

OUT-OF-SCHOOL-TIME ONLINE HOMEWORK HELP
IN CALIFORNIA LIBRARIES:
AN EVALUATION STUDY

Submitted to the California State Library by
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BACKGROUND

Cindy Mediavilla and Virginia A. Walter have undertaken a comprehensive evaluation study of Online Homework Help in California libraries. They looked at the two vendors providing this service with partial or complete subsidies from the California State Library – Tutor.com and Brainfuse. The objectives were to determine the effectiveness of each vendor in meeting student needs and the level of satisfaction librarians have for the program, as well as to identify the distinguishing features of each program.

A multi-method methodology was used to tease out the objectives. Walter analyzed 100 English language transcripts from each vendor to determine student outcomes and tutor effectiveness. Mediavilla analyzed 25 Spanish language transcripts from each vendor. Walter generated a SurveyMonkey instrument that was sent to each library participating in the program, asking for a front-line librarian familiar with the service to respond to questions indicating student, parent, and staff satisfaction. Walter interviewed five administrators to provide a broader context and “a view from the top.” Mediavilla examined library web sites to determine how the service was being marketed through that medium. Finally, Mediavilla drew up a chart that identified the services and features provided by each vendor.

Initial plans for the study included visits to selected libraries to observe onsite usage of Online Homework Help. However, use statistics and follow-up conversations with target libraries indicated that in-library usage of the service is negligible. The one library system whose statistics seemed to indicate a tremendous increase in onsite use explained this as a one-time glitch in their reporting software. Onsite observations were therefore dropped from the evaluation plan.

This report is intended to complement and supplement the usage and cost statistics that have been compiled since the beginning of the program.

EVALUATION RESULTS

The report is organized as follows:

1. Findings.
 - Session outcomes
 - Librarian responses
 - Administrator responses
 - Out-of-School-Time Online Homework Help links on library web sites
 - Vendor services
2. Discussion

3. Recommendations

Attachments:

- Out-of-School-Time Online Homework Help Links from Library Web Sites
- Out-of-School-Time Online Homework Help Vendors;
- Out-of-School-Time Online Homework Help Usage statistics, 2007/2008

1, Findings.

1.2. Session outcomes.

Tutor.com and Brainfuse provided transcripts of the first 100 transcripts of sessions conducted in English for the week beginning February 25 and for the first 25 transcripts conducted in Spanish. These transcripts were coded for subjects covered, success or failure, and evidence of effective student or tutor strategies.

Tutor.com -- English

Subjects covered

An overwhelming number of student inquiries involved math, ranging from fourth graders to high school students with calculus problems. Breakdown by subject follows:

Math	64
English*	17
Science	8
Social studies	8
Chemistry	1
Physics	1

N = 100

* English here refers to queries related to English course assignments, not to queries in the English language.

Math inquiries were usually requests for help with specific problems, but there were also general questions about topics such as fractions or ratios. Tutors were gentle with corrections and generous with praise when students got it right.

Almost all English inquiries were related to essay writing. Some students needed help getting started with a thesis statement; others wanted help with proof-reading. Tutors seemed to find that the requests for proof-reading challenged their policy of not giving answers, but they were inventive in their efforts to get students to correct their own errors.

It was not always possible to determine the grade of the student, but it is safe to say that very few were elementary school students. Middle school and high school students with math questions are the most active users of the service.

Success rates

Transcripts were evaluated for successful outcomes. A successful outcome was defined as one in which the tutor was able to complete the session to the satisfaction of the student. Only 63 of the 100 sessions met this criterion. There were many reasons for lack of success, and most of them were not related to tutor ineffectiveness. Reasons for session failure in the remaining 37 cases follow:

Student abandons session	12
Communication issues	8
Technical issues; disconnects	7
Student uses obscene language	7
Student wants more time or help	3

N = 37

In the twelve cases in which the student abandoned the session, he or she usually announced their departure, sometimes indicating a reason or just “gtg.”

The seven sessions in which there were technical issues or possible disconnects are a little more ambiguous. In one case, the student was unable to see the tutor’s download. In six cases, however, the student was just gone. It was not possible to tell from the transcript whether the student abandoned the session or was disconnected.

The eight cases in which lack of success was due to communication issues were more varied. In some, the student was unable to articulate a query. In one algebra session, neither the tutor nor the student could make sense of the assignment as the student reported it. In one science session, the tutor was not able to break through the student’s insistence on just getting the answer.

