The University of Auckland Library is the most extensive library system in New Zealand and the national leader in the provision and development of electronic resources. The Library has been eager to explore ways to incorporate e-books into the University’s learning and teaching initiatives, and the University Librarian has taken a leading role in ensuring that growth of e-book collections has featured in the Library’s strategic plan.

There are several reasons why the Library is investing in e-books. One of the key drivers is to enable academic staff and students to access library resources at times that suit their schedules. Moreover, e-books allow much faster turnaround than print books as far as borrowing and returning are concerned. Also, the University is located in the centre of Auckland, and physical space is at a premium. The opportunity to forgo print copies is enticing, providing publishers supply appropriate digital storage for long-term access.

Access to the first e-book at the University of Auckland Library was provided in 1998, when the Library bought a new integrated library system (Voyager) which enabled linking from the Library catalogue to an e-resource. The first collection of e-books was bought at the beginning of 2001. As of June 2009, the Library has access to over 80 e-book databases, and nearly 350,000 e-books are listed in the Library catalogue. The number of e-books is actually much higher, but not all e-book collections have bibliographic records, which makes it difficult to count the total number of purchased titles.

In 2004, the Library spent NZ$ 429,532 on purchasing e-books, which was 3% of the total collections budget of NZ$14,436,000. In 2008, NZ$1,586,487 was spent on e-books, which is 9% of a total collections budget of NZ$17,577,165. Numbers of holdings for e- and print books added to the Library catalogue in the last ten years are shown in Table 1.

<table>
<thead>
<tr>
<th>Year</th>
<th>E-books</th>
<th>Print books</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009 (till end of June)</td>
<td>19,618</td>
<td>20,186</td>
</tr>
<tr>
<td>2008</td>
<td>18,042</td>
<td>40,012</td>
</tr>
<tr>
<td>2007</td>
<td>14,321</td>
<td>46,868</td>
</tr>
<tr>
<td>2006</td>
<td>66,806</td>
<td>53,488</td>
</tr>
<tr>
<td>2005</td>
<td>40,746</td>
<td>50,340</td>
</tr>
<tr>
<td>2004</td>
<td>93,905</td>
<td>51,187</td>
</tr>
<tr>
<td>2003</td>
<td>81,890</td>
<td>46,757</td>
</tr>
<tr>
<td>2002</td>
<td>4,404</td>
<td>43,080</td>
</tr>
<tr>
<td>2001</td>
<td>5,261</td>
<td>43,467</td>
</tr>
<tr>
<td>2000</td>
<td>29</td>
<td>33,840</td>
</tr>
<tr>
<td>1999</td>
<td>3</td>
<td>29,340</td>
</tr>
<tr>
<td>1998</td>
<td>279</td>
<td>31,060</td>
</tr>
</tbody>
</table>

Table 1. E- and print books added to the University of Auckland Library catalogue per year
A variety of access points

To enable 24/7 access, the Library provides remote access to e-books through the Library website. This has been achievable thanks to a locally developed user authentication system which the University has had in place since the late 1990s, and a proxy server which enables access to fee-based websites the Library subscribes to. Authorized users have to login the first time they access the network, and subsequent session traffic is recognized as coming from the University network.

To increase the likelihood of users finding e-books, and to maximize their usage, several discovery pathways were developed:

■ bibliographic records in the Library catalogue enable users to search the entire Library resources, print and electronic. The catalogue records contain URL links to full e-book content

■ direct access to publisher servers is provided via Connect Pages. They are set up as a separate web page for each database. Google Scholar, Google Books and Scirus have their own connect pages. By connecting to these search engines via EZproxy, users have access to the subscription-only material to which the University Library subscribes

■ subject librarians create Course Pages for individual courses taught at the University. These pages have lists of print and electronic resources with direct links to individual e-books.

■ a dedicated e-Book Page serves as a general gateway to e-books. One item on this page is a canned catalogue search that will find only e-books. The page also lists the main e-book databases with brief descriptions and links to

Connect Pages. There is also a Guide to Finding & Using E-books, and an e-book course handout How to Search & Use E-books.

Table 2 gives the number of user sessions for the three most popular collections for the period January–June 2009 and compares access to databases via Connect Pages, counted by the Library, with numbers of user sessions supplied by vendors. Unfortunately, there is no data to show where traffic reported by vendors comes from, however, we can say with some certainty that the Library catalogue, Google and Scirus figure prominently.

E-book sources

The majority of electronic titles at the University of Auckland Library are part of purchased collections. Purchasing recommendations come from subject librarians.

E-book collections are offered via diverse platforms, most of them operating like journal aggregator databases, i.e. they are package collections. The advantage of this is that our subject librarians spend less time on selection. However, this also means that the Library acquires titles that it would normally have no interest in buying. Other e-book databases, like NetLibrary, follow the print model of acquisition and require libraries to select individual books. Some databases, like Safari, combine these two models.

