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## **Librarians On Call: an instant messaging enquiry service for Open University distance learners**

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### **The Authors**

From November 2000-June 2002, Georgina worked for The Open University Library as Learner Support Projects Officer, during which time she ran and monitored the Librarians On Call pilot service. In July 2002, Georgina moved to University College Northampton where she now works as an Assistant Librarian with responsibility for e-learning and online development. Michelle is an Assistant Librarian in the OU Library's Learner Support team. She is responsible for the development and administration of the helpdesk/enquiry service and is now running and monitoring the Librarians On Call service.

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### **Abstract**

From March 4 – May 31 2002, The Open University Library piloted a new, instant messaging enquiry service for use by its distance learners, called Librarians On Call. The service enabled OU distance learners to remain online using electronic library resources, whilst also obtaining instant help from a librarian, without the need to disconnect from the internet to use the telephone. Student reaction to the service was overwhelmingly positive, and as a result the Open University has decided to continue the Librarians On Call service. Exit surveys conducted with students indicated students preferred the Librarians On Call service to both email and the telephone, and that they found the service both beneficial and easy to use. The article details the results of the pilot, and also discusses some of the practical issues encountered whilst setting up the service, such as software selection and staffing.

### **1.0 Librarians On Call Pilot: Background, Purpose and Aims**

The use of instant messaging, chat style technology as a means of providing instant, online information assistance to students is now widespread in academic and public libraries in North America. Results from studies have shown a very positive response to instant messaging enquiry services from distance learning students (Alliance Library System, 2001; Broughton, 2001; Granfield, 2002). As the UK's biggest distance learning institution, with over 200,000 students living across the UK and across the World, The

Open University (OU) Library<sup>1</sup> felt it was essential to test the value of instant messaging technology with its own distance learners.

The value of instant messaging as an enquiry medium lies in its capacity to allow students to stay online and get help at the same time, without the need to disconnect from the Internet to pick up the phone. For OU students this is highly advantageous, as information resources for OU students are delivered purely over the Internet via Open Library, the OU's electronic library service. OU students are given support in using Open Library by the Library's specialist Learner Support team, who students can contact using email, fax or telephone. In March 2002 the pilot instant messaging service was launched, providing students with a fourth and alternative means of contacting Learner Support. The service was called "Librarians on Call" and ran from 4 March 2002 to 31 May 2002. Like many of the US pilot studies (Broughton, 2001; Granfield, 2002), Librarians On Call proved an overwhelming success with students, and consequently the OU Library has decided to continue the service beyond the pilot phase. This article reports the final results of the pilot. It also aims to answer some of the questions other libraries considering running a similar pilot service might ask, including:

- How did the Librarians On Call instant messaging service work? What did students experience and see on screen?
- How did we choose the software?
- Who used the service and how often?
- What did the students think?
- What did the staff think?
- What about the future of the service?

## **2.0 How did Librarians On Call work?**

The instant messaging software chosen for the pilot was LivePerson Corporate<sup>2</sup>, and the process of selecting this software is discussed in greater depth in section 3.0. To use the service, no downloads or plug-ins were required whatsoever for the student. Instead students simply clicked on the "Librarians On Call" button visible on each of the Open Library web pages (see Fig.1). A window then appeared on students' screens asking them to provide a few *optional* details, known as the pre-chat survey (see Fig 2).