In three cases, the students wanted help with more math problems or still didn’t understand the lesson. In each of these cases, the tutor told the student that time was up, usually indicating that there were other students waiting for help. Time spent on tutoring sessions varied a great deal, with some sessions lasting close to an hour without the tutor putting a stop to it. Perhaps allowable time per session varies with the number of students waiting for help, but this wasn’t clear from the transcripts.

The seven cases of student use of obscene language are interesting anomalies. It seems likely that a small group of middle school boys has discovered that the online homework sessions are another venue for the “crank calls” of another era. These are evidently common enough that the tutors have a stock response from their pull-down menus for these occurrences.

We can absolve Tutor.com of any responsibility for failure for situations in which students abandoned the session or used inappropriate language – a total of 19. This still leaves 18 out of 100 cases in which some improvement or change in the technical infrastructure, tutor communication skills, or company policies might improve student satisfaction.

Tutor.com – Spanish

Fourteen usable transcripts were examined. As with English language users, students needed most help with math – eleven of fourteen requests. Two were social studies questions; one involved a chemistry problem. Nine sessions (64%) were successful. Of the five that did not end successfully, four sessions

ended abruptly – two before a question or problem was posed. One session was terminated by the tutor before the algebra problem was completely solved.

Brainfuse -- English

Subjects covered

As with Tutor.com, most inquiries to the Brainfuse tutors involved math. Brainfuse defines its subject areas somewhat differently from Tutor.com. Breakdown by subjects is as follows:

Math	64
Reading	8
Science	8
Writing	6
Social studies	5
Physics	2
Chemistry	2
English	1

N = 100

Brainfuse offers an option not available on Tutor.com – skills building in various subject areas. Nine students took advantage of this option, specifying math or reading; however, some sessions that appeared to be requests for skills building turned out to be requests for help with specific problems or evolved into regular tutoring sessions.

Brainfuse transcripts did not include material from the white board so it was sometimes difficult to tell what was going on in the sessions or to analyze tutor strategies. Student responses were often missing, perhaps because they had entered them on the white board.

Success rates

Sixty-nine tutoring sessions were judged to be successful, using the same criteria as above. Reasons for the thirty-one unsuccessful sessions follow:

Communication issues	10
Technical issues; disconnects	8
Student abandons	5
Tutor unable to help	7
Obscene language	1

N = 31

In seven cases, the student failed to initiate a query; these were classified as communication issues although they may have been the results of technical difficulties as well. The seven cases in which the tutor was unable to help are also worth looking at. In some situations, the student was apparently nonresponsive or uncooperative, but in at least three cases, the tutor had to admit that he or she couldn't help for one reason or another.

As noted above, the lack of white board material in the Brainfuse transcripts made analysis of tutor strategies difficult in many cases. However, there seemed to be a slightly greater tendency than with Tutor.com to provide answers rather than to guide the student to find the answer independently.

If we eliminate the cases in which students abandoned the session or used obscene language, there are still 25 cases in which Brainfuse is in some way responsible for lack of student success.

Brainfuse -- Spanish

Twenty-five transcripts were analyzed. The range of subjects covered was more varied than the Spanish language transcripts from Tutor.com.

Math	10
Social studies	4
Reading	3
Science	4
Chemistry	2
Writing	2

N = 25

It is possible that the availability of skills practice appealed to some Spanish-speaking students.

Twenty-one sessions (84%) were successfully completed. All four of the unsuccessful sessions ended abruptly, in one case because the student's brother was interrupting.

Many students needed help translating homework questions from English into Spanish or translating their answers from Spanish into English in order for their teachers to read them.

1.2. Librarian responses

In March 2008, all 53 California libraries using California State Library funding to partially or completely pay for their Out-of-School-Time Online Homework Help vendor were asked to respond to a SurveyMonkey instrument. 27 responses were received, for a response rate of 51%.

The survey was a simple one, designed to be answered quickly and to determine general satisfaction with Out-of-School-Time Online Homework Help (OST OHH) as well as some basic information about other homework services offered by the library and how OST OHH was publicized.

The questions and tabulated responses are as follows:

Q1. Which vendor do you use for Online Homework Help?

