

**THE GROWTH OF E-BOOK COLLECTIONS AT SOUTH AFRICAN
ACADEMIC LIBRARIES: A CASE STUDY OF THE WESTERN CAPE**

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COMPULSORY DECLARATION

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ABSTRACT

Libraries are still unsure of the value e-books can add to their collections and subsequently to their users' research. E-book integration into library collections is made difficult by complicated purchasing and lending models and ever-changing technological requirements. Additionally, it is unclear what exactly library users want from their e-books.

In this study, research into the obstacles facing the growth of academic library e-book collections was carried out by reviewing the literature on the topic, found in print and electronic reference works, monographs and journals, and on blogs and websites.

Secondly, an investigation was conducted into patrons' attitudes to e-books, their current use of e-books, and their expectations of e-books in their libraries, to examine the current and potential use of e-books at South African university libraries.

The investigation employed both qualitative and quantitative research methods to discover library users' attitudes towards e-books. Surveys were run on the campuses of the four universities in the Western Cape of South Africa. A sample of potential participants, totalling 1,539 staff members and 45,849 students, was invited to participate in the survey via email or a website link. Data was collected by means of a self-administered, online questionnaire distributed using SurveyMonkey software. The questionnaire contained both closed-ended and open-ended questions. A total of 1,355 responses was gathered. Data analysis involved calculating the number of responses to closed-ended questions using Microsoft Excel, as well as interpreting opinions expressed by comments made by respondents in free-text fields. Variables were looked at independently as well as interdependently. In order to compare the views of the users to those of the libraries themselves, data triangulation took place using data obtained from the acquisitions or e-resources librarians at the four participating libraries.

The results show that users are eager to use e-books but that they are currently not using them to a large extent. There is a lack of awareness that libraries stock e-books and, for users aware of library e-books, a feeling of dissatisfaction with the collection as a whole. Although print is still preferred by many, e-books are seen as an alternative because of their 24/7 availability on and off campus. Users show a great demand for the features e-books offer, such as search functionality, but some features, such as note-taking and the customisation abilities of e-books, are not valued as much. Downloads to memory devices are in high demand, however

downloading to cell phones is relatively low on the list of priorities for users. Lastly, users are ignorant of the limitations that most e-book licensing agreements impose.

Recommendations made in this study include increasing the awareness of library e-book collections, no matter how small, through promotional activities and inclusion in discovery tools. Print collections should not be ignored but libraries should educate users on the advantages of e-books and the features they offer that enhance research. The limitations of these features should also be pointed out to avoid users feeling dissatisfied with the collection.

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REFERENCE STYLE

For electronic sources lacking pagination, such as web pages, the provisions of Rule 15.8 of the Chicago manual of style, 16th edition, have been adopted, whereby a section heading, closest to the material cited, has been added to the in-text citation indicator. For example, Brown (2006: Foreword).

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ABBREVIATIONS AND ACRONYMS

ALA	American Library Association
ALIA	Australian Library and Information Association
CD-ROM	Compact Disc Read Only Memory
CIBER	Centre for Information Behaviour and the Evaluation of Research
CILIP	Chartered Institute of Library and Information Professionals
CPUT	Cape Peninsula University of Technology
DDA	Demand-Driven Acquisition
DOI	Digital Object Identifier
DRM	Digital Rights Management
ECAR	Educause Center for Applied Research
e-PUB	Electronic Publication
HTML	HyperText Markup Language
IFLA	International Federation for Library Associations and Institutions
ILL	Interlibrary Lending
IP	Internet Protocol
LIASA	Library and Information Association of South Africa
LIS	Library and Information Science
OA	Open Access
OPAC	Online Public Access Catalogue
IHS	Information Handling Services
PDA	Patron-Driven Acquisition
PDF	Portable Document Format
RDA	Resource Description and Access
ROI	Return On Investment
UCL	University College London
UNLV	University of Nevada, Las Vegas
URL	Unique Resource Locator
VLE	Virtual Learning Environment

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CHAPTER ONE

1. INTRODUCTION

E-books in libraries are a big talking point. From an outsider's perspective, being able to borrow books from the library is a given, and electronic books should be no different. For the library insider, however, e-books differ vastly from print books and cannot be dealt with in the same way. Libraries are faced with a range of choices and decisions that have to be made when incorporating e-books into their collections.