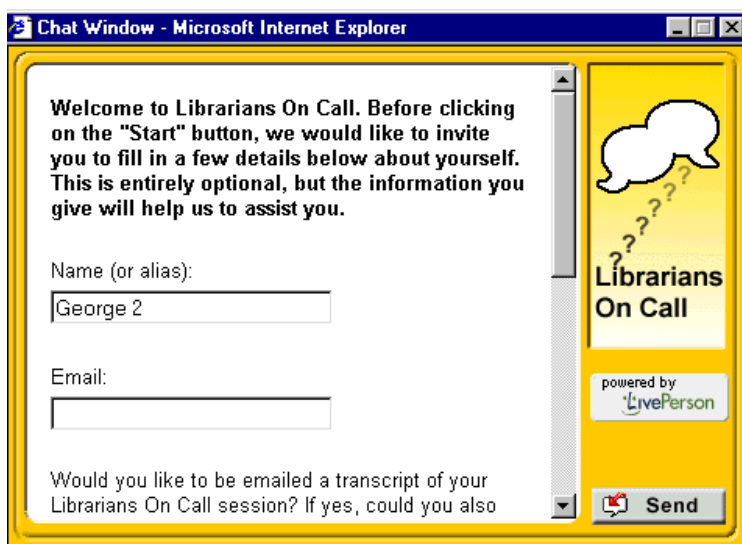
Questions included in the survey were entirely customisable by the OU Library. For our *Library and Information Research 27(85) Spring 2003, pp 11-21*

purposes, students were asked to give us their name, email address, course code, and to tick an option to indicate whether they were postgraduate or undergraduate. This enabled the librarian to know immediately the subject and information level with which they were dealing. During the pilot the pre-chat survey proved a valuable tool for gathering information about the student prior to the chat commencing. After completing the pre-chat survey, students then clicked “Send” and were connected directly to a Learner Support librarian, and the instant messaging chat session began.

**Fig.1 “click to chat” button**



**Fig.2. Pre-chat survey**



While students did not need any additional software, it was necessary to install the LivePerson Corporate operator software on the PCs of the nine librarians participating in the pilot study. These nine librarians included both Learner Support Librarians and also several Subject Information Specialists. For the purpose of the trial, only one current operator licence was purchased, meaning that only one librarian could login to operate the service at any one time. For the three month pilot period, the service was staffed from 09:00-13:00 and from 13:00-17:00 from Monday to Friday, with one librarian logging in for each of the four hour slots. When a librarian logged on, the software on the librarian's PC connected to the LivePerson server. All Librarians On Call communication was then sent to the student via the LivePerson server, and vice versa. When the student clicked “Send”, a message was sent to the LivePerson server,

which in turn activated the LivePerson software lying dormant on the librarian's PC, and a bell rang to inform the librarian that a call had arrived.

Using the LivePerson software, OU Library staff developed a pre-scripted greeting message and several pre-scripted answers to frequently asked questions, which could be sent quickly to the student. Amongst the Learner Support librarians, it became standard procedure to send out a pre-scripted greeting containing an offer of help as soon as a caller arrived. The librarians also found they only used a limited number of pre-scripted messages - primarily greetings, answers to password FAQs, and stalling messages to keep the student happy while the librarian hunted for an answer to the student's question, e.g. "I think this requires some further investigation. Hang on while I see what I can find....".

In addition to pre-scripted messages, "page-push" was also a popular feature with library staff. If the librarian needed to refer the student to a particular web page, this feature enabled the librarian to send a specific web page to the student, which then launched directly in the student's browser. Library staff found that both the page-push feature and carefully deployed pre-scripted answers could quickly resolve many student queries.

Outside office hours, the text on the Librarians On Call button changed to read "No-one available. Click to leave a message". If the librarian had to take a quick tea break, they could change the message to read "Back Shortly". Students who clicked to use the service outside office hours or while the librarian was at tea were provided with an email box where they could type their enquiry. This enquiry was then sent direct to the Learner Support email inbox.

### **3.0 How did we choose the software?**

During the software selection process it was mandatory that users should not need to download any plug-ins. This eliminated many of the free instant messaging products that are commonly used in chat rooms, such as AOL Instant Messenger, NetMeeting and ICQ.

Cost was also a contributory factor and several of the instant messaging products dominant in US libraries fell beyond the OU Library's budget. Overall these products

provided greater functionality, such as application sharing and co-browsing. However, this functionality made increased technical demands on students' home computing facilities, such as modem speed and browser spec. As a result, the chat session was prone to crash when sophisticated functionality was in use, such as application sharing and co-browsing.

