How effective are online services in keeping students and staff up to date with the latest research? Current awareness and the sciences at the University of Bath

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The librarian’s role in the provision of current awareness services changed considerably with the advent of e-journals and online databases. Before the digital revolution, most current awareness services provided by librarians involved photocopying contents pages from a multitude of journals. These services are now few and far between and staff and students are using online current awareness services in greater numbers. With this in mind, the question that needs to be addressed is: how effective are these online services in keeping students and staff up to date with the latest research?

In order to answer this question, nine journals were selected by subject librarians and table of contents (TOC) e-mail alerts were set up for each, using Web of Science (WoS), Zetoc and ELIN, the University of Bath’s Electronic library system.1 The date when the publishers made their information available was used as a benchmark. The dates the alerts arrived were recorded over a one-year period (March 2008 to March 2009). It was hoped that the data gathered from this survey would provide an insight into the timeliness and reliability of these alerting services.

What is ELIN?

ELIN (Electronic Library Information Navigator) is the University of Bath’s e-resources search engine. It links to our full-text e-books and e-journals, our databases and many e-articles. It is difficult to compare it to other commercial services as it provides an alternative to federated search, utilising locally stored metadata rather than broadcast searching in real time. This metadata has been collated by Lund University libraries through various publisher agreements.

Comparison of current awareness services

The most current alerting service was provided by ELIN, with Zetoc being the second most current. The timeliness of alerts sent by WoS was inconsistent. This is highlighted in Table 1, which shows that alerts for Biochemical engineering journal took, on average, 51 days to arrive after the first alert had been received from the publisher, whereas Nature took 9 days.

<table>
<thead>
<tr>
<th>Journal</th>
<th>ELIN</th>
<th>WoS</th>
<th>Zetoc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature</td>
<td>4</td>
<td>9</td>
<td>14</td>
</tr>
<tr>
<td>Trends in pharmacological sciences</td>
<td>6</td>
<td>45</td>
<td>16</td>
</tr>
<tr>
<td>Biochemical engineering journal</td>
<td>6</td>
<td>51</td>
<td>16</td>
</tr>
<tr>
<td>Automatica</td>
<td>3</td>
<td>41</td>
<td>14</td>
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<tr>
<td>International journal of fatigue</td>
<td>5</td>
<td>45</td>
<td>17</td>
</tr>
<tr>
<td>Journal of child psychology and psychiatry</td>
<td>2</td>
<td>16</td>
<td>21</td>
</tr>
<tr>
<td>Journal of clinical psychology</td>
<td>8</td>
<td>35</td>
<td>21</td>
</tr>
<tr>
<td>Science</td>
<td>3</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Quality of life research</td>
<td>1</td>
<td>18</td>
<td>14</td>
</tr>
<tr>
<td>Total average for all journals</td>
<td>4</td>
<td>30</td>
<td>17</td>
</tr>
</tbody>
</table>

Table 1. The average number of days taken to receive an alert after the first was received from the publisher (March 2008 – March 2009)

The University of Bath does not have a subscription to Current Contents, therefore this data was
not included in the study. An Excel spreadsheet containing full data can be viewed at: http://www.bath.ac.uk/library/store/Alerts12month-sample.xls.

Alerts were not always received. Table 2 shows the total number of alerts not received for each service. Zetoc emerged as the most reliable service, more so than the alerting services provided by the publishers. The high number of alerts not received from ELIN is a concern.

<table>
<thead>
<tr>
<th>Service</th>
<th>Number of alerts not received</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELIN</td>
<td>33</td>
</tr>
<tr>
<td>Publisher</td>
<td>14</td>
</tr>
<tr>
<td>WoS</td>
<td>13</td>
</tr>
<tr>
<td>Zetoc</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 2. Number of alerts not received (March 2008 – March 2009)

Once the alert has been received, there is also the issue of how readily content can be accessed. Alerts from WoK and Zetoc contain the TOCs information in the e-mail; ELIN does not. Only the publishers, however, provide links that lead directly to the full-text documents. ELIN, ZETOC and WoS all take you back to the host database and require further mouse-clicking to reach the full text, making these services less streamlined than those provided by the publishers.

So which alerting service is the best? The data for TOC alerts suggests that using services provided by the publishers is the best option. The services provided by the publishers were comparatively reliable in terms of sending alerts. Additionally, their alerts were always the first to be received. However, it is a time-consuming process creating alerts for a number of journals from different publishers. Zetoc, WoS and ELIN all have an advantage in that they allow the user to set up alerts from one location. Based on this small survey, we would recommend Zetoc for providing a good balance between timeliness and reliability; overall it performed better than WoS and ELIN.