Traditionally, quality items constitute a "good" collection – classics, or complete sets of long-established reference titles, for example, will make up part of a well-rounded collection of books. Every collection needs to be used, however, and finding out what users want is important to ensure that collections are indeed used. In this dissertation, growing the e-book component of an academic library collection to best serve its users is under discussion.

1.1. Research question

The digital age is truly upon us. As far as libraries and information consumption are concerned, desktop computers, laptop computers, mobile telephones, tablets and e-reading devices proliferate and the e-resources that can be accessed on these devices are available everywhere – some free, some at a price.

Even though libraries provide access to information in all sorts of forms – journal, DVD, CD, artefact and a range of formats via the internet – they are still very much associated with books (Dewan, 2012: 27; Medeiros, 2011: 85). In academia, the e-journal is now widely integrated into library use and is commonly accepted as the successor to the print journal (Anderson, 2009: 133; Medeiros, 2012a: 169; Joint, 2010: 86). Though print subscriptions do occur, they are usually a small percentage of the entire journal collection.

With these two points in mind, it seems logical, in this digital age, that e-books should have found a permanent place in library collections: the combined effect of the demand for "books" as library staples and the lessons learnt from the integration of e-journals into libraries would seem to afford e-books an easy path to integration into the library.

This has not, however, been the case. It seems that some libraries are still unsure of the value e-books can add to their collections, and subsequently to their users. In addition, e-book

integration has been made more difficult by complicated purchasing and lending models and ever-changing technological requirements.

The result has been that e-books cannot be introduced into libraries simply as “another book or electronic offering”. Nevertheless, to offer users access to the best collection of which the library is capable, e-books must become part of the collection. This has prompted the question of what exactly users want with regards to e-book availability, access, use and functionality.

1.2. Research problem

The JISC National E-books Observatory project concluded from its user surveys that “[e-books] have entered into the mainstream of academic life and people are increasingly expecting to source e-book materials from the university library” (Rowlands et al., 2009: 13). While this may be true of the United Kingdom where the JISC project was carried out, similar studies have not been conducted to determine if the same can be said for South Africa. A close examination of the issues of adopting and using e-books in libraries is needed to determine what the obstacles are to integration of e-books into academic library collections. It is then necessary to discover what South African academic (student and staff) expectations are with regards to making use of e-books from their libraries.

E-books are certainly becoming more common in South African academic libraries and, while they cannot be denied a place, their introduction does not come without issues. A university library must carefully decide how much of its collection can be made up of e-books and how much of print books in order to give its users the best opportunity to make use of the entire collection. They also have to consider factors such as their budgets, how the introduction of new technologies will impact on the working processes of the library, what type of e-book business model it should invest in, and the technical issues – both of hardware and software – that come with the introduction of new technologies. In this dissertation, these issues will be discussed by reviewing the literature on e-books in chapter two.

Once practical issues of e-book adoption have been identified, the questions of whether patrons are interested in using e-books, if they are currently using them, how they use them and how they could potentially use them become pertinent. Most library communities are made up of different user groups. In the case of universities, users belong to various disciplines and age groups, and levels of study differ. Because of different research needs, these groups will want access to e-books to a lesser or greater extent and will have different

requirements of use. Users also have different abilities to use e-books because of varying degrees of access to the necessary software and hardware with which to read them. This statement is particularly true in South Africa. The 2011 South African census found that only 21.4% of households own a computer. While mobile telephones proliferate (88.9% of households own a cell phone, according to the census) and the most popular way of accessing the internet is via a cell phone, only 16.3% of households are able to access the internet this way. 64.8% of households have no access to the internet at all (Statistics South Africa, 2012).

The survey conducted as part of this research explores user demands by asking academic library users directly to what extent they use e-books from their university libraries.

1.3. Objectives of the study

Libraries strive to know their users so that what they offer them has relevance. A relevant library collection will result in satisfied users – those whose research needs are being met. Consequently, because the collection is being used, the library will be able to report a positive return on investment (ROI) which, in turn, bodes well for growing the collection further. ROI in a library environment is not easy to define (Lara, Fisher & Mirakian, 2012: 5) but, for those interested in statistics, electronic products have the added benefit of being able to be tracked, a fact which gives libraries an idea of how well they are being used.