Some collections are digitized, like Early English Books Online. Other collections, like ebrary and Books@Ovid, contain books that are born digital or published in parallel print and electronic editions. The difference between these types of collections is

![chart](chart.png)

Table 2. Access at the University of Auckland Library for Jan–June 2009
important in a number of ways, including pricing models and subject matter. Born-digital books may offer more functionality than digitized, such as audio dictionaries and interactive applets.

An increasing number of freely available e-books have been added to the Library resources. New Zealand government departments and bodies, such as the New Zealand Law Commission and the New Zealand Health Funding Authority, issue large numbers of documents in electronic format. These are key resources for many courses and need to be part of Library collections. The Library has to ensure that they remain available when they are replaced by new editions or withdrawn from websites, and so printouts are made as well, where this is legally possible, and laced in the collection. In the longer term we will probably archive a digital copy on our own server.

Libraries around the world have been digitizing heritage collections and making them freely available. Many of these collections or individual titles are valuable and access to them is provided via the Library catalogue on the recommendation of subject librarians. The University of Auckland Library has also become a digital publisher in its own right with its Early New Zealand Books digitalization project, and 170 titles have been completed to date.5

### MARC records and bibliographical control

Providing access via library catalogues has proven important for e-book discovery. SpringerLink statistics, for example, show that the use of e-books doubles if the library has MARC records.6

Library catalogues also serve as inventories of library resources and as such they are useful management tools for subject librarians. Library staff involved in acquisition can easily determine if an item is already held, and avoid duplicating orders and the waste of time and money this entails.

The majority of bibliographic records for e-books in the University of Auckland Library catalogue have been supplied by vendors. Unfortunately, not all vendors and publishers provide bibliographic records.

If MARC records are not available, cataloguers have two ways of providing access via catalogue – either by creating records themselves, or by adding URLs in the 856 MARC field to records for printed copies. Adding a URL to an already existing record makes an electronic item quickly and easily available, but it is not cost-efficient in the long run as more time is spent later on administering e-books. If, for example, access to an e-book has ceased, URLs from individual bibliographic records have to be manually deleted. Creating a separate record for an e-book is more laborious, but enables subsequent bibliographic control to be done in an automated way. For this reason individual records for e-books are preferred at the University of Auckland Library. Table 3 shows the number of individual bibliographic records for electronic and print books added to the Library catalogue in 2008.

Various computer programmes have been used to facilitate the automated creation and checking of bibliographic records for e-books. For editing bibliographic records that are already in the catalogue, Cataloguer’s Toolkit is used.7 MARC Global and MARC Report, programmes developed by the MARC of Quality company, are used for checking and fixing bibliographic records before loading to the catalogue. The quality of records supplied by vendors varies to a great extent. The Library often receives large files, sometimes even several thousand records, to be batch-loaded to the system. Such numbers make it impossible to carry out standard bibliographical control. MARC Report and MARC Global cannot replace copy cataloguing completely, but they can find and repair mistakes in MARC tagging, coding and punctuation. MARC Global has also been used to clone records for e-books from existing records for print editions.

### Some issues with managing e-books

E-book ordering is handled by both Serials and Acquisitions Departments. The traditional separation

<table>
<thead>
<tr>
<th>2008</th>
<th>All records for monographs</th>
<th>Records for e-books</th>
<th>Records for print monographs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copy-cataloguing</td>
<td>60,858</td>
<td>17,387</td>
<td>43,471</td>
</tr>
<tr>
<td>Original cataloguing</td>
<td>4,088</td>
<td>655</td>
<td>3,433</td>
</tr>
<tr>
<td>Total</td>
<td>64,946</td>
<td>18,042</td>
<td>46,904</td>
</tr>
</tbody>
</table>

Table 3. Bibliographic records added to the Library catalogue in 2008
of finances for books and serials is blurring. E-books are often bought from serials funds because of the need to budget for ongoing commitments.

The variety of purchase models is a major problem for subject librarians as they cannot streamline the selection process. A spreadsheet has been made available to provide answers to questions about publishers’ packages and whether new books are added to the collection as part of a package or have to be purchased individually.

Access to e-books and the receipt of bibliographic records for them is not simultaneous. Sometimes the vendor sells the e-book, and provides the record before the book is actually accessible. At other times there is a considerable wait for the vendor to send bibliographic records for books that are already available.

Another problem is that many publishers and vendors do not understand the principles of bibliographic description. Mistakes in records are varied and frequent. Vendors and publishers often re-use records for print books and frequently do not change elements within the records that are unique, such as Library of Congress Numbers, and ISBNs, which identify particular manifestations of titles. This creates a huge problem for automatic matching of bibliographic data. There have been cases where the Library has been sent records for print editions, unchanged and even without URLs to link to the electronic editions.

