Abstract:
E-books continue to thrive with e-book technology companies developing a variety of solutions for libraries, many of which offer excellent support for teaching and learning. The objective of this paper is to present the University of Auckland Library’s experiences in integrating e-books into the learning environment. This is a complex issue and will be considered from different perspectives: selection, purchasing, providing access, cataloguing, and user support and satisfaction.
Introduction

The University of Auckland encourages and promotes the development of flexible educational models, the use of new teaching technologies and computer assisted learning management systems. The University's flexible, distance and e-learning initiatives involve engaging students in online learning experiences.

E-book technology companies have developed a variety of solutions for libraries, many of which offer excellent support for teaching and learning. New technology has definitely altered the ways libraries provide services; however, managing this vast number of e-books is not easy. The variety of purchase models that vendors offer, varying formats of e-books, obtaining bibliographic records, bibliographical control, and choosing avenues to provide access, are just some of the problems libraries have to face and solve.

The University of Auckland Library has been eager to explore the opportunities new technology offers, to use it to expand Library services and to find ways to incorporate it into the University’s learning and teaching initiatives. The Library has committed itself to purchasing e-books and coping with problems as they arise.

Access to the first e-book was provided in 1998, when the first link was created from the Library catalogue. Seven years later, over 200,000 e-books are available through the Library catalogue. In 2003 and 2004, twice as many e-books were catalogued as printed books. Students and staff appreciate their advantages and their popularity is growing.

The purpose of this paper is to present the University of Auckland Library’s experiences in integrating e-books into the learning environment. This is a complex issue and will be considered from different perspectives.

The term "book" is used in the wider sense of monograph and includes e-documents such as bibliographies, government reports, and cartographic material.

Sources of e-books

The majority of electronic titles are part of purchased collections, like OVID, ebrary, netLibrary, Women Writers Online, Medieval Sourcesonline, Past Masters, Oxford Reference Online, and Early English Books Online. There are about thirty of them. A list of e-books databases the Library has purchased can be found on LEARN (the Library Electronic Academic Resources Network) at http://www.library.auckland.ac.nz/ebooks/.

Some e-book databases operate like article databases, i.e. they are a package collection with no selection, while other e-book databases allow libraries to select the books they acquire. ebrary represents a package collection with no selection and netLibrary and Safari follow the print model of acquisition, which competes with print format.
As well as links to the individual titles of purchased collections, there are also links from our catalogue to many free e-mono-graphics. Links are added to free full-text electronic versions of printed monographs if the URL is printed in the book or if the cataloguer knows of the existence of an e-version and can readily find its URL. Links are also added for various free e-documents published by the New Zealand government, or bodies such as the New Zealand Law Commission, and the New Zealand Health Funding Authority. Increasingly, more and more of these publications are originally published electronically. Considering their importance, and the need for them to remain available when they are replaced with a new edition, or withdrawn from the website, subject librarians may decide to add a printout to the collection as well, where this is legally possible.

Electronic information that is supplementary to the print version, such as companion sites, can also be added. We tend not to add links to sites which don’t provide the full-text but provide only tables of contents, publishers’ web sites and other sites which have only an overview of the book, and to eversions which are available for a limited period only. Nevertheless, if the links are already in the bibliographic record, we do not delete them. There is a division of opinion among subject librarians about this. Some of them think that it is confusing. The link on OPAC says ”Link to e-resource: e-Supplement”, or “Link to e-resource: Table of Contents”. Students see the link, and expect to find the full text. Other subject librarians think that having links to this type of information is valuable because it gives students the opportunity of seeing whether the book is useful to them and saves them going to the shelves or obtaining the item by interlibrary loan. However, this type of e-resource is not included in the count of 200,000 e-books.

All the above mentioned electronic monographs are stored on non-Library web servers and are accessed remotely. Our e-collections also include a very small number of locally stored e-monographs, which all have to be in PDF format. A sample copy has to be obtained first, and tested, before purchase. The resource must not be on the web, or on CD or any other format. We also have to ensure that the publisher or vendor has given permission for it to be stored.

Selection

Selection and recommendations for purchasing are made by subject librarians. A subject librarian is assigned to every department and faculty in the University. Before they make a recommendation to purchase a new e-book collection, subject librarians need to consider several things.

Below is the checklist compiled by the database administrator, the aim of which is help subject librarians make a decision on whether to purchase e-book collections:

Platform
1. What kind of document format is your e-book in (i.e. html, xml, PDF, proprietary)?
2. How do you navigate through the pages?
3. Is it web based or do you need client software?
4. Do you support stable title-level jumpstarts (i.e. can we link from our catalogue to a URL for an individual book)?
5. Do you supply MARC records with embedded URLs?