Brainfuse	5	(18.5%)
Tutor.com	22	(81.5%)

Q2. How long has your library subscribed to Online Homework Help?

One year	12	(44.4%)
Two years	7	(25.9%)
Three years	2	(7.4%)
Four years	6	(22.2%)

- Q3. How does your library publicize its participation in the Out-of-School-Time Online Homework Help program?
- | | | |
|---|----|---------|
| Library web site | 27 | (100%) |
| Through local schools | 26 | (96.3%) |
| Posters and handouts in the library | 27 | (100%) |
| Direct contact with students in the library | 25 | (92.6%) |
| Other | 15 | (55.6%) |
- Q4. Does your library offer any after-school homework help onsite other than Online Homework Help?
- | | | |
|-----|----|---------|
| Yes | 15 | (55.6%) |
| No | 12 | (44.4%) |
- Q5. If you answered yes to the previous question, please mark all answers below that apply:
- | | | |
|------------------------------|----|---------|
| Volunteer homework helpers | 11 | (73.3%) |
| Paid homework helpers | 6 | (40.0%) |
| Dedicated computers | 9 | (60.0%) |
| Dedicated space for homework | 8 | (53.3%) |
| Other | 5 | (33.3%) |
- Q6. How would you describe the level of onsite use of Online Homework Help at your library?
- | | | |
|----------|----|---------|
| Light | 17 | (63%) |
| Moderate | 3 | (11.1%) |
| Heavy | 1 | (3.7%) |
| Varies | 6 | (22.2%) |
- Q7. How would you describe the level of satisfaction students have with Online Homework Help?
- | | | |
|-----------------------|----|---------|
| Very satisfied | 24 | (88.9%) |
| Somewhat satisfied | 2 | (7.4%) |
| Somewhat dissatisfied | 0 | |
| Very dissatisfied | 0 | |
| Don't know | 1 | (3.7%) |
- Q8. How would you describe the level of satisfaction parents have with Online Homework Help?
- | | | |
|-----------------------|----|---------|
| Very satisfied | 21 | (77.8%) |
| Somewhat satisfied | 2 | (7.4%) |
| Somewhat dissatisfied | 0 | |
| Very dissatisfied | 0 | |
| Don't know | 4 | (14.8%) |
- Q9. How important is homework assistance to students to your overall mission of service to children and young adults?
- | | | |
|--------------------|----|---------|
| Very important | 22 | (81.5%) |
| Somewhat important | 5 | (18.5%) |
| Not very important | 0 | |
| Don't know | 0 | |

Q10. How important is Online Homework Help to your ability to provide homework assistance to children and young adults?

Very important	23	(85.2%)
Somewhat important	4	(14.8%)
Not very important	0	
Don't know	0	

Q11. Is there anything you would like to tell me that would help to explain any of your answers above?

17 respondents made comments:

“I perceive the offering of the service as very important, but our usage, despite promos, has been light and we may not have the budget to continue.”

“Overall the satisfactory rating is usually around 90-95% for the students who use the service. Occasionally it has dropped to around 80%, sometimes even lower. A few parents have been offered the surveys and they seem glad that there is a service like this. Homework assistance is important to the library – we have a variety of homework” [sentence truncated].

“It is a major feature of our Homework Center.”

“Anecdotal evidence indicates that parents are satisfied and students are satisfied. One anecdote: a mother who recently regained custody of one of her children because the child's grades were so improved due to regular use of the library's online homework help. We appreciate that Brainfuse is now offering a post use survey...”

Question 4 – “While we don't have other homework services, we do answer the students' questions and help them find resources that will assist them with their homework.”

“We have a very large library system and the program would probably benefit more students especially in the rural areas if we could offer in-library use, rather than remote access only. Contrary to what other people think the reality for some...”[sentence truncated]

“While onsite use of Online Homework Help is light, remote usage continues to climb. This is very important as it is offered both during library hours and even more important after the library has closed.”

“The majority of use is by remote users. However, I feel that in-house use is just as important even if there are fewer users because these students most likely to not have computers at home or just dial-up.”

“We don't know how satisfied parents are because we don't collect that information on a regular basis. We only know of the student's satisfaction from the survey conducted by tutor.com at the end of the session.”

