# Chat: from the desk of a subject librarian

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# Keywords

Distance learning, Students, Librarianship, Reference services, Academic libraries, Virtual libraries

## **Abstract**

Off-campus students at La Trobe University are a growing group who do not always receive assistance through information literacy classes, or at their time of need. Previous efforts by the subject librarian to answer e-mail queries from off-campus nursing students have sometimes been less than satisfactory for both the student and the librarian, requiring that a telephone call be made in order to conduct a reference interview. A chat reference service was offered to off-campus nursing students as an alternative method of contacting the subject librarian or the library. There was a trial in March and April 2002 using LivePerson, and involving three health sciences librarians. The trial would determine: if chat increased the number of students who sought/received help; if a reference interview can be conducted properly during a chat; and the infrastructure required to continue a chat service, particularly whether using subject librarians removes the need to roster staff on the service.

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## Introduction

# Increase in students eligible for off-campus library services

Students eligible for off-campus library services at La Trobe University are increasing each year. In 2001, of the 1,879 students potentially eligible, 1,467 (78 percent) were health students served by the subject librarians at the Bundoora campus. A significant number of these students are postgraduate nursing students. Before the Faculty of Health Sciences subsumed the School of Deaf Studies in 2000, nearly all postgraduate diplomas in health at Bundoora were offered through the School of Nursing. The students are enrolled on a flexible mode basis and visit the campus irregularly. Most of the faculty's new off-campus course initiatives have been in the School of Nursing, which is proactive at introducing new specialties in flexible and distance modes, offering more programs overseas, and making established units available via a new online mode.

# Lack of contact with a subject librarian

According to feedback from the students and their lecturers, off-campus nursing students have problems finding enough references for their assignments. This is due partly to a lack of basic knowledge on the range of databases that are suitable for them. A bigger problem is that they do not have a command of the search techniques used in Boolean-based databases, with the result that they retrieve too many irrelevant records, or not enough relevant records, on their topic.

Students who do not use plentiful references receive lower marks and are at risk of failing the assignment. These students may not have had contact with a librarian during semester about researching literature for their task. Of those that did initiate contact with the subject librarian in person, by telephone or e-mail, emailing was the least successful method. Some of the students could not articulate their specific problem. After attempting e-mailing for two or three days, the librarian would ask the students for their telephone number to perform a reference interview, and finish providing the needed information to the student. About half of the students lived either in rural areas or overseas, requiring that one party make a longdistance or international telephone call.

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# Initiatives to provide contact

Initiatives for 2002 to address the lack of exposure that off-campus nursing students have to library orientation and information literacy instruction and assistance are:

- An online tutorial or CD-ROM guide which emulates the on-campus workshop given to flexible mode nursing students, covering basic catalogue searching, basic database searching, using the document delivery service, and getting assistance from the library (in production).
- A Web page of database search strategies which have worked for real assignment examples (completed)[1].
- A trial of a chat service as an alternative to oncampus appointments, telephone assistance, but particularly to e-mail assistance.

The third initiative, chat, and chat appointments, might be expected to improve access to subject librarians for off-campus nursing students because:

- The number of students contacting the library staff may increase with a chat service due to newness/novelty, the immediacy of person-to-person contact without disconnecting from the Internet, and the lower cost compared with making a longdistance, international, or mobile phone call. It would also be more convenient than scheduling an appointment on campus.
- The quality of assistance given to students
  who use chat would be higher than to those
  who use conventional e-mail, due to the
  ability to conduct a reference interview, and
  thereby establish and solve the real problem,
  while online, and in a short time frame.

#### Aims of the trial

The trial was to determine:

- (1) If chat increases the number of off-campus nursing students who act on their desire for help:
- (2) If chat is preferred by students who would previously have used e-mail or telephone;
- (3) If a reference interview can be performed during a chat session so that the student's real demand is understood;
- (4) If the student's real demand is met within the first "consultation"; and
- (5) The infrastructure needed for a chat service, particularly whether using subject

librarians removes the need to roster staff on the service.

If (1)-(4) are shown to be true, then a gap in library service will be filled. More nursing students will have been assisted in their progress toward obtaining the number and quality of references they need for their assignment. Library staff may then identify this to be a niche demand, which is not accommodated elsewhere in the Library service. If so, the infrastructure for the service would need to be decided upon.