Readers
1. Do you need any readers to view the content?
2. Are they proprietary to your product? (Important)
3. If yes to 2. – How often do you send updates for the readers?

Borrowing
1. Describe how our users borrow or view books.
2. How much can they print?
3. If you have to create an account, how do you keep track of users who may have left the university?
4. If buying sets of e-books, can our users retrieve a customised bookshelf or list of works to which they have access?

Authentication
1. Can it be IP based?
2. Does it work with ezproxy?
3. If you use a password or other methods, please describe. Note: access needs to be networkable, not single PC-based.

Future of the product
1. What other vendors are you affiliated with?
2. Is your e-book line subject based?

Access

From the beginning it was decided that web access was preferable. With LEARN authenticated users can access e-books from the Library, computer laboratories, or from home, on a 24-7 basis.

Access to e-books is provided in three ways – through Connect Pages, LEARN Course Pages, and through the Voyager Library catalogue. All three ways of access are important.

Connect pages enable users to go directly to vendor e-book databases. Databases offer full text searches across the whole collection, not just one book. Integration of full-text searching with other search capabilities allows more nuanced and comprehensive retrieval of information than ever before. Most e-book databases have administration features which allow usage data such as popular books and topics of high interest to be identified and graphed. Some have inbuilt dictionaries, a feature that has been surprisingly popular. netLibrary has an audio file that pronounces words. Other functionality includes the ability to create personal files, add notes to the margins of e-books, and create lists and shortcuts to favourite books.
Subject Librarians are responsible for creating online Course Pages for courses run by their departments. These pages list useful resources for students, print and electronic, including reference books and indexes to journal articles. Many contain reading lists with links to online books and journal articles. Students are presented with relevant e-books that are only a mouse click away, and this saves them unnecessary searches. Lecturers find them valuable as the pages can be quickly updated with links to new resources and information literacy help pages. LEARN course pages play a key role in providing equitable library support to programmes taught at multiple campus locations.

Providing bibliographic records in the Library catalogue is very important because it enables users to search both print and e-resources in a speedy and efficient manner. Plans for simultaneous searches of the Voyager catalogue and e-book databases were abandoned when it was realised that every search performed this way would be counted by the vendor as a usage session of the resource, giving us and the vendor a wrong impression of usage. This is particularly impractical for the databases that give us a limited number of logins.

Statistics show that more people are accessing e-books through Voyager and Course Pages than through Connect Pages. The Library’s statistics for database usage shows that in July 2004 the ebrary database was accessed via ebrary Connect Page 426 times, while for the same month ebrary reported a total of 1,881 user sessions. netLibrary was similar - in July 2004 the vendor reported 1,313 user sessions, 423 of these were through the netLibrary Connect Page.

Cataloguing

Several years ago e-book publishers were unsure what metadata to offer with their e-books. Nowadays, more and more publishers are offering MARC records. The majority of our bibliographic records for e-books have been supplied by vendors. This is our preferred way of obtaining records. Some vendors like ebrary, netLibrary, xreferPlus, send big files that we batch load. The majority of vendors are willing to customise the 856 MARC field, and put the name of the collection in a public note, e.g. “e-book Oxford Reference Online”. This is useful for key word searching, the Library statistics, and also ensures the information is prominent in the OPAC display.

Sometimes we have to go to the vendor’s web page and download the records one at a time; here we add the information about the collection ourselves.

Unfortunately, not all of our vendors provide bibliographic records. If we cannot find the records for an e-version of their books, we add a URL in the 856 MARC field to the existing hard copy record. This is not the ideal solution, but it saves time, which is a very important factor, particularly when dealing with such huge numbers of records. If no record at all is available, we create a record for the e-book.

Links to e-books display in the OPAC in the field "Link to e-Resource" - in both the Brief View and Full View of the bibliographic record. The full URL does not display; instead, for full text e-
versions, the text "e-Book" will display, or "e-Book (PDF)" if the content is in PDF. Links to other related resources without full text display as "e-Supplement" instead of "e-Book". Related resources include companion sites, errata and addenda, etc. Links to tables of contents display as "Table of Contents". Links to cartographic material (maps and atlases) display as “e-Map”.

The following table shows the number of e-book holdings created each year in the Voyager Library catalogue for full text e-books.

