The Three-Continent, 24-Hour Help Desk: An Academic First?

Taking advantage of time differences around the world permits four universities to share help-desk services and provide 24-hour support to users

By Jean Sykes

Tour universities across three con-vative, 24-hour help-desk service called Follow the Sun. The day is divided into six-hour slots among the four partner help desks at the University of Colorado in Boulder, Macquarie and Newcastle Universities in Australia, and the London School of Economics in the U.K. (LSE). According to Anthony Giddens, Director of the LSE,

LSE has always been known as a world-class international institution, so it is highly appropriate that we are the first to offer this innovative, global method of providing 24-hour technical support to our students.

The idea was born back in early 1999 when Neil McLean, University Librarian at Macquarie, had lunch in London with me — his friend, former colleague, and Librarian and Director of Information Services at the LSE. Both of our organizations provided 24-hour computing facilities for students, but neither could staff the help desk for anything like the full 24 hours in a day. Neil's big idea was to exploit the time difference between the U.K. and Australia by setting up a collaborative helpdesk service. Macquarie's staff would help LSE users during unsocial (or "off") hours in London, while LSE staff would assist Macquarie users when the local help-desk service in Sydney was closed.

Why the Need?

Everyone involved in higher education knows of the enormous user



demand for networked access to a growing range of learning and information sources, both on- and off-campus. These include Internet and e-mail, online catalogues and databases, online learning from e-texts to full-scale ecourses, campus information lookup systems, electronic journals, and the full range of software applications needed to support courses.

Increasingly, students and faculty want network access at unsocial hours, when the home computing service is not staffed. They might be part-time students with full-time jobs during core hours; distance or online learners located a state, a country, or even a continent away; or researchers on sabbatical or attending conferences in different time zones. Yet few computing directors have the staff resources to fund a full 24-hour help-desk service. Even minimum staffing would be costly, and that would not provide access to the full range of staff expertise. Much better to get access to the expertise you need from a fully staffed help desk somewhere else in the world, where a normal day-time service is in operation.

"The help-desk service pioneered by Macquarie University and LSE has been much admired by my fellow vice chancellors in Australia, and the initiative is regarded as a fine example of innovative, collaborative action," commented Professor Di Yerbury, Vice Chancellor of Macquarie University.

Other 24-Hour Help Desks

Such is the need for technical help that commercial call centers exist to support computing queries from students, especially in the United States. Colleges with large numbers of online students might well pay hundreds of thousands of dollars a year for such fee-per-minute services. Other universities have signed up collectively with software vendors who offer services as part of their applications package deals. Yet others have pooled their resources to offer 24-hour support through regional collaboration.

Kelly McCollum touched on some U.S. initiatives in an article in the October 7, 1999, Chronicle of Higher Education,1 and Jeffrey Young described a wider range of initiatives, including the LSE/Macquarie one, in the same journal in May 2000.2 But Follow the Sun seems to stand alone with the cheapest option of all: a reciprocal help desk service among four universities, with no extra cost outlay whatsoever.

What It Does, and How

Currently the service answers queries relating to MS Windows, MS Office, MS Explorer, Netscape Navigator, and MS Exchange, and general Internet enquiries. Any computing queries not related to this common core are redirected where possible to relevant other staff.

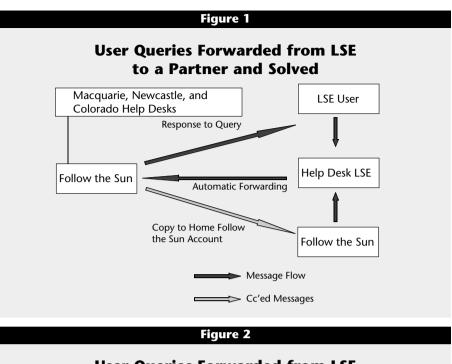
Follow the Sun works by exploiting the difference in time zones and functions via e-mail. The user e-mails the local help desk with the query, and if the staff have gone off duty, the request is automatically forwarded to one of the partner help desks. Microsoft Exchange is the common medium.