#### Literature review

Evaluations of chat based on trials in libraries are not widely published. The bulk of the literature dealing with chat in libraries merely lists libraries which use it, perhaps describing chat services, and how they might be used. This may be because software designed for libraries has only become available in the last two years. However, within that time, a limited number of studies have attempted to draw conclusions on whether chat is really successful in providing a reference service. All of them focus on the model of chat as a reference desk service, which serves allcomers. The research only briefly comments on use by distance and off-campus students. No studies discuss the topic of using chat as part of the consultancy role of a subject librarian.

## Chat as a new online service

Real-time reference in libraries is not expected to go the way of e-mail Ask-A services. Chat may prove to be the real solution to winning back patrons who have dropped off using the reference desk in favour of the Internet. At the same time as chat products are becoming established in library Web pages, the free online commercial reference services, that are seen as competition to libraries, have found that they cannot keep up with demand and are referring most questioners to their local libraries (Steury, 2000).

The library's challenge then is: what happens if we succeed? Designers of WWW contact centre software assume a commercial setting where 80 percent or more of the customers could find their own answers using information on the company's Web site. Can 80 percent of

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our reference questions be handled by library Web sites (Coffman and McGlamery, 2000)? One weakness of the online service is obvious – when there is a need to forward information from paper sources, the librarian can only type, scan or fax limited amounts of information to the caller (Patterson, 2001). However, it does provide an opportunity to promote the library's possibly under-utilised online reference collection (Hoag and Cichanowicz, 2001).

Within the first four months alone, and without aggressive marketing, the new online reference service (chat) will be used as much as the Ask-A service, and the library will be receiving the same types of questions about finding resources and off-campus access. Where real time reference has been lacking is in the times it is offered - being available only during banking hours does not help the distance education student, who typically works on their online courses after hours (Boyer, 2001). However, remote students can be invited to make a chat appointment (particularly for the purposes of co-browsing – see "Ability to conduct a reference interview", below) after initial contact via e-mail or telephone (Anderson et al., 2000).

The service has to be easy for the patron to use or it will fail "miserably" (Boyer, 2001). Real-time digital reference services that require users to install specific software, e.g. ICQ, will be ineffective. This is especially true of remote library users. Even new university students, who might be expected to be familiar with chat programs, do not actually use chat in high proportions (Yue, 2000).

## Impact on library staff

Where the model offers chat as a complementary service to the reference desk, library staff may be required to respond to chats while at the desk, or during a shift rostered at a different access point. Either way, the electronic service was not seen by librarians as replacing queries that have been lost over time from the walk-in reference service, but as an additional demand on staff who are already thinly stretched (Stormont, 2000). Librarians are more supportive if the chat service is seen to fill a niche in library service that other services could not better accommodate (Boyer, 2001).

According to the only study that published times for the average length of chats, the time

required per call is 12 minutes for simple queries, and 28 minutes if the question is not straightforward. With a mix of users, the average service time is about 15 minutes (Patterson, 2001).

#### Ability to conduct a reference interview

The reference interview is clearly at the heart of the reference transaction (Straw, 2000). Chatting allows the reference librarian to conduct the reference interview in real time. The librarian ascertains the real question, obtains the "document" for the patron, and reviews the result to be certain that the patron is satisfied (Patterson, 2001). E-mail Ask-A reference does not provide the synchronous service most users need nor the quality of service they are used to getting at the reference desk (Yue, 2000).

Reference interviews have traditionally used audio-visual cues and, in the absence of these, interaction between the librarian and caller changes. Communication is slower and briefer yet having a greater sense of urgency, and it is more difficult educating clients about what is feasible and what is not (Crossfield, 2001). For the duration of the session, particularly if it coincides with a shift on the in-house reference desk, your fingers are constantly working and mental and physical exhaustion comes very quickly (Schneider, 2000). Perhaps the key element in making an electronic interview work is traditional writing skills - reference librarians must be able to write messages that are organised, concise, and logical (Straw, 2000).

Optimal chat conditions occur when audiovisual cues are present, e.g. using videoconferencing software. Simpler technical solutions can be employed to emulate eye contact (symbols blinking in acknowledgement), smiling (friendly greeting or cheerful screen design elements), nodding ("Your question has been received ..."), listening (paraphrasing to demonstrate understanding, and responding quickly), tone of voice (suggested by fonts, colours, capitalisation, etc.) (Viles, 1999).