Another issue raised by application sharing and co-browsing was privacy. Some of the co-browsing and application sharing products available on the market require the operator (i.e. the librarian) to invite the user to accept a plug-in prior to co-browsing or application sharing. The plug-in enables the operator to remotely control the end-user's PC, enabling the operator to access personal information and files held on the end-user's PC. Most OU students contact the OU Library using their home PC, and this represented an unacceptable intrusion into student privacy.

This left eight possible products, provided by four different companies:

<b>Product</b>	<b>Cost for six months usage (March 2002)</b>
<b>LivePerson Pro</b> - <a href="http://www.liveperson.com">www.liveperson.com</a>	<b>£378.00</b>
<b>Live Person Corporate</b> - <a href="http://www.liveperson.com">www.liveperson.com</a>	<b>£1,236.00</b>
<b>LiveHelper</b> - <a href="http://www.livehelper.com">www.livehelper.com</a>	<b>£210.00</b>
<b>LiveHelper Corporate</b> - <a href="http://www.livehelper.com">www.livehelper.com</a>	<b>£1,056.00</b>
<b>OnDemand</b> - <a href="http://www.conveysystems.com">www.conveysystems.com</a>	<b>£662.00</b>
<b>OnDemand Enhanced</b> - <a href="http://www.conveysystems.com">www.conveysystems.com</a>	<b>£1,254.00</b>
<b>InstantService</b> – <a href="http://www.insantservice.com">www.insantservice.com</a>	<b>FREE to non-profit organisations</b>
<b>Instant Service Corporate</b> - <a href="http://www.insantservice.com">www.insantservice.com</a>	<b>£1,979.00</b>

**Table 1 Instant messaging products**

After further testing it was decided that LivePerson Corporate was both the most robust and also the most user friendly, from the viewpoint of both the librarian and the student. Although the operator software did need to be installed on a PC, rather than a Mac, no such restrictions were placed on the student: students could use Librarians On Call via a PC or a Mac. Tests were also conducted using the screen reading software JAWS, designed for visually impaired users, and although somewhat cumbersome, tests showed that students using JAWS could also access Librarians On Call.

Functionality provided by the LivePerson Corporate software included:

- **Simple click-to-chat interface**
- **Customisable pre-chat survey**
- **Customisable exit survey**
- **MIS usage statistics**
- **Archiving of chat session transcripts**
- **Chat transfer from operator to operator**
- **SSL Security** (secure socket layer security can be turned on if required)
- **Customisable buttons and chat window interface**
- **Customisable canned messages**
- **Operator status** – the operator can change their status between “Online”, “Back in 5 Minutes”, “Away” and “Offline”, which in turn changes the button shown on the website.
- **Offline email service** – End-users are invited to send an email outside office hours and when the librarian has selected the “Back Shortly”, “Away” or “Offline” status.
- **Page-push** - the ability to push a web page to an end-user and for the web page to appear in the end-user's browser.
- **Invite-to-chat** - the ability to invite the student to chat by sending a floating icon across their screen.
- **Incoming call alerts** - the software can be set to automatically pop up when an incoming chat is received and for a bell to ring when a new call arrives, enabling staff to continue other work while waiting for chat calls.
- **Multi-chat capacity** – the ability to conduct many concurrent, separate chats with individual users. In addition, it is possible to set the maximum number of simultaneous chats each operator is prepared to handle.
- **End-user “Info”** – the ability to check end-user pre-chat details (e.g. course code, email address etc) during the chat session.

#### 4.0 Who used the service and how often?

To promote Librarians On Call, publicity about the service was placed in the OU student magazine SESAME. In addition, every page on the Open Library website featured the Librarians On Call “click to chat” button, and a special web page was set up which explained to students how the service worked. Beyond this explanatory text, no further training was given to students. The LivePerson Coporate software had been deliberately selected for its ease of use and the minimal requirements it placed on the end-user, e.g. no plug-ins or downloads. Ease-of-use was an essential criterion in selecting the software, as OU distance learners study remotely, and it is difficult for OU Library staff to train them in person.

In evaluating the success of Librarians On Call, both the numbers of users and their response to the service were taken into account. Over the three month pilot period a total of **304** people used the Librarians On Call service. These were all genuine users, as opposed to librarians from other institutions testing the service. Of these 304 instances of use, **172** were live web chats occurring during office hours (around 14.3 per week) and **132** were emails sent to the Learner Support email inbox while Librarians On Call was offline. These offline emails arrived either outside office hours (103) or while the librarian was at tea break (29).

If user numbers are used as the sole indicator of success, then the Librarians On Call pilot can only be consider a limited success: 304 total users represents only a small proportion of the overall OU student body.

However, when the response and feedback given by individual users is evaluated, a much more positive picture emerges, and this is discussed in full in section 5.0. In particular, the service proved popular with OU students living or studying abroad, and many became repeat users of Librarians On Call. By looking at transcripts and users’ email addresses it was possible to determine that at least 20 users of Librarians On Call were accessing the service from outside the UK, and many used the service more than once. Non-UK users were predominantly from Western Europe and Asia.

Abu Dhabi (United Arab Emirates – 2)	Italy (2)
Argentina (2)	Japan (1)

Belgium (1)	Kampuchea (1)
Eire (1)	Oman (1 – frequent user)
Germany (4)	Portugal (1)
Gibraltar (1)	Sweden (1)
Greece (2)	Sweden (1)

**Table 2 Non-UK users**

It is much cheaper for students living abroad to get instant help using an online instant messaging service than it is to telephone, and this may account for the popularity of the service with this particular user group.

From data gathered via the pre-chat survey, it was also possible to see that the service proved popular with all levels of student, and the numbers of undergraduate, taught postgraduate and research postgraduate users reflected their representation in the OU student population as a whole. In addition, while it was anticipated that Librarians On Call users would be studying science and technology subjects, this was not the case, and the service proved equally popular with arts and humanities students, as can be seen in the percentage breakdown of user by Faculty, as shown below:

<b>Subject discipline</b>	<b>Percentage of users</b>
Social Science	18%
Faculty of Education and Language Studies	14%
Arts	12.5%
Technology	12.5%
Science	11%
Open University Business School	10%
Health and Social Welfare	8%
Maths and Computing	8%
Law	3%
Institute of Educational Technology	3%
Knowledge Media Institute	0%

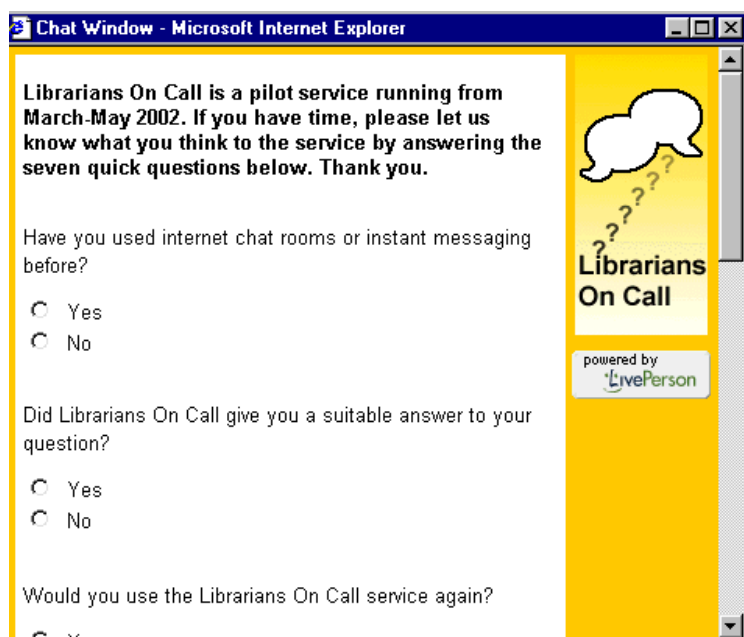
**Table 3 Subject discipline of users**

## 5.0 What did the students think?



To gather student opinion, at the end of each Librarians On Call chat session students were invited to complete an exit-survey. The tools to create the survey came as part of the LivePerson Corporate software, and enabled OU Library staff to ask students to give their feedback to specific questions by ticking their preferred response from a selection of answers, as shown in Fig. 3.

**Fig. 3. Exit-survey**



In total seven questions were asked, aimed at establishing how beneficial users found instant messaging as a medium for asking enquiries, and also to ascertain if the students had any past experience using instant messaging. Not all students completed the exit-survey, and of those who did, not every student answered every question. However, around 76 students answered one or more questions, and the response they gave to Librarians On Call was overwhelmingly positive. The responses given by students to each question are detailed below, together with a brief comment upon the result:

**1) When compared with using email, how was your experience of using Librarians On Call?**

- Better - 88% (64 users)
- Same - 5.5% (4 users)
- Worse - 6.5% (5 users)

Students seemed to favour Librarians On Call over email due to the instant contact made with the librarian, and this finding was reinforced by the further comments made by students, see question 7.

**2) When compared with using the telephone, how was your experience of using Librarians On Call?**

- Better - 67% (47 users)
- Same - 24% (17 users)
- Worse - 9% (6 users)

Students seemed to favour Librarians On Call over the telephone because they could work online with the Librarian without the need to disconnect from the internet to use the telephone. In particular, the page-push facility was popular with students, as the student could be swiftly guided to an online resource that could fulfil their information need.

**3) How easy to use did you find Librarians On Call?**

- Very easy - 78% (59 users)
- Easy - 18% (14 users)
- Neither easy nor difficult - 3% (2 users)
- Difficult - 1% (1 user)
- Very difficult - 0% (0 users)

This result was particularly rewarding, as the vast majority of students found the Librarians On Call service easy to use, with only 1 exit-survey respondent recording any difficulty.

**4) Have you used internet chat rooms or instant messaging before?**

- Yes - 52% (39 users)
- No - 48% (36 users)

Prior to the pilot study it was anticipated that the vast majority of users would have used instant messaging technology before. Unexpectedly, 48% of Librarians On Call users had never used instant messaging. This meant those students who had never used instant messaging had not been put off using Librarians On Call by the prospect of

having to use technology new to them. The result also highlights the importance of choosing instant messaging software that does not require the end-user to download a plug-in prior to using the service – the 48% of users unfamiliar with instant messaging may not have used the service had a plug-in been required.

**5) Did Librarians On Call give you a suitable answer to your question?**

- Yes - 95% (72 users)
- No - 5% (4 users)

Overall satisfaction levels were very high, and where the librarian was not able provide a suitable answer, this was usually because the student wanted to obtain material online that was unavailable through Open Library.

**6) Would you use the Librarians On Call service again?**

- Yes - 97% (73 users)
- No - 3% (2 users)

Again, another overwhelming positive result, which indicated the potential demand and need for the service to be continued.

**7) Do you have any comments you would like to add about the Librarians On Call service?**

It was from reading the comments provided by students that the real value of the service became apparent. In total **38 positive** comments were received and **5 negative** comments. Negative comments were given under the following circumstances:

- when the librarian on call went to tea without switching on the “Back Shortly” button
- when the service was disconnected mid-chat, i.e. the user’s modem disconnected, a firewall caused problems, or problems occurred on the LivePerson server
- when the librarian was unable to fulfil the user’s request, for example, the user wanted to view material online that was not available electronically.

The most negative feedback was received when library staff forgot to turn on their “Back Shortly” or “Away” status when they went to tea break. This problem is easy to  
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remedy and simply requires the librarian to remember to change their status before leaving their desk, but this simple mistake caused students to wait in vain for help, while reading the software's auto-response, which read "Please be patient. A librarian will be with you shortly". This futile wait prompted one user to comment that the service was "SLOW beyond belief", and that it "would be easier to call up the dead" (*1 May, 2002*). Other students who experienced a similarly long and unnecessary wait also gave this type of response. Students were far less disconcerted by disconnection (18 occurrences), and in many cases would try again later until they were successfully connected with a librarian.

