

LibAnswers flier highlighting text availability

3. Repurpose your knowledgebase as an internal training tool. When onboarding new online librarians at Berkeley College, I ask them to browse our FAQs as part of their training. This ensures that new librarians are prepared to support our population's specific information needs, while emphasizing the importance of this resource as a central information hub. We've also created an internal password-protected knowledgebase for librarians; it highlights policies, account information, shared materials, instructional strategies, and more.

4. Get creative with automated text responses that link to FAQs. Another innovative feature of our virtual reference platform, LibAnswers, is the ability to set up auto-responders. When patrons text a specific word or phrase to our text number, they can immediately receive a text back with relevant information. For example, if someone texts the word "Flipster" to our text number, he or she will receive a response with a link to download our digital magazine app. As auto-responses are limited to 150 characters, providing a link to an FAQ serves as an ideal way to relay more in-depth information through this process. For example, a student can text "topic" to our number to receive an auto-response with a link to an FAQ on strategies for selecting a topic for a research paper.

Planning for a Library of the Future

As we look to the future, the demand for around-the-clock online access and support promises to grow exponentially. We already see hundreds of higher education institutions around the country embracing artificially intelligent chatbots as a means to support admissions, financial aid, student services, and more. In recent years, we've seen chatbots used to support learning (for example, Georgia Tech's virtual teaching assistant, Jill Watson). It's only a matter of time before academic libraries turn to chatbots as a way to supplement virtual reference services by providing answers to routine questions.

The starting point for the development of any chatbot is the creation of a "brain" or depository of information. Initially, the bot's intelligence is limited to the information it is programmed to access. When a chatbot is asked a question, it responds by drawing on the knowledge available to it at that time. Thus, if the bot is asked a question to which it doesn't know the answer, it will either avoid the question or pass it on to a human. Regardless, with each interaction, the bot learns and continues to get smarter over time.

With this in mind, in order for a library chatbot to be effective, a central information hub is needed. A well-designed library knowledgebase can serve this purpose. To be clear, I don't believe a chatbot will ever replace the need for qualified

librarians and the scaffolded, personalized instructional guidance we provide. However, it's very likely that libraries will embrace AI in the years to come as a cost-effective way to field repetitive reference questions, freeing up time for librarians to focus on more in-depth research inquiries.

Closing Thoughts

While a library knowledgebase may seem like old news, it remains the single most important tool in our virtual reference toolkit. As technological innovation thrives, tools will continue to emerge that allow us to take online reference and instruction to new and exciting levels. In the future, we will likely find ourselves communicating with students in VR environments and programming artificially intelligent voice assistants to provide real-time support. However, regardless of the technology used or the methodology of interacting with our patrons, having a central depository of information in place can serve to improve the efficiency, accuracy, comprehensiveness, and sustainability of our support. A library knowledgebase will forever remain the backbone of virtual reference services.

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