Chat would also more truly replicate the reference interview when collaborative browsing can occur (Anderson *et al.*, 2000).

This feature allows the caller to observe the librarian's movements on the screen, when locating resources on the WWW, or to search a database. There have been instances where

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co-browsing was not successful with all databases, which meant that the librarians opted not to use it. This is important, as many reference librarians think that the success of their chat service depends on their ability to exploit the co-browsing feature (Boyer, 2001).

#### Other libraries using chat reference services

As of January 2002, there were many US libraries providing chat. In the UK, the University of Leicester Library trialed HumanClick, the sister product to LivePerson, from October 2000 to January 2001, and their Web site provides a list of other academic libraries (USA only) using or trialing chat at that time[2].

A total of 14 (50 percent) of the 28 libraries on the list were using or trialing LivePerson. The software that the other 11 libraries used for chat included Virtual Reference, AOL Instant Messenger, Netscape Chat, Anexa.com Communities, Camden, LiveAssistance, and ConferenceRoom by Webmaster.

One year later only eight of the original 14 on the list were still using LivePerson; six have moved to alternative software, and four have suspended their chat service. None of the 11 libraries originally using other software had moved to take up LivePerson, and two had cancelled their chat service.

Despite the fact that, a year later, half of the libraries which used LivePerson moved to other software, 40 percent (24/60) of libraries providing chat are currently using LivePerson or its sister product Humanclick. It is by far the most popular software in use, followed by LiveAssistance (13 percent), Virtual Reference Desk (12 percent), and AOL Instant Messenger (10 percent).

From descriptions available at the Web sites, libraries tended to provide the service as an alternative method of contacting the reference desk, rather than as an alternative means for contacting a subject librarian. The University of Pennsylvania[3] did provide separate chat points for health sciences and business students, but these were directed to subject branch libraries, not librarians. Most allowed chat during normal opening hours, while some restricted the service to 1:00pm-5:00 pm. While chat could be expected to benefit distance students in particular, only eight (13 percent) libraries stated that these students are the primary target of this service.

Four Australian university libraries could be found to be trialing chat. Macquarie University's chat service is found easily on the Library's home page[4] and requires the client to download NetMeeting. The University of Technology, Sydney, was trialing eGain, after reviewing several products, including LivePerson (Edwards *et al.*, 2002). The University of New South Wales[5] was to trial chat in February 2002 and Monash University[6] reviewed a trial it completed recently.

#### **Experiences with LivePerson**

Libraries that use LivePerson reported very few problems. It would be interesting to contact the university libraries which discontinued using LivePerson to establish why. One, the Bowling Green State University[7], moved to Virtual Reference Desk as a result of funding to improve the service, and chose this product over LivePerson because it allows users and librarians to follow each other's progress through a database or Web site. This feature became available in LivePerson V.05 (May, 2002).

# Methodology and results

# Choice of software

Two products were considered for trial, based on assessment by systems staff. LivePerson and InternetService were chosen because they allowed us to load the program on our own machines, rather than going through software loaded on an external server. In addition, the La Trobe University Library staff had seen HumanClick in action before its transformation to "LivePerson", and this program had been recommended in the literature by other libraries who had used it. Programs which require the caller to download software were not considered. LivePerson is easily downloaded from the Web site and a demo was trialed in the last week of December (2001) for six days. Negotiation for a trial of InternetService stalled due to delays with the contract.

No special software is required at the client end. The librarian selects a set of icons that are used to display the availability of the librarian. The icon is easily inserted into a Web page, and it changes to display availability in response to the librarian selecting a status from a list. When

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no librarian is available, the client is offered an opportunity to send their question as an e-mail.

#### **Promotion**

The trial was promoted in the School of Nursing, in the department, and on their Distance Education Web page. The Library promoted the trial in orientation classes, and on various Web pages – the Bundoora Library Home Page, subject pages for nursing and public health, and distance library services.

#### Staff involved

Each member of the team has her own subject responsibilities, but will assist students of other team members when necessary. Therefore, the impact of the chat service was calculated for its effect against the health sciences team as a whole, not against the nursing librarian on her own.