Fortunately, this type of negative feedback was minimal, and the comments made by most students gave a clear mandate for the service to be continued:

"This is an excellent service and I hope it wont be stopped after the trial period. I've managed to prepare my dinner in between messages too!" *18 March, 2002*

"Saves a lot of time searching around the net - i had spent an evening trying to get the info. i needed & the librarian was able to give it to me in about 2 mins! A service worth having." *21 March, 2002*

"What a superb service. I have been frustrated in the past trying to find my way through all the resources but having immediate help really makes the experience much better. Please keep it going." *26 April, 2002*

"As a first experience in using any form of chat on-line it worked very well and I wouldn't hesitate to use it again" *1 May, 2002*

"very quick service - brilliant! I think this system is great! I might become a technophile yet."

"Please continue this service. It is excellent." *28 May, 2002*

"IT's a great service. Instant results." *31 May, 2002*

Overall, the feedback and comments given by students showed that the instant messaging medium suited the busy lifestyles and needs of distance learners. In between

chatting with the librarian, the instant messaging medium enables students to conduct other tasks e.g. working online, feeding the dog or looking after children. In particular, students valued the ability to work live online with the librarian without the need to disconnect from the Internet to use the phone. For students overseas, the chat medium represented a means of obtaining an instant response without the expense of making an international telephone call.

In addition, while students were appreciative of an immediate answer delivered via Librarians On Call, they did not require an immediate *answer* in order to value the service. Students seemed to want immediate *contact* with the librarian and a quick *response* of some type, even when the librarian had to conduct further research and send the final answer to the student via email.

Obviously, those students who left comments using the exit-survey were a self-selected group, and would tend towards expressing either very positive or negative comments. To counteract this, around 15 students who had not completed the exit-survey, but who had given their email address in the pre-chat survey, were contacted and invited to give their comments via email. These students included some of those who had been disconnected mid-chat due to problems on the LivePerson server. Overall, these students gave a positive response, with most of those students who were disconnected mid-chat expressing satisfaction with the service after having retried the service at a later date.

Finally, many students, particularly those based in the UK, requested that the Library expand the Librarians On Call service beyond standard office hours. Research conducted by the OU has shown that 50% of OU Library enquiries are sent outside office hours, and several students requested that the Librarians On Call service be extended into the evening.

## **6.0 What did the staff think?**

The nine staff operating the service were asked to provide their individual comments about the service to the following three questions:

- In what ways do you think the Librarians On Call service was beneficial? e.g. What was good about the service? What did you like?

- What were the drawbacks of Librarians On Call? What didn't you like about the service?
- Do you have any overall comments or opinions about the Librarians On Call service?

The staff response to the use of instant messaging was generally positive, although not quite as enthusiastic as the student response. While students valued immediate contact and the ability to work live online with the librarian, several staff operating the service felt less able to handle long complex enquiries via instant messaging. Following the completion of a chat session, staff sometimes found that they needed to email the student with a full response to the enquiry. So while students found the instant contact provided by Librarians On Call beneficial, some staff found it slightly more time consuming. A summary of staff likes and dislikes is given below:

### **Staff Likes**

- **instant communication and help** - without the need for users to disconnect from the internet to use the phone
- **page push facility**
- **easy-to-use software**
- **clearly visible help facility** – the Librarians On Call button was included on every Open Library web page. The visibility and prominence of Librarians on Call made it easier and more obvious for students to see who to contact. This was evidenced by the number of out-of-hours offline messages sent via Librarians On Call, rather than via the standard email inbox, which was located solely on the Open Library Help and Support web page. In addition, as the Librarians On Call button was located on every web page, students were able to contact Librarians On Call as and when they needed help, without the need to navigate through the Open Library pages to find the Help and Support page.
- **students' pre-chat details** – operators found it useful to have course code and student level information prior to commencing the chat session.
- very useful for **short, quick queries**.