Researchers’ views

Following this period of data collection and analysis, the library’s sciences team developed and launched a short online questionnaire (27 March – 19 April 2009). The aim was to find out about staff and research postgraduate preferences for keeping up to date in their fields of research. It was intended to explore how current awareness services might best satisfy the needs of researchers at the University of Bath, so as to feed this back into our teaching of information skills to postgraduate students and to help us to recommend the most appropriate services. In the survey, ‘current awareness services’ were defined as ‘electronic alerts set up by an individual via a database or publisher’s website’, with three main types identified as table of contents (TOC), author/keyword and citation alerts.

In total, 60 members of staff and 31 research postgraduates from the science faculty participated. The survey findings complement those from the analysis of the timeliness and reliability of the ELIN, WoS and Zetoc services, allowing more detailed recommendations to be made.

The majority of our researchers used TOC rather than other types of alert (such as citation or keyword alerts) and they preferred delivery by e-mail (76%) over RSS feeds. The most popular current awareness service identified was Web of Science, used by a third of participants, although around half of the respondents were using of a wide range of individual journal alerts set up on publisher websites. Zetoc and ELIN were significantly less popular, used by about 10% of respondents.

The perceived benefits of current awareness services are that they:

- are fast and easy to use
- provide an overview of your field
- allow serendipity in searching (‘I find interesting papers that I might not if I merely searched a few chosen citations’)
- provide links to electronic copies where available
- save time
- prevent repeat searching
- are relevant, providing cutting-edge information.

However, some argued that they are ‘a distraction’, create information overload and ‘clutter up my inbox until I finally delete them’. They are complex (‘real difficulty getting them set up’), irrelevant, lack breadth, have gaps (some services are ‘useless as many journals are not listed and the updates are not sufficiently frequent’) and are slow (‘alerts seem to arrive 3 or 4 months after papers are published’). There are also alternatives: one staff member felt ‘Going to conferences and talking to colleagues is much more efficient and timely.’
Nevertheless, most of the comments received on the perceived ‘usefulness’ of alerts were positive (80%), and uniformly so from the research postgraduate students. Negative comments came from a small number of staff who had difficulties using the services or could not fit them into their workload as easily.

We asked:

‘If you set up a Table of Contents (TOC) alert, what is the maximum amount of time after the publication date of that journal issue that you would be prepared to wait for the alert to arrive before you consider the alert no longer useful?’

We also asked:

‘If you set up a Table of Contents (TOC) alert, what proportion of missed/undelivered alerts would you be willing to accept before you rejected the service as unreliable?’

On average, a researcher was prepared to wait up to two weeks for alerts and wanted to miss no more than 5% of them. However, this average disguises the range of opinion, which reflected different expectations and approaches to using alerts (particularly regarding speed): some arguably more focused and systematic, others arguably more ad hoc and tolerant of delays and undelivered alerts.

The strongest pattern regarded the proportion of undelivered alerts staff and research postgraduates were ‘willing to accept’. 60% of respondents would not be happy to miss more than 5%. The questionnaire results suggest that, whilst slower than ELIN, Zetoc would be preferred by researchers because of its reliability, although the average wait for alerts is just over two weeks for Zetoc (17 days), compared with 4 days for ELIN.

Full results of the survey can be viewed at: http://www.bath.ac.uk/library/store/CurrentAwarenessReport.doc.

**Conclusion**

The survey results indicate that it is worth identifying how individual researchers perceive and use alerts, as this has an impact on which will be most suited to them. Our questionnaire was a good first step in this direction and will certainly inform our future training. Raising awareness amongst researchers about the huge differences between alerting services in timeliness (speed or alert delivery) and reliability (proportion of alerts received) must be an aim.

Helping researchers to identify the best service based on their approach to alerts – quick but less reliable or slow and painstaking – is a way in which subject liaison librarians can improve their role in the short term; both elements of our survey show that there is no one-size-fits-all service. They may prefer the quicker alerts of ELIN and not mind missing a number of alerts, or they may be more concerned about getting every alert and less about how long they take to arrive, in which case Zetoc is the better choice. Ultimately, getting alerts direct from each publisher provides the fastest, most reliable source, but is more labour-intensive to set up and monitor than using a one-stop service, particularly if your area of interest is broad and covers many journal titles.

The research community would benefit from a broader study of current awareness services over a longer time period, involving more services and types of alerts as well as a broader range of journals. It is also hoped that alerting services such as that provided by WoS will be improved so that in future their quality can be brought up to match their level of popularity.

**References**