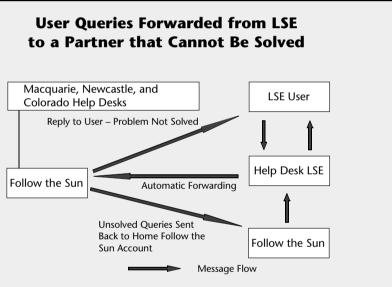
All answers sent to the user are copied to the home help desk so that local staff can see what has happened when they come in the next day. Queries that cannot be dealt with are forwarded too, so that they can be handled expeditiously the next day by local staff. (See Figures 1 and 2.)

What Took So Long?

Neil had the idea in 1999,3 but it took until Christmas 2001 for Follow the Sun to reach launch status. Why? The reciprocal service between Macquarie and the LSE was up and running by October 1999, largely due to the excellent work of Matilda Kolandaisamy, Supervisor of IT Customer Support at Macquarie, and Malcolm Keech, User Services Manager of the LSE at that time.4 The service, however, was not strongly promoted because of a four-hour "dead spot" each day when neither help desk was staffed. The dead period was probably more critical for LSE students, since it was between 7 and 11 p.m., than for Macquarie users, who had no service between 5 and 9 a.m. The search therefore began for a North American partner to fill the gap.

While the Macquarie and LSE helpdesk teams quietly worked away at eliminating problems and improving the service, I set about trying to find a third partner. Such is the pressure on computing services on U.S. and Canadian campuses that this task proved to





be remarkably difficult. Until, that is, I found myself sitting next to EDU-CAUSE Vice President Richard Katz in Brighton, England, in March 2001 at a conference dinner. Richard was the keynote speaker at the annual Management Conference of UCISA (Universities and Colleges Information Systems Association). I told Richard about the help-desk project, and he promised to find a U.S. partner. Within a few weeks he had found a volunteer in Jim Marshall, Executive Director of Academic Technology Services at the University of Colorado at Boulder. Exchanges of e-mail took place, then the deal was clinched over a lunch in London that included me, LSE User Services Manager Sue Wing, and Jim on a torridly hot day in July when Jim was en route to his fishing vacation in Ireland. The eagle-eyed will by now have spotted the significance of meals in this Follow the Sun initiative!

By the end of the summer all of the details had been sorted out at our three institutions, thanks to the efforts of Colorado's Ken Schuetz, IT User Services Manager. In the meantime, Macquarie had attracted a second Australian partner, Newcastle University in New South Wales, to join the project. The key contact in Newcastle is Peter Sidorko, Client Services Manager in the Information Services Division, This meant that the load could be spread four ways instead of three, with sixhour shifts rather than eight for each partner.

"Higher education prospers through innovation, sometimes on a large scale, sometimes on a smaller scale," noted Richard Katz. "The goodwill and persistence of these four institutions has led to an innovation that seems at once feasible and powerful. It is a compelling example of how colleges and universities can adapt to a 24 × 7 service expectation in ways that work well within our culture."

The challenges

Both technical and human issues needed to be addressed in the early days. Tackling them between the first two schools paved the way for the third and fourth partners.5

- At first, the message forwarding facility had to be turned on manually, which required help-desk staff to remember to flick the switch. Automatic message forwarding soon resolved that potential weakness in the system.
- Initially, only one mailbox was set up, and any returned mail went to help-desk supervisors' accounts. But this required an extra step by the supervisors — to forward the message to help-desk staff - so each partner site added a second mail-
- Access to "staff only" information soon became important. Partners offered each other password access to their local departmental Web sites.
- A "bounce back" problem occurred in the early stages, whereby respective auto-forwarding rules clashed with each other. The problem was quickly rectified by setting up an exception rule in e-mail.
- Some query tracking difficulties meant that help-desk staff could not always tell whether the answer to an enquiry had been sent to the user. Additional redirection rule arrange-

ments ensured that a copy of each satisfactorily answered query goes to the home help desk through the Follow the Sun mailbox. Not only does this ensure that users receive an answer, it also helps the home help desk gauge the type of demands being made of the remote help desk during unsocial hours.