“Torrance – through Library and Schools and Recreation – provides a great many on-site homework support opportunities but it all depends on the student getting to us. This complements those and draws a lot of service from students ...[sentence truncated]”

“All I can say is that Tutor.com gets rave reviews from our users. It is one of the best online services we have ever offered to students.”

“We have a separate homework center where students are helped by volunteers and staff. We have noticed that most students who use tutor.com do so from home.”

“The majority of use is remote – from the individual student’s homes. Only a small fraction of use is coming from the library’s buildings. The students who use the service are very happy with it. Parents are always surprised and pleased to find out about it.”

“The per use cost is very high. I would love it if the state did some sort of partnership with school districts to get them involved.”

1.3. Administrator responses

Also in March 2008, five administrators were interviewed by telephone. The intent of these interviews was to provide a context for the survey responses and also to learn what library decision-makers thought about the service. Administrators who participated in these interviews were from Glendale Public Library, Santa Barbara Public Library, Torrance Public Library, Mendocino County Library, and Contra Costa Public Library. These represented libraries from the northern and southern parts of the state and rural as well as urban and suburban communities. The following questions were asked each participant:

1. How long has your library subscribed to Online Homework Help?
2. How does your library publicize your participation in the Out-of-School-Time Online Homework Help program?
3. Does your library offer any after-school homework help onsite other than Online Homework Help? If so, what?
4. How important is after-school homework help to your overall service plan to children and teens?
5. In general, how satisfied are you with Online Homework Help?
6. If you could change or improve any aspect of Online Homework Help, what would it be?
7. Do you have a sense of how satisfied students are with the service? Parents? Teachers?
8. What factors would make you likely to continue the service? Discontinue it?
9. How useful has the State Library’s support been in piloting the service in your library?
10. Is there anything else the State Library could have done to help make your Online Homework Help program more successful?
11. Is there anything else you would like to tell me about your library’s use of Online Homework Help?

Administrator responses are reported here by topic.

Publicity

All of the libraries have publicized the program through a variety of media: radio spots, local newspapers, newsletters, posters and bookmarks in the library, placement on the library web site. All have also made efforts to promote the service through their schools, even providing live demonstrations at meetings of parents and teachers. One library also demonstrated the service at a City Council meeting. One system tied Online Homework Help in with Summer Reading, Teen Read, and Teen Tech Week. Public service librarians and homework helpers have been trained to promote the service to parents and students in the library. All noted the need to promote the service even more aggressively.

Homework assistance and the library's mission

Three of the five libraries offer some kind of formal after-school homework assistance onsite in addition to Out-of-School-Time Online Homework Help. All five respondents indicated that supporting students was important to their overall mission. One replied that it is an "integral part of our services." Another, whose library does not have any onsite formal homework assistance program, nevertheless said, "Our community tells us we should be there for our youth. Educational resources are important here."

Satisfaction with the Out-of-School-Time Online Homework Help program

In general, the libraries are satisfied with Out-of-School-Time Online Homework Help. They can see from the reports generated by the vendors that students seem happy with the service, and most feedback from patrons is positive. Parents who can't afford private tutoring services such as Sylvan are pleased that the library offers this option. Complaints were rare. Two libraries reported problems with lengthy wait times, especially for high school students. The interface is difficult for some students, and remote usage is a problem in some rural areas where home computers and Internet access are less ubiquitous. For the most part, however, the libraries are pleased to offer this service.

Cost

The cost of the service is the single biggest drawback. All respondents mentioned cost as a factor in deciding whether to continue the service or not, particularly as the State Library subsidy decreases and eventually ends. One administrator said, "If the public knew how much we were spending on it, I think they might question our priority." All but one administrator were nevertheless planning to continue the service for at least one more year although perhaps with decreased hours. One library may explore partnering with local schools, but the administrator was doubtful that the school district would contribute any money.

One of the libraries had dropped onsite use because of the cost, and another library is considering it. In spite of relatively low in-library usage, this was a difficult decision because the librarians are aware of the lack of computers and Internet access in their patrons' homes. In one case, the library's policy of a 30-minute limit on public access computers also creates barriers to onsite use; and they are considering changing the policy.

Role of the State Library

Three of the five libraries said that State Library support was essential to implementing the service initially. One librarian, looking at the end of State Library support next year, said that the State Library funding enabled them to get started and get their usage up.

All five libraries have been happy with training and technical support provided by the vendors and by the State Library. The one area in which they would like to see more statewide effort and coordination is in marketing the service. This appears to be a program that is hard for people to understand at first. Students have been slow to use the service, but anecdotal evidence would indicate that many become repeat users after they discover it.

1.4. Out-of-School-time Online Homework Help links on library web sites

In an attempt to decipher whether placement of online homework help links on library pages has an impact on the amount of usage, the web sites of each Out-of-School-Time Online Homework Help library

were examined to see exactly where their homework help links appear and where they lead. (Please see first Attachment.) Depending on the library, links are typically provided via one or all of the following sites: the library's main homepage; the teen page (if the library indeed has one); and the kids' page. The links often feature the vendor's icon or may just be labeled "homework help" or something comparable. In some cases, the links lead to a page that explains the online homework service; but in many cases, the link just leads directly to a page where users then enter their library card number as authentication.

Since all the library web sites examined provide variously configured links to their vendor's tutoring site, it is difficult to conclude that placement of those links seriously impacts service usage. Glendora Library, for instance, provides the service via a link called "electronic resources" available through their youth services page – there is no link from the library's homepage – yet usage is strong, indicating that students are managing to find the link despite its less obvious placement. The same is true of Rancho Cucamonga, which provides a single link from its "homework tools" teen page.

Still, it seems apparent that libraries with low usage could do a better job promoting online homework help through some more prominent web site placement. Mendocino County, for example, includes a tiny Tutor.com icon and very brief description of the service on its homepage, but no links from its kids' page. San Benito County utilizes no icons, but rather provides its links through the highlighted phrase "homework help." More prominent placement of homework help icons and descriptions might help boost usage in these and other low-use libraries.

1.5. Vendor services

To tease out the similarities and differences between the two vendors, representatives from both Tutor.com and Brainfuse answered a multi-question survey about the services they offer. (Please see second Attachment.)

Not surprisingly, the services provided by both 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 in writing; Tutor.com's "writing center" is handled live as part of its regular homework assistance. Brainfuse also offers a separate skills-building module where students can work one-on-one with tutors who specialize in particular subjects. With Tutor.com, skills-building occurs during each regular tutoring session.

Both vendors administer their services in similar ways. Tutors are screened, trained, and evaluated in a similar fashion. Ninety-five percent of Tutor.com's tutors are based in the U.S., while 100% of Brainfuses's tutors are based here. Brainfuse serves public libraries exclusively, while 5% of Tutor.com's clients have private accounts. Tutor.com appears to offer a more aggressive marketing plan, providing libraries with publicity and press release templates. In addition, they have partnered with JanWay to create customized student giveaways. They also offer quarterly webinars where librarians can share successful marketing tips.

2. Discussion

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. Tutor ineffectiveness is a relatively small factor in unsuccessful sessions. More significant factors are technical difficulties and student behavior, including abandonment

of the session or inability to communicate effectively. In a small number of cases, students are using the service as an opportunity to sexually harass the tutor.

Satisfaction levels with the service are high among all stakeholders – students, librarians, and parents (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. Supporting student achievement is an important element in the mission of almost all public libraries in California, however, and libraries 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.

The Spanish language service offered by both vendors is a likely candidate for expansion if good marketing strategies can be developed. At this time Brainfuse is somewhat more effective in its implementation of Spanish language tutoring than Tutor.com.

Two areas in which participating libraries would like to see continuing State Library support are marketing and building formal partnerships with schools and homeschooling networks.

3. Recommendations

As noted elsewhere in this report, many libraries find it challenging to promote this service effectively. The State Library could help with this effort by considering several initiatives. The first three recommendations below were suggested by library administrators.

- Enlist the State Department of Education as a formal partner to assist with promoting the service through public schools.
- Create formal links and partnerships with homeschooling networks.
- Consider creating a statewide marketing campaign.
- Look for ways to target potential Spanish-speaking users.
- Provide guidelines for promoting the service through library homepages.
- Provide guidelines and/or lesson plans for quick tutorials and/or demonstrations to help patrons use the service onsite.
- Provide guidelines for effective demonstrations of the service for targeted audiences such as teachers, parents, or elected officials.

APPENDICES

Out-of-School-time Online Homework Help Links from Library Web Sites

Out-of-School-Time Online Homework Help Vendors

Out-of-School-Time Online Homework Help Usage Statistics, 2007/2008