

Lifting the Blackboard Curtain: The Benefits of Providing Online Homework Help Through Public Libraries[1]

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Background

In 2001, the California State Library hired a research firm to conduct a qualitative study designed to inform the continuing development of a statewide young adult services program. A series of twenty-nine focus groups, made-up of a total 193 teens, ages 13-18, were held throughout the state. The focus groups revealed that teens primarily visit the library to do research for school projects and to complete homework assignments. Although several public libraries throughout California already offered in-person homework assistance, the study established the need for a more formalized statewide homework help program.

As a result, California launched the first pilot project in the country to offer statewide online homework assistance to students grades 4-12. A vendor, Tutor.com, was contracted to provide the service in English and Spanish during weekday afternoons and evenings and on weekends.

To connect to an online tutor, students click on a link from their local library's website, indicating their grade level and the subject of that day's homework assignment (e.g., math, social studies, grammar). A tutor with the requisite subject expertise then logs on and proceeds to help the student through an interactive whiteboard and shared websites. Tutors are certified teachers, college professors, professional tutors, and graduate students, all of whom have undergone stringent third-party security checks. Although some repeat customers may eventually learn to recognize certain tutors, the sessions are, for the most part, anonymous—a feature that most kids appreciate.

There are 181 public library jurisdictions, representing over a thousand service outlets (i.e., central libraries and branches), in the state of California. To test the feasibility of an online homework help service offered through public libraries, the program was initially limited to 46 library outlets. These provided homework help onsite only through a link from their homepage. Therefore, students needing help with their homework had to go to the nearest participating library to connect to Tutor.com. Remote access was offered the following year, but only to those students referred from the state's virtual reference service, called AskNow. For the first two years of the program, there was no direct access to the State Library's online homework help program from, say, a student's home or other outside site.

Evaluating the Program in 2003

In 2003, Dr. Virginia Walter and I were asked to assess the State Library's online homework help program, including evaluating the effectiveness of having the AskNow librarians refer students to Tutor.com. To do this, we reviewed the transcripts of 150 Tutor.com sessions as well as 115 AskNow homework-related sessions. Using content

analysis to classify the virtual reference and homework encounters, we were able to tease out librarian and tutor behaviors that helped and hindered student access to homework help.

Although 17% of the student-tutor encounters ended in technical problems, we were most pleased to discover that the tutors generally did an excellent job of engaging the students in the problem-solving process, often coaching them patiently as they dissected problems together piece by piece. Few tutors actually gave the answers outright; instead, they encouraged the students to find the answers themselves. In a few cases, tutors revealed themselves to be true teachers as they explained the larger principles involved in the problem being solved.

We were sorely disappointed, however, by the librarians who provided virtual reference to students. For the most part, these transactions were brief and heavily one-sided as students were quickly—and sometimes inappropriately—referred to Tutor.com. Even worse, the referrals were often made without consulting with the student first, causing some customers to express confusion when suddenly confronted by the Tutor.com webpage. We also noticed that there was often no attempt to probe students regarding their homework questions. In fact, in some cases the librarian flatly refused to help with homework, telling the student, "We can't give advice" or "I can't answer your homework question for you." [2]

As a result of this study, the State Library began offering remote access to online homework help directly through participating libraries' websites in 2005. The program was expanded to include 28 entire library jurisdictions (e.g., counties as well as cities), instead of merely 46 branch outlets.

The Next Phase of the Program

In addition to California, Tutor.com has worked with over 1,600 libraries throughout North America and in Australia, and was, for many years, the only vendor to serve public libraries. Then, two years ago, a new vendor, called Brainfuse, entered the scene.

A service provider to school districts for several years, Brainfuse came to librarians' attention at the 2006 Public Library Association conference, where they promised to provide online homework help that was competitive with the services provided by Tutor.com. Librarians throughout the state asked that I investigate Brainfuse and so a product demonstration was conducted at the State Library. It was decided then that, just as we had done with Tutor.com five years previously, California would pilot this new homework help service to give our librarians at least two vendors from which to choose. Libraries have the option to negotiate with the vendor of their choice in order to get the most affordable subscription possible. Thanks to this "free market" approach, the pricing structure of online homework help statewide has become more competitive as both vendors vie for Californians' business. [3]

Evaluating the Program in 2008

Because it has expanded so dramatically over the past four years, the State Library recently asked Virginia Walter and me to take a second look at what is now called the Out-of-School-Time Online Homework Help program. We again analyzed student-tutor

transactions—but this time we reviewed 25 Spanish language transcripts, in addition to 100 English language transcripts, from each vendor. Dr. Walter also surveyed participant libraries to assess their satisfaction with the program and followed-up by interviewing five library administrators to provide a broader context. For my part, I created a detailed matrix describing the services provided by each vendor (please see appendix).

Transcript analysis. The transcripts revealed that 64% of all online homework help sessions involved math problems. A distant second were grammar, reading and writing questions, comprising a total 17% of the sessions. Other less frequent homework topics included social studies, science and chemistry.

Of all the sessions studied, roughly two-thirds concluded successfully with the students getting the help they needed. The remaining third ended, often abruptly, before the homework problem was resolved. But unlike the situation four years ago, when 17% of all transactions were incomplete because of technical difficulties, the fault this time lay mostly with students who, for one reason or another, suddenly abandoned their sessions. Technical problems accounted for only 6% of the failed sessions—a big improvement over the findings in our previous study.

Survey. Fifty-one percent of the participating libraries responded to Dr. Walter's survey. Of these, almost 90% indicated they were "very satisfied" with the program. Eighty-five percent also said that online tutoring is "very important" in providing homework help to youth. Several respondents commented on how much the students love the service, with one library noting that, "It is a major feature of our Homework Center."

Administrator interviews. From an administrative perspective, Dr. Walter found that, in general, library directors are satisfied with the program. They can see from the monthly vendor reports that students seem happy with the service, and most feedback from patrons is positive. Parents who can't afford private tutoring services are pleased that the library offers this option. Complaints are rare although two libraries did report problems with lengthy wait times, especially for high school students. The vendor interface is also difficult for some students, and remote usage is a problem in some rural areas where home computers and Internet access are less ubiquitous. But for the most part, libraries are pleased to offer this service.

Subscription price is a major drawback, however. All respondents mentioned cost as a factor in deciding whether to continue the service or not, especially since libraries are eligible to participate in the State Library's program for only three years. One administrator said, "If the public knew how much we were spending on it, I think they might question our priority." All but one library were nevertheless planning to continue the service for at least one more year, although perhaps with decreased hours.

Finally, three of the five administrators said that State Library support was essential to initially implementing the service. One librarian, looking at the end of State Library support next year, said the funding enabled them to get started and increase usage. However, one area where they would like to see more statewide effort and coordination is in marketing the service. This is a program that is, at first, hard for people to understand. Students are slow to use the service, but anecdotal evidence indicates that many become repeat users after they discover it.

Vendor matrix. The services provided by both online homework help vendors are extremely similar. Both assist with homework questions in English and Spanish in an

array of subjects and serve K-12 students as well as adult learners. Tutor.com also serves introductory college students. Brainfuse offers a 24-hour writing lab, where students can upload text files to be critiqued overnight by expert tutors. Brainfuse also offers a separate skills-building module where students can work one-on-one with tutors who specialize in particular subjects.

The vendors also administer their services in similar ways. Tutors are screened, trained, and evaluated in a similar fashion. Ninety-five percent of Tutor.com's tutors and 100% of Brainfuse's tutors are based in the U.S.. Brainfuse serves public libraries exclusively, while 5% of Tutor.com's clients have private accounts. Tutor.com offers a more aggressive marketing plan, providing libraries with publicity and press release templates, as well as quarterly webinars where clients can share successful marketing tips.

Project Conclusions

Both Tutor.com and Brainfuse offer an effective online tutoring experience for students, particularly those at the middle school and high school levels. Math is by far the most utilized subject area. Success rates for the two vendors are comparable, with approximately 70% of their tutoring sessions resulting in positive outcomes for the student.

Satisfaction levels with the service are high among all stakeholders: students, librarians, and parents alike (although parent feedback is rare). Cost and pricing structure are the only negative factors cited consistently. Nevertheless, most libraries are trying to maintain the service in spite of a bleak budgetary climate.

Perhaps because online homework help is a new concept, this appears to be a service that is difficult to promote and slow to build. However, because supporting student achievement is an important part of California's public library mission, librarians seem willing to put in the effort needed to develop this service to a viable level. Internet access and home computer ownership in rural and poor areas are still barriers to remote access, making onsite provision of the service particularly important.

Last Words

While I concur with these findings, I also feel strongly that one of the reasons online homework help is so difficult to promote is that students don't necessarily think of the public library as the place to go to meet all their academic needs. Certainly they may think of the library when they are doing research for a class project or need articles to cite in a paper. But is the public library the first place they go for help with math homework—the single most requested topic by users of online homework help? I don't think so. It seems the most effective marketing strategies would promote this particular aspect of online tutoring since the prospect of helping kids with their math homework sends shivers down even the most hardened spines!

Also, because online homework help in public libraries is, for the most part, a drop-in service, students need to be constantly reminded of its availability. Librarians no doubt do a brilliant job promoting the program at the beginning of every new school year. But what of the student who has a thorny calculus problem in March and no longer

remembers the online demonstration the librarian did in class way back in September? Online homework help must be promoted year-round.

And finally, regardless how wonderful online homework help is, it will remain just another unused service if the library doesn't also adopt an organization-wide "culture" that welcomes students and their school-related questions. Several years ago, librarian and youth services advocate Donald Sager commented on the "blackboard curtain" that often descends when a librarian hears that a youngster's reference question is actually school-related. As Dr. Walter and I saw when we analyzed the transcripts of virtual reference encounters, many librarians still think it is inappropriate to help kids with their homework. I contend that homework help is not only an appropriate role for libraries, but a mandatory service we should offer especially when, for whatever reason, kids do not seem to be getting the homework help they need at home. Online homework help provided by certified teachers and others who are experts in subjects that we may know little about, is one of the most effective ways we can lift the blackboard curtain in our libraries.

References

1. The California State Library's Out-of-School-Time Online Homework Help program is funded largely through the Library Services and Technology Act (LSTA) administered at the federal level by the Institute of Museum and Library Services. LSTA funds are administered at the state level by the California State Library.
2. For more information about the virtual reference side of the 2003 study, please see Walter, Virginia A. and Cindy Mediavilla, "Teens Are From Neptune, Librarians Are From Pluto: An Analysis of Online Reference Transactions," *Library Trends* 54:2 (2005): 209-227.
3. For a complete list of public libraries offering online homework help in California, please see <http://www.library.ca.gov/Tutor/libraries.html>. Of these, 52 public libraries provide online homework help through the financial support of the California State Library.

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