The objective of this study, however, is to investigate via the opinion of users, rather than through reported statistics, the current and potential use of e-books at South African university libraries. This will be done by exploring patrons' attitudes to e-books, the use they currently make of e-books, and their expectations of e-books in their libraries. For this study, library circulation statistics will not be taken into consideration.

As has been mentioned, there are a number of obstacles to libraries growing their e-book collections. Being aware of the demands, expectations and limitations of their users with regards to e-books, may aid libraries in overcoming some of these obstacles. If users are indeed important to libraries, then being aware of their users' opinions and use of e-books will give libraries good reasons for growing their e-book collections in one way or the other.

1.4. Critical questions

The two critical questions explored in this dissertation are:

What are the reasons for adoption or non-adoption of e-books in academic libraries?

What are the demands and expectations of academic library users with regard to their current and potential use of e-books?

It is the aim of the study to say for certain, within the research parameters, what library users want from their e-books. While there may already be preconceived ideas in the researcher's mind about the outcome of the study, it is hoped that the fieldwork will provide a few unexpected answers. Flick recommends that researchers are open to "new and perhaps surprising results" (2002: 46). These will present interesting points for discussion.

1.5. Rationale for the study

This study will provide the participating libraries with reasons for growing their e-book collections that take account of the library user. It is aimed at libraries that have not yet settled on an e-book policy and which are struggling with the many different e-book offerings from publishers, aggregators and vendors.

The institutions invited to participate in the study were the universities in the Western Cape of South Africa. It is, however, hoped that the study will also be of some significance to a few or all of the other nineteen South African universities, depending on whether or not they view their student body to be similar in composition to one of the participating universities.

Additionally, while the number of participants in the study is necessarily limited, it is hoped that their attitudes will provide some points to consider for e-book publishers who are interested in the South African market. Being aware of what users – and thus libraries – need or may need in the future, could allow them to adapt their e-book models accordingly.

1.6. Summary

The study that follows attempts to understand why it is that the growth of e-book collections in academic libraries is where it is now. The literature review in chapter two will discuss obstacles to the adoption of e-books in academic libraries in general.

The survey conducted as part of this research explores user demands by asking academic library users directly to what extent they use e-books from their university libraries. It will discover, through analysis of the data collected from four South African universities, what users want from e-book offerings in their libraries. The findings will, in turn, identify points of particular interest to libraries and publishers that can be used to enhance and grow their e-book collections.

Libraries must be sure of the value that e-books bring to their collections. Until they are, they will be hesitant to invest heavily in them. This study aims to contribute to their strategic thinking about collection development from a users' perspective.

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CHAPTER TWO

2. LITERATURE REVIEW

2.1. Introduction

The literature discussed in this chapter is material published between 2007 and 2013, with the few exceptions of some older works of significance. The focus is on academic libraries – papers on public libraries are generally not discussed – and limited to studies in the United Kingdom, the United States, Australia and South Africa.

The literature review is not intended as a discussion of all materials on e-books published since 2007, but instead focuses on writings about the adoption of e-books in academic libraries and those that report on evidence of use by library patrons. Sources used appear in reference books, monographs and journals, and on blogs and websites.

2.2. Related studies

A number of studies are referred to in the review of the literature that follows. The studies that most influenced this dissertation as a whole, and in particular the survey questions used in the fieldwork part of the study, are the SuperBook project and the JISC National E-books Observatory project (to be known as the “JISC Observatory project”), both of which were based in the United Kingdom. The studies focused on patrons and their e-book use behaviour.

The 2006 SuperBook project, run by the Centre for Information Behaviour and the Evaluation of Research (CIBER), was the “first large-scale national user study of e-book use by academic staff and students in higher and further education institutions in the UK” (Rowlands, 2007: The SuperBook Project). One of the aims of the project was to inform libraries on the use of e-books among their students so that they could grow their e-book collections appropriately (Rowlands, 2007: The SuperBook Project). A paper by Rowlands et al. (2007) explored e-book awareness levels, discovery methods, use, and the effect demographic differences have on these among the academic staff and students of University College London (UCL). Rowlands and Nicholas (2008) focused on just one question from the survey in order to explore how much demographic differences affect e-book discovery at UCL.