Three librarians in the health sciences team were available for callers any time when they were at their desks and not preoccupied with another consultation. The LivePerson software routes the caller to the next available operator that is online. They did not roster themselves to be available for particular times of the day.

#### Recording of chats

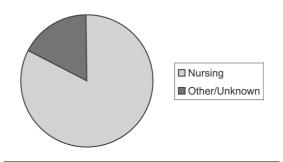
The chats were timed automatically, and the transcripts viewed on the LivePerson Web site. Ten chats took place, and 13 e-mails were received through the chat software when a librarian was unavailable. These have been combined for calculations regarding time of day, subject of chat, user type, etc., because it is useful to know these facts about any student wanting to chat, even though the librarian was not online at the time. Although this is not a large sample, the aims of the trial as they pertain to La Trobe University Library were achieved. The data from the sample will also inform further research on the communication needs of our off-campus students, as well as aid future assessment for a wider reference desk chat service at this university.

# Aims of the trial

(1) To determine if chat increases the number of nursing students who act on their desire for help.

The major users of the trial were offcampus nursing students, the target audience (Figure 1).

Figure 1



For the last two years, subject librarians have kept statistics on the number of reference queries they receive when not on the reference desk. In 2001 there was a 10 percent increase in these over 2000. If more students are encouraged to contact the library because of the chat method, then we may find that the off-desk statistics for 2002 would be greater than 2001, allowing for a 10 percent increase that reflects a normal trend of growth in use of remote reference services.

For March and April 2002, there was a huge increase (62 percent) in off-desk queries received by the health sciences team compared with 2001 (Table I). Chat consultations increased the difference to 74 percent. The subject librarians have taken on extra duties related to the absence of a team member, but these have been removed from the total.

(2) To determine if chat is preferred by students who would previously have used email or telephone.

Telephone and e-mail consultations with the subject librarians for March and April 2001 were recorded separately from demands for personal assistance. This was repeated for March/April 2002.

If students do not prefer chat to e-mail or telephone, then the e-mail and telephone consultation statistics for 2002 would be the same as 2001, allowing for a 10 percent increase that reflects a normal trend of growth in use of remote reference services (see (1) above).

**Table I** Total off-desk queries received by the health sciences team

2001	2002	Increase (%)	
188	304 (without chats)	62	
	327 (with chats)	74	

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If students do prefer chat to e-mail or telephone, the incidence of e-mail and telephone might be lower by some degree compared with last year, assuming no other reason can be found, e.g. librarian on recreation leave.

From Table II it can be seen that there was a blow-out in e-mail and telephone enquiries for March and April. In 2002 there were 154 more than 2001, a 138 percent increase. This is after compensating for extra duties. There was a corresponding decrease in personal consultations on 2001, possibly due to the increased unavailability of the librarians due to a greater burden of classes, or a preference by students to ask for help remotely.

Chat inquiries made up only 7 percent of the total enquiries received by the subject librarians, so the chat service cannot be said to have been a major influence on students to contact the library for help (Table II).

(3) To determine if a reference interview can be performed during a chat session so that the student's real demand is understood.

A reference interview (RI) is described as a back and forth process between the librarian and patron to "refine and disambiguate the patron's need". It includes learning about the patron's context – knowledge of his/her situation, history and preferences – and using open rather than closed questioning. To complete the reference transaction, the librarian creates a representation of the problem by using the information from the RI to form the real question in her mind. She then chooses the appropriate resources to interrogate, and filters further to finally package the answer or connect the patron to the raw information (Zick, 2000). This

Table II Choice of consultation method with the subject librarians

	2001		2002	
	Queries	% queries	Queries	% queries
Chat enquiries	n/a	n/a	23	7
			265	
Other e-mail/telephone			(133 e-mail,	
enquiries	111	59	132 phone)	81
Personal consultations	77	41	39	12
Total	188	100	327	100

definition of an RI does not include instructing patrons how to find the information for themselves.

The transcripts were checked for some sort of RI process. The technology was expected to place some constraints on the librarian. While there would be conversation "back and forth", it was anticipated that the librarian might need to reach a compromise between following the best practice of open questioning, and improving response time through the use of closed questions based on educated guesses.

There were ten chats, and 13 e-mails were received through the chat service when it was closed.

The types of questions about which users sought to chat are shown in Table III.