- During the initial period some 30 percent of the enquiries were unique to the remote site and therefore could not be resolved. Discussions are now under way to see if this percentage can be reduced by better understanding of the partners' technical set-ups. There were, and will always be, technical challenges to resolve as partners upgrade and introduce new operating systems and software. For example, the LSE migrated to Windows 2000 in summer 2000 and to Exchange 2000 in summer 2001.
- Human and organizational issues also needed attention. The time difference meant that phone calls were difficult, yet the need to have three-cornered (three-continental) telephone conferences did become quite acute. This requires one of the partners to be available at a drastically unsocial hour. Moreover, every problem that arises needs to be chewed over four ways before being resolved, and that takes time.
- Winning over the hearts and minds of local computing staff wasn't always easy, either. The directors had the vision and the enthusiasm, but often the people who had to make it work were so busy "firefighting" that finding time to prioritize this marginal service was problematic. Still, all these obstacles have been overcome.
- The service is also necessarily limited in what it can do for users. No help is currently possible if the local network or e-mail server goes down. No help is guaranteed for specialist hardware and software not common to the four partners (for example, the LSE doesn't support Macintosh or Unix applications). Currently, we

cannot help users who have forgotten their passwords or don't know how to log in to their local systems in the first place. Yet these are among the most common user problems for every service.

Ideas for Development

The partners have no shortage of ideas for future development of Follow the Sun.6 The partners are evaluating a number of methods to move on from auto-forwarding, including logging into one another's e-mail accounts. This would minimize the confusion of mutual redirection rules and provide a more efficient query tracking mechanism.

We want to enable help-desk staff to log in to one another's networks in order to overcome user-name problems. file allocation sizes, and password changes outside of normal hours. All of these problems come up regularly and cannot currently be resolved. Perhaps the help-desk software recently installed at the LSE will be adopted by the other partners — all are evaluating such packages at present — to enhance interoperability.

The partners are discussing service levels so that users will know what they can expect of the remote service. Shared FAQs and collaborative use of chat software are on the agenda, too. And why not experiment with alternative communications technologies, such as fax or phone, when the user's major problem is that he or she cannot get into email in the first place?

Conclusion

Although the number of enquiries to Follow the Sun from any single university remains relatively small (indeed, the commercial call centers have found the same), the few people who make use of the out-of-hours service find it very beneficial. And we assume that demand can only grow. If so, having gained experience and resolved early problems with a low user base will have proven useful.

This imaginative 24-hour service is just one of a range of ways in which institutions can extend local services and answer increasing demand. It probably wouldn't work as well without considerable additional resource outlay for universities with large cohorts of distance or online learners because of the scale of demand involved. However, for traditional universities wishing to help those of their users who choose or need to use computing facilities at unsocial hours, it offers a cost-effective and worthwhile service. Which computing director does not have all-hours services somewhere in his or her strategic agenda in support of students and staff?

Follow the Sun has made international links and fostered relationships. Who knows what other kinds of projects the initiative could lead to among its partners? Time will tell. $\boldsymbol{\mathcal{C}}$

Endnotes

- 1. K. McCollum, "Computing Questions? A Web Service Lets You Say What You'd Pay for Answers," *Chronicle of Higher Education*, Oct. 7, 1999, http://chronicle.com/free/99/10/99100701t.htm.
- 2. J. R. Young, "Distance Education Transforms Help Desks into 24-7 Operations," *Chronicle of Higher Education*, May 26, 2000, http://chronicle.com/weekly/v46/i38/38a04901.htm>.
- 3. N. McLean, "Collaborating to Compete: The Search for New Alliances," paper given at the RAISS Conference, Sydney, Australia, 1999, http://www.lib.mq.edu.au/conference/mclean/collaborate/index.html>.
- 4. M. Kolandaisamy and M. Keech, "Moving Towards 24-hour Support," Books and Bytes: Technologies for the Hybrid Library, Proc. 10th Biennial Conference and Exhibition (Melbourne: Victorian Association of Library Automation, Feb. 2000), https://www.vala.org.au/vala2000/2000pdf/Kol_Kee.PDF.
- 5. S. Wing, "24-Hour Support: A Collaborative Project," working paper for UCISA, Sept. 2001, available at http://www.ucisa.ac.uk/rc/library/docs/REHDS.doc.
- 6. J. Sykes, "Follow the Sun: The Three Continents Help Desk," talk given at the London Metropolitan Network Workshop on 24x7, Nov. 2001, http://www.lmn.net.uk/events/report7by24.htm.

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