Communication from vendors and publishers to libraries is often poor. Many publishers do not advise on updates to their collections. Repeatedly, the Library has not been notified about ceased or superseded titles, and changed URLs. This creates difficulties when a lecturer chooses an electronic title for recommended reading and then, half-way through the course, without any notice or explanation from the vendor or publisher, the e-book is no longer available. This gives the impression that e-books are not a reliable resource.

Monitoring usage of e-books is another problematic area. Not all vendors and publishers provide usage statistics. The large number of University of Auckland Library e-book collections makes it difficult to get a complete overview of total e-book usage. The Library monitors the most popular databases, SpringerLink, ebrary and NetLibrary, and the usage of all of them has been steadily increasing. In the period January–June 2009, for the three above mentioned databases, there were 81,845 user sessions, and 21,468 book titles were accessed. This is 1.6 user sessions per user in the first six months from a population of nearly 50,000 Library users.

Over the years, Excel spreadsheets have been used to manage various processes related to e-books management, such as usage statistics, licences, etc. A wiki was created in 2009 (Figure 1) and all important documents have been stored on it,
including spreadsheets, cataloguing instructions, notes and decisions related to e-books. Having all the documentation in one place makes management of e-books much easier.

**Connecting with users**

To ensure that the University is getting a return on its investment in e-book collections, it has been necessary to undertake considerable promotion of e-books. From the beginning there was an awareness of the need to instruct users (both staff and students) about what is available and what advantages e-books can offer in their particular disciplines, and to identify the potential for using them in an academic environment.

A regular course is held to help Library staff and users gain a better understanding of e-books. The course handout is also accessible from the Library website and explains the main advantages of e-books and how to search NetLibrary and ebrary, two of the major cross-disciplinary e-book collections.

The education of subject librarians and other Library staff was also considered very important as they select and make recommendations for purchases and also educate users. Presentations on each new collection are organized for Library staff, with advice on how to use the resources. It is important that subject librarians are aware of new e-book titles so they can add them to relevant Library-created course pages.

Information Literacy programs have been an opportunity for proper utilization of e-books. Embedding information literacy in the Bachelor of Business and Information Management (BBIM) curriculum has been described by Douglas Carrie and Lynne Mitchell in the book *Collaborative Information Literacy Assessments*. For the purpose of this article we can say that e-books, together with other electronic resources, play an important role in the University’s e-learning initiatives.

In 2004, a questionnaire was created to assess the level of knowledge that users have about e-books, the type of use they make of them, and their perceptions of them. The questionnaire was given to Library staff and two groups of students. The results were reported at the LIANZA 2004 conference.9

The University of Auckland results are very similar to those found by Mercieca10, Abdullah11, Jamali, Nicholas and Rowland12, and in other surveys. Print is the preferred format in many instances – users will often browse an e-book to see if it is useful, and then get the print copy for more substantial reading. Some respondents who favoured electronic access said they would still have to print out the text, because reading hard copy is easier and because electronic page turning is tedious. Different e-book features were rated differently. Access ‘anytime, anywhere’ was regarded as very important, while elements such as animation or video were of little importance. The majority of respondents said they would like more e-books in their subject areas. Another survey is scheduled for 2009, to see if perceptions have changed.

**The future of e-books**

The future role of e-books at the University of Auckland Library relies on what directions e-publishing for libraries will take in the future, but also on subject librarians and the extent to which they will incorporate e-books into their collections.

The general opinion among the University of Auckland Library staff is that e-books have expanded the level of Library service and added value to the learning environment. Everybody likes the full-text searching and other features of e-books. Some subject librarians believe that e-books will completely replace print books in the near future. They point out that students are already physically visiting the Library less and there is a growing expectation of being able to access most resources from the desktop. But other subject librarians are still not selecting e-book titles. Many remain reluctant to purchase an e-book in preference to a printed version except for second and subsequent copies, and 95% of book purchases are single copies. The only exception is reference books, where the general rule now is that online sources are preferred.

One of the main reasons why many subject librarians do not choose e-books is that currently available e-book packages do not satisfy student needs. There are not enough recommended texts in electronic format. Publishers keep text books in print format, and e-book collections offer mostly supplementary and general reading. Many librarians at the Library are disappointed at how long it is taking for publishers to move to more innovative models.
Various problems with e-books lessen their appeal to subject librarians. Lack of standardization of purchase models and formats is confusing for librarians as well as for library users. Access to e-books can be unreliable. Managing e-book collections has often proven to be a difficult task.

Nevertheless, the first ten years of e-books in the University of Auckland has been a positive experience and their place is well established. The next decade will bring further exciting developments and challenges.

Notes and References

7. Cataloguer’s Toolkit is created by Gary Strawn from Northwestern University Libraries, Evanston, Illinois. This set of programs makes easier management of the data on the Voyager library system. See: http://www.library.northwestern.edu/public/. (accessed 8 September 2009).

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