In the following example, which took 20 minutes, attempts were made to disambiguate the patron's need, to learn about the patron's context, to paraphrase the real problem, to choose and filter resources, and package/deliver the information. However, questioning is not always open-ended.

In this and in the other chats, an RI does take place, with the exception that questioning by the librarian changes to closed questions due to the pressure of waiting time. In the above example, the librarian had the option to ask "Where have you looked for this already?" but instead chose to ask if the student had checked certain tools, the catalogue and databases.

(4) To determine if the student's real demand is met within the first "consultation".

Closure was achieved with all chats, except two. In one case, the caller decided it would be quicker to drop the chat session and visit the information desk (this student had initiated a chat session while actually in

Table III Types of questions asked by chat callers

Topic of question	No. queries
Document delivery	7
Ready reference (quick facts, confirming	
citations, booking for classes, etc.)	6
Literature/subject searching	5
Off-campus database access	5

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the Library!). In the second case, the librarian judged it would be better to keep the chat short to establish patron need, then work on the query off-line and report the answer to the patron later via e-mail.

All chats ended satisfactorily for the caller, in a time frame similar to telephone or personal consultation; however, 13 percent of chats took longer than 30 minutes, while 10 percent of e-mails and 4 percent of telephone calls took this long (Table IV).

Chats took an average of 11 minutes, with only one taking more than 30 minutes (35 minutes). Eleven of the e-mails received through the chat e-mail service took less than 30 minutes to attend to, while the remaining two were subject searches and could be assumed to take a long time using chat.

(5) To determine the infrastructure needed for a chat service, particularly whether using subject librarians removes the need to roster staff on the service.

A number of questions on software, staff and service issues were posed:

- Is the software easy to learn and use? Yes.
- Would students want to use it more than once? Two students out of the 23 required further assistance and took up the option of using the chat again, rather than telephone or e-mail.
- Do librarians like using it every day if they have to? It was sometimes annoying to remember to change the availability setting constantly throughout the day. This might be something to which you get accustomed, but the general feeling was that it would be better to have a definite time period during which the librarian expected to stay at her desk, rather than trying to incorporate the chat service throughout her daily routine. It was occasionally inconvenient for the librarian to drop a project in which she was fully engrossed to answer a caller.

Table IV Time spent by subject librarians on answering queries

Time (mins)	E-mail	Phone	All chat requests
<30	121	127	20
>30	12	5	3

- Are technical problems encountered, and is support available? There is a good chat help service, with attentive support and marketing personnel.
- What are the costs of providing reference service this way? A two-month subscription to Lineperson for three librarians cost LTU Library US\$178[8].

Ten chats took place at US\$17.80 per chat. In total 23 inquiries were received through the chat service. If these had all developed into actual chat sessions, the cost would be US\$7.74 per chat.

In comparison, for a telephone call of 11 minutes (average chat length) between 2.00-5.00 p.m. (time of highest use of chat) an STD call = A\$2.67, and a mobile telephone call = A\$3.88 to \$5.09 depending on the network called.

- Of how much record keeping can it relieve the librarian? The librarian needs to keep her own statistics on the number of chats, as reporting was not offered with this software. She also needs to separately collate average time of day, average length of chat, caller status/category and type of query. Statistics are kept by the system on the IP address from which the caller is coming, length of chat session and the transcript.
- Would team members be prepared to back up each subject librarian's chat responsibilities permanently? Yes, with two provisos: that there be a time when the librarian knew they should be prepared for chat "interruptions"; and if there was some way of validating that the caller was an authorized user, perhaps by having them fill out a brief question form verifying their status as an LTU student, and further, in this case, as an off-campus student.
- Does using subject librarians remove the need to roster staff on the service?
   No, some "rostering" is still required, when the librarian knew they should be available; otherwise chat callers will interrupt important activities on which the subject librarian is working.

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Rostering would also lead to greater use of the service, as the times could be advertised and callers would be more likely to go online at times they knew they would be successful in contacting the librarian.

- Is "teams" the wrong place for chat would it be better as a reference desk service? There was some difficulty being available in person at the time the callers wanted to chat. Only 56 percent of the callers wanted to use the chat between normal business hours of 8.00a.m.-5.00 p.m. Some suggestions are provided in the Table to address the time constraints (Table V).
- How does it affect other liaison services, e.g. Telephone and in-person requests for attention? Numbers that relate to interruptions received during a chat session are unknown; however, a decision has to be made about whether chats take priority over telephone calls. In practice, the chats took priority because it was hard to explain to chatters that they would have to wait, and easy to let the telephone ring, or to explain the situation to other staff who approached the librarian at her desk.

# **Discussion**

Some students stated in classes that chat would be better to use for remote queries because they do not have to disconnect from the Internet to talk to the librarian. However, a preference for chat as opposed to other methods could not be established with the data.

There was a 74 percent overall increase in students contacting the librarians for assistance this year in the period recorded. It appeared

that more students contacted the library for help because they knew that they could do so than because of the availability of the chat. Chats comprised only 7 percent of the total queries received by subject librarians during the trial period, but a small number of students used the chat service more than once, indicating that it was a satisfactory method for them.

With the great rise in e-mail and telephone queries over and above the chat service, it cannot be said from this trial that chat was the preferred option by students in general. There was a corresponding reduction in the number of personal consultations and approaches for help in-person. Each subject librarian had a heavier load of classes in 2002 and was consequently unavailable more often, which may have forced the students to use e-mail instead. Many distance nursing students purchase a connection to the Internet when they start their course, and the increase in telephone calls corroborates our experience that these students often have trouble setting up their connection. For these students, chat is not an option. Many were possibly unaware of the chat service, as a link could not be placed on the Web site at typical points of need, e.g. entering the Cumulative Index to Nursing and Allied Health (CINAHL) database, due to constraints with the design of the Web pages.

Reference interviews can be performed during the chat sessions, although it may take longer to reach the "real question" in certain cases than it takes by telephone, due to the tendency to drop natural speech, and the need to wait for a response. Owing in some part to the pressure of waiting time, the librarian rarely used open questions. The irony is that openended questions would probably improve response time, such as asking "Are you a city campus student?", risks a "no" response, when "Which campus are you enrolled?" would

Table V Most popular time of day to use the chat service

Time of day	No. chats	Infrastructure
2-5pm	6	Subject librarian can be rostered, with certain limitations
9-12pm	5	Chat service in another time zone
8-11am	4	Part of reference desk service, with certain limitations
Midnight-3am	4	Chat service in another time zone
11am-2pm	3	Subject librarians can be rostered, with certain limitations
5-9pm	1	Low use of chat service at this time, need further data to confirm

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provide the required answer with theoretically a single question. The librarian needs to stay calm, which comes with experience at chatting.

Controlling the discussion may have its difficulties. It was apparent that different clients use different chat etiquette. Many users did not wait for a reply before sending another question, and some would send one response as several lines of text. Along with calmness is the ability to use logical questioning in the absence of physical or aural cues. Some training in this for the librarian would be of assistance in shortening the chat consultation.

Closure was achieved with all chats, except two. In fact, it was later questioned why the chat needed to achieve closure. The particular value of chatting in person was the opportunity to establish the real question via a reference interview. The packaging of the information could be done later if necessary.

Despite the fact that chats felt longer, only one chat and two of the e-mails received through the closed chat services took longer than 30 minutes (13 percent of all chat consultations). Only 10 percent of e-mails and 4 percent of telephone calls took this long, but a larger trial would be needed to confirm that chats typically take longer. One advantage of e-mail inquiries for the librarian in comparison with chat inquiries is that she feels that she can take her time to choose and phrase her questions more appropriately. However, it is worth noting that it may take many e-mails (and days) for the e-mail inquirer to obtain the same information that the chat users obtained in one session. In this respect, the quality of assistance given through chat was better than using e-mail for queries which could not be answered with "canned" responses.

For a product that is so easy to use, and does what Lineperson does, we would expect to pay more. Under the assumption that the more intuitive a program is for the user, the more development has gone into it, we felt that we got a more expensive product than that for which we paid. The cost per chat enquiry came to US\$7.74. In comparison, if a librarian gets ten queries on a reference desk in an hour, the librarian would need to be earning US\$77.40 per hour for the reference desk to be an equivalent cost. Hence, it was more expensive to provide a chat service than staff the reference

desk. The average chat inquiry took 11 minutes, which is considered long in reference desk terms. According to LTU Library's reference desk survey in 2000 only 3 percent of queries took over ten minutes to answer.

When necessary, the subject librarians will ring a remote student to talk them through a procedure. A long-distance call would cost A\$2.67 for 11 minutes between 2:00pm and 5:00 pm, and mobile telephone calls cost between A\$3.88 and A\$5.09, depending on the network being called. From this, it can be seen that the chat service may be less expensive than a mobile call if the query takes over 30 minutes. The service would need to be three times more popular than it was during the trial, to make the average chat the same cost as a mobile telephone call.

There was some difficulty in being available when callers wanted to chat. Only 56 percent used the chat service during business hours. Some arrangement could be made that the subject librarian is available in the afternoon for the most popular time of day (2:00pm-5:00 pm). The next most popular time is when most libraries are closed (9:00pm-12:00 midnight) and, unless subject librarians will habitually be available at that time for their off-campus students, then real time chat at this library needs to be part of a wider initiative which involves collaboration with libraries/subject librarians in another time zone. One hurdle to this is that, given the types of questions asked, the other libraries would need to be fully aware of the particular policies we have regarding document delivery, and technical problems with off-campus access to journal databases, as well as to possess the usual reference knowledge.

The subject librarians in the trial felt that their time was a precious resource, and becoming more so, and that chat only increased the number of single consultations with which they had to deal. It is an inefficient way of dealing with repetitive queries.

The current trend is to reduce the workload on individual librarians and not to introduce a new service unless it fills a niche not satisfied by other services. The questions related to document delivery and remote access could be answered by an FAQ or auto-response system. The basic reference queries could be addressed

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by the Ask-A e-mail service, and there remains the 22 percent of chat queries that required detailed subject assistance. The first two services could screen the initial query, forwarding e-mails of a complex subject nature to the subject librarian as they arise. The subject librarian could then contact the student by e-mail, telephone or, if available, chat. The only advantage to using chat in this case over the other options is the ability to co-browse. In the absence of a chat program, a short video presentation could be made available online to demonstrate how to move around the library Web site.

## **Conclusion**

Although some off-campus nursing students stated that they preferred the chat, because they did not have to disconnect from the Internet to receive personal assistance, removing the chat service will not prevent any La Trobe University students from contacting the Library another way when they need help. Therefore it is not strictly necessary for us to provide a chat service to increase the number of nursing students who act on their desire for help and, thereby, to increase the number who produce better references in an assignment.

A reference interview can be performed during a chat and closure reached satisfactorily for the user, within an acceptable time frame. However, chats were sometimes an inconvenient interruption to the work of the subject librarian, and a limited amount of rostering was seen as required to provide some predictability – the librarian would not tackle high concentration tasks at that time, and the student could expect someone to be available. Generally, chats were seen as increasing inefficient single consultations during a time when we are looking for more efficient ways to deliver service in a climate of staff reductions. Many students wish to chat outside normal business hours, so co-operation with librarians in other time zones would be necessary.

Some remote students see a niche for a chat service. They want immediate personal assistance without disconnecting from the Internet, as they may not have a second phone line. In the absence of a chat service, there is a

slightly greater chance that the librarian will have to do the literature search on behalf of a remote student because she cannot show these students what to do or "co-browse". Therefore, the librarian may see this as a niche for the chat service. If the numbers in this situation at your university are significant, they may warrant a subscription to a well-priced, quality product such as Lineperson.

#### **Notes**

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- 2 University of Leicester Library Distance Learning Unit Trial Chat Enquiry Service, available at: www.le.ac.uk/ li/distance/chat.html (accessed 16 January 2002).
- 3 University of Pennsylvania Lippincott Library, available at: www.library.upenn.edu/lippincott/askoption.html (accessed 31 January 2002).
- 4 Macquarie University Library: "Ask a librarian", available: www.lib.mq.edu.au/ask/ (accessed 25 January 2002).
- 5 University of New South Wales Library Help, available at: www.library.unsw.edu.au/liveref.html (accessed 31 May 2002).
- 6 Monash University Library, available at: www.lib. monash.edu.au/ (accessed 31 May 2002).
- 7 Bowling Green State University, "Chat with a librarian: history", available at: www.bgsu.edu/colleges/library/ infosrv/hc.html (accessed 31 January 2002).
- 8 From May 2002, the cost would be US\$89 per month for each librarian requiring a log-in.

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