### **Staff Dislikes**

- **chats ended prematurely** – thinking the librarian had given them all the information they required, some students chose to end the chat session, while the librarian often wanted to give the student further information before closing the chat.
- **synchronisation** - sometimes the chat became out of synch, and wires were crossed.
- **less useful for long, complex enquiries** – using the chat medium it often took a long time to get to the crux of the enquiry, and librarians often had to conduct research for complex enquiries outside of the chat session, responding in full to the chat caller by email.
- **what is the student up to?** – sometimes long delays elapsed between the librarian sending a message and the student responding. This could be for a number of reasons, for example, the student may have been multi-tasking, i.e. reading a web page that has been page-pushed, or the student could simply be a slow typist. Some librarians found this unknown element off-putting. However, operators could continue with other work whilst chatting and were alerted by a flashing LivePerson icon in the bottom of their screen to indicate when the student had responded.
- **disconnection problems**
- **staffing and rota problems** – at the time of the pilot, two help desk rotas were run concurrently in Learner Support: the main Learner Support Help Desk and Librarians On Call. Staff felt the two rotas needed to be merged, but were concerned that a Librarians On Call chat session could not be conducted whilst on the telephone. One solution to this would be the purchase of an additional LivePerson concurrent operator licence. This would enable another librarian to pick up Librarians On Call chats whenever the librarian time-tabled on the rota was engaged in a telephone call.

## 7.0 What about the future of the service?

Due to the success of the pilot, the OU Library has decided to continue its Librarians On Call service. The service resumed at the beginning of October 2002, staffed by four  
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Learner Support Team Librarians who had been involved in the pilot. During the pilot, several Subject Information Specialists had also staffed the rota, and as these staff were unable to give their time in the long-term, the Librarians On Call service was only made available during peak enquiry hours: from 13.00 – 16.30 Tuesday to Thursday and from 10.00 – 13.00 on Fridays, with one librarian logging in for each of the slots. It was also decided to merge the Librarians On Call slot with the Learner Support helpdesk rota. This has been made possible by the purchase of an additional LivePerson concurrent operator license, which enables another librarian to pick up Librarians On Call chats whenever the librarian time-tabled on the rota is engaged in a telephone call.

Initially the merger caused difficulties with rota time-tabling, as only four Learner Support Librarians had been trained to use the LivePerson software. These staff members had to be available for those timetable slots when the Librarians On Call service needed to be operated, which was not always possible. It also meant one or two Learner Support Librarians had to do more helpdesk slots than usual to ensure the Librarians On Call service was available during the publicised time slots.

This time-tabling problem has now been solved as all members of the Learner Support team, including library assistants, have been trained to use the LivePerson software and there are now ten members of staff trained to operate the service. The availability of extra-trained staff has enabled us to extend the Librarians On Call service hours, which as of the beginning of December 2002, has been staffed from 13.00 – 16.30 on Mondays, and from 9.30 – 16.30 Tuesday to Friday. It was decided not to offer the service on Monday mornings, as this is our busiest time on the helpdesk, catching up with emails and telephone messages, which have been submitted over the weekend period.

The comments and feedback on the service received via the exit survey on LivePerson have continued to be very positive, with comments such as *“This is a brilliant service, so important to those of us learning ‘off-campus’ (19/11/02)*. Following the results of the pilot, during software training the importance of using the “Back Shortly” or “Away” status buttons has been heavily stressed and so far we have not received any negative comments from students waiting in vain for a response from the Librarian on duty. Staff using the software are coping very well and feel confident when responding to queries using this mode of communication.



When Librarians on Call resumed in October, the software was upgraded to Version 5.0 and some additional features worth noting were added. It is now possible for users to request a transcript of their chat to be emailed to them, operators can communicate with one another via a messaging channel not visible to chat visitors, and there is a graphical dashboard display of the last 30 days of visitor traffic and chat activity. We will shortly be upgrading to Version 5.5 which will offer improved features such as the ability to embed a chat window in a web page instead of opening a new window and to define hot keys for a quick launch of canned responses.

The Learner Support team is in the process of examining how we can extend our helpdesk hours beyond standard office hours in the future, and extending the Librarians On Call service will be considered as part of that process. We need also to plan how we monitor the quality of the service and how we can most effectively promote the service to the OU community.

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## **Endnotes**

<sup>1</sup> See <http://oulib1.open.ac.uk/>

<sup>2</sup> See <http://www.liveperson.com>