<table>
<thead>
<tr>
<th>Year</th>
<th>Created Holdings</th>
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<tr>
<td>2005</td>
<td>40,489</td>
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<tr>
<td>2004</td>
<td>93,905</td>
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<td>2003</td>
<td>73,742</td>
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<tr>
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<td>1999</td>
<td>3</td>
</tr>
<tr>
<td>1998</td>
<td>279</td>
</tr>
</tbody>
</table>

**Total e-Book Holdings:** 218,112

Report created on 6 December 2005

This compares with 40,000 – 45,000 bibliographic records for monographs in all other formats which are added to the catalogue each year.

The large number of e-book records makes it impractical to carry out bibliographical control. A further problem is the fact that the receipt of e-books and bibliographic records for them does not necessarily coincide. Sometimes we buy the book and download the record before the book is actually available. Another time there is a considerable wait for the vendor to send us bibliographic records for books that are already available.

Sometimes vendors change links, or cease to provide access to e-books without informing us. We find this out accidentally, usually when Library patrons complain to us that they cannot access an e-book. This happens with big vendors, but even more often with publishers of free e-books. An example is the New Zealand Law Commission, which have recently changed URLs for 55 of their documents.

Although it time consuming and tedious, providing access to e-books via the Library catalogue proves to be essential – simultaneous searching has not been delivered to date and users want all
information on what is available in both print and electronic formats. We should campaign to encourage vendors to offer us records in ways that suit needs of libraries - to provide good quality records, send them in batches in a timely manner, and customised for individual libraries.

Connecting with users

Reaching out towards users

E-books have become an important part of the learning environment at the University of Auckland and students and staff increasingly appreciate their advantages.

From the very 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 point out the potential for using them in an academic environment. A group was formed with the goal to consider the ways e-books could be promoted and better utilised.

As one of the steps in promoting e-books the Library has organised a regular e-books course to help both Library staff and users gain a better understanding of what an e-book is and to encourage their use. Most Library staff have attended the course and their response has been very positive. An on-line tutorial from the course is accessible from the Library web pages, explaining main advantages of e-books and how to connect and search netLibrary and ebrary, two major cross-disciplinary e-book collections. The e-book tutorial can be accessed at: http://www.library.auckland.ac.nz/instruct/ebook/ebook.htm.

The education of Subject Librarians and other Library staff was also considered very important as they select and make recommendation for purchases and also educate users. Presentations on each newly acquired e-book resources are organised for Library staff, indicating both how best to use the resources, as well as obstacles they might encounter. It is also very important to make Subject Librarians aware of new e-book titles so they can be added to the relevant course pages.

To give e-books more prominence, the Library has created a dedicated e-book page on the Library web pages. This page serves as a gateway to e-books both in the Library catalogue and also the databases. A search through this gateway of the Library catalogue is basically a canned Voyager search and it will find only e-books. The page also lists main e-books databases with very brief descriptions of each database. The name of a database is a live link. On the page there is also a link to a directory of open access e-books which are not catalogued on Voyager as well as a Guide to finding & using E-books. The e-book page can be found at: http://www.library.auckland.ac.nz/ebooks/.
Feedback from users

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 both Library staff and students. The results of this investigation were reported at the LIANZA 2004 conference.

The questionnaire indicated that 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 printed 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.

The most common reason for preferring the printed book is that it is easier to read. Some other reasons that were given: “More familiar”, “No time limit”, “Can mark important lines”, “Can read it on the bus”, “Too long to download big bits of books”, “E-books are too slow”, “Easier to look through”, “Getting out of the house”.

Reasons for preferring e-books were: “Availability”, “A few people can access it at the same time”, “I don’t have to carry the books around”, “Keyword searching of full text”.

Different e-book features were rated differently. Access “any time, anywhere” was regarded as very important, while elements such as animation or video were of little importance. Access to key reference materials and definitions as one reads the e-book was valued more by library staff than by students. However, it is uncertain how many students know about these features.

When asked if they would like more e-books in their subject areas, the majority of respondents answered yes.

Statistics are also a good way of obtaining information about usage trends.
netLibrary title acquisition

2001 = 4,276 titles
2002 = 415 titles
2003 = 1,366 titles
2004 = 1,931 titles
2005 = 164 titles
Total netLibrary titles = 8,153

ebrary title acquisition

2002 = 2,845 Titles
2003 = 5,433 Titles
2004 = 5,405 Titles
2005 = 1,262 Titles
Total ebrary titles = 14,946
netLibrary and ebrary statistical data show that e-books are becoming more and more popular with users. The use of these two collections has increased every year, with peaks in the middle of each semester. The main factors responsible for this are: more titles being available every year, increased awareness of e-books, and in particular the fact that lecturers started prescribing texts that are only electronically available.

Further analysis of netLibrary and ebrary statistics would be particularly useful, since one represents a package collection with no librarian selection and the other follows the print model to the extent that only one reader at a time is allowed access to the book, or two if the institution has purchased two copies.

The usage of Safari database shows similar trends. Usage peaks when the final research is due. The most heavily used books are those on software development, programming and database administration. Safari model is good for titles from this very dynamic area. Although we have only around 200 titles, the collection remains relevant as Safari allows replacing less used titles with more current ones.

**Innovative usage**

E-books and other electronic resources created an opportunity for the Library to align closely with the University’s teaching and learning priorities. Particularly interesting are initiatives taken by the librarian of North Shore Campus Library, Lynne Mitchell.
The North Shore Campus was established in 2001. At the same time, the Business School introduced a new three-year undergraduate degree program, the Bachelor of Business and Information Management (BBIM), taught across three Auckland campus locations: Tamaki Campus, North Shore Campus and the Manakau Institute of Technology.

As BBIM students work across traditional disciplines and in diverse locations, it was a challenge to provide adequate library service. It was recognised early on that the answer to this would be an electronic Library with a Librarian specifically employed to integrate information literacy into the BBIM curriculum.

In 2002 the Library begun the BBIM Info Lit programme, which consists of a series of five online tutorials utilising both LEARN and Cecil (the University’s content management system). On LEARN students access their e-learning resources (e-books, database articles, web resources) and on Cecil their course resources (quizzes, simulations, discussions and assessments). The content of Info Lit relates directly to the learning requirements of BBIM coursework. Students navigate from the LEARN online tutorials to multi choice questions hosted on Cecil. The questions are worth 5% of course grade, and student participation and grade is recorded in Cecil. Students have flexibility in completing the Info Lit online tutorials and assessments in their own time, place and pace.

What’s next?

Unfortunately, the answer to this question is unpredictable. It will very much depend on what is going to be developed next and what directions e-publishing for libraries will take in the future. The e-book industry is developing rapidly. Companies serving the e-book market have realised that the biggest consumers of their products and services are libraries. They are focusing on libraries and creating new products for libraries.

There are a few things that we would like to see happening:

- Quality bibliographic records, delivered at the same time as the books and which can be uploaded in bulk with the least possible effort on our part. We also would like to be notified when vendors remove access to e-books.

- More recommended texts in e-format. E-books offer mostly supplementary reading in digital format. E-book databases do not have enough titles that are required texts, and if they do have them, they are very expensive. The publishers keep these in print format, and e-book titles are available only as secondary and general reading.

- More standardisation of purchase models that vendors offer, the formats of e-books, and ways of access.

The future role of e-books at the University of Auckland Library relies also on subject librarians – the extent to which they will incorporate e-books into their collections and how much they can
streamline the selection process. A concern is that some subject librarians are still not selecting e-book titles. They are reluctant to purchase an e-book in preference to a printed version except for second and subsequent copy, and 95% of purchases are single copies. The exception is reference books, where the general rule now is that online sources are preferred.

The demand for electronic texts is growing and the Library is also developing its own digital resources.

Partly to overcome the lack of electronic textbooks, the Library has recently set up a digitisation team to scan book chapters and print-only journal articles on course reading lists onto the Library web server as PDF files. These were previously held at individual libraries as photocopies available for hourly loan.

The Library plans to develop a digital institutional repository, and, together with the other New Zealand university libraries, has joined the Australian Digital Theses Program. Eventually we would hope that all University of Auckland theses submitted in the future will be available electronically, but University regulatory issues have still to be resolved.

The Library has also started digitising early New Zealand books, and that way has become a digital e-book publisher in its own right. This project is still in its infancy, with a total of 27 titles published to date. We have already created bibliographic records for these and, only a few days after the information became available on the library catalogue, there was a query from a user asking whether we plan to digitise more books. The collection can be accessed at http://www.enzb.auckland.ac.nz/.

We also plan to add other digital products to our collections. We recently purchased Naxos Music Library, an online database comprising the complete Naxos, Marco Polo, and Da Capo catalogues. The database has over 75,000 tracks, including classical music, historical recordings, jazz, world, folk and Chinese music. Whilst listening, users can read notes on the works being played as well as biographical information on composers or artists. We are currently exploring the option of buying bibliographic records for these.

Another new initiative is digitising local archival inventories and linking them through Voyager.

It is obvious that e-books have expanded the level of the Library service and also added value to the learning environment. Statistical data shows that they are now an integral part of the University of Auckland Library’s collections. E-books have certainly brought many problems, but we have had more positive than negative feedback. The Library is keen to add more e-books to its collections.
References