The JISC Observatory project was also run by a team from CIBER. The project licensed a collection of e-textbooks in four disciplines (business and management studies, engineering, medicine and media studies), evaluated their use, and assessed the impact of the supply of “free” e-textbooks on libraries, publishers and aggregators. Data was collected from over 120 universities across the United Kingdom through user surveys, analysis of server logs, focus groups, and library and retail circulation and sales data (Rowlands et al., 2009). Many papers have been written about the project as results can be applied to e-books as a whole, not only to e-textbooks in particular. Papers influential in this study include those by Jamali, Nicholas and Rowlands (2009) and consulting firm Information Automation Limited (Armstrong & Lonsdale, 2009a; 2009b), which conducted the focus groups with librarians at nine of the universities involved in the project. Key findings and recommendations for the project as a whole were written up in the project’s final report in 2009 (Rowlands et al., 2009).

2.3. The e-book development timeline

Books have been produced digitally on computer, as opposed to created on typesetting machines, since the 1970s. Books have been published digitally for consumption and profit since the 1980s. For about a decade from the late 1980s, the CD-ROM was a popular distribution channel for digital books (e-books), but it was the internet and the World Wide Web that allowed e-books to become the widely used items that they are today (Gardiner and Musto: 2010).

The first internet-based e-books are said to have been uploaded as the work of Project Gutenberg in 1971, before the CD-ROM was invented. The aim of the project was to digitise, and make freely available online, books that were out of copyright (Lebert, 2008). Books were initially digitised by hand before the introduction of optical character recognition software. Their display was basic – plain text was used – and books were offered free of charge to readers. Both these features made Project Gutenberg e-books more accessible (Galbraith, 2011: 4) – plain text, because of the ease with which it can be read, copied, re-formatted and printed by most computer systems. Project Gutenberg electronic books were stored on a server and, because the World Wide Web had not yet been invented, they could be downloaded only by those who knew where to find them and who had access to the server. Once Web browsers were introduced, the Project Gutenberg website was able to make its books accessible to all. The idea behind storing non-print texts together and making them accessible in one place was not new: in 1945, the engineer Vannevar Bush had envisaged the

Memex, a storage “desk” for books, which would display texts on microfilm after a typed command accessed them for the user (Gardiner and Musto, 2010: 165).

In the 1980s and, especially, the 1990s, where the networking capabilities of the World Wide Web were discovered, many libraries and academic institutions launched their own e-book projects with the aim of digitising books in their collections for the sake of preservation, access and sharing. Examples are the University of Oregon’s Renaissance Editions, a repository of English works from 1477 to 1799, which went online in 1992; CARRIE, a collection of history texts, created in 1993; and the Library of Congress American Memory project, a digital archive of books as well as image, audio and video files, officially launched in 1994 (Galbraith, 2011).

Because books were already being created digitally and because publishing on the Web is a relatively easy process, expectations were high for businesses hoping to make money from electronic publishing. Ultimately, though, publishers, who thought that they would profit quickly from the internet boom, found it difficult to create models that were as successful as their print ones. With the burst of the internet bubble in the 1990s, digital publishing efforts slowed as publishers realised that they had to take a different, more measured and strategic approach to generating income from e-books (Thompson, 2005: 311).

While traditional publishers were struggling with devising innovative business models for e-books, companies which had not previously been involved in publishing were beginning to digitise books and make them available to the public. One such company, Google, began its digitisation project, Google Books, in 2004, with the aim to create an online index and full-text access to as many books as possible (Grimmelmann, 2011: 702). Google borrowed print books from libraries and publishers, which it then digitised and made available online. Books that are out of copyright and are therefore in the public domain are available in full on Google Books. For books that are still in copyright, Google offers a limited view of sections of the work only (Price, 2011: 58).

The giant upsurge in e-book reading devices, or e-readers, has had a big impact on the e-book industry (Galbraith, 2011: 10). E-readers are portable electronic devices that can store multiple electronic texts (usually e-books) which can then be read on the device’s screen. The first e-reader was launched in 2006 by Sony; Amazon launched the Kindle the following year (Clay, 2011: 192). Some of the biggest advantages of e-books are the lack of backlighting and

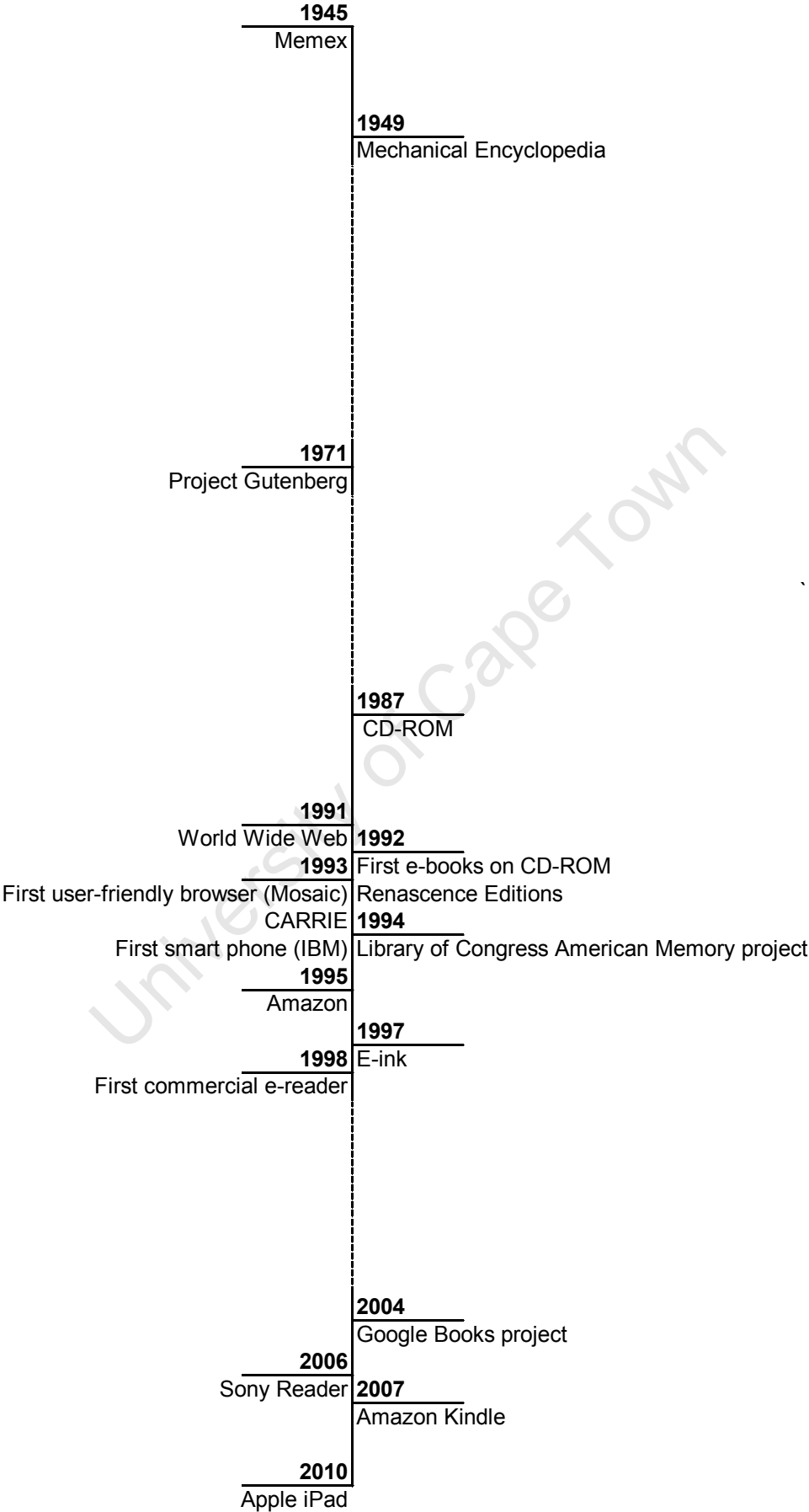
the electronic paper, or e-ink (electro-phoretic), display utilised by the screens of newer e-readers which lessen eyestrain. Another advantage is the lightweight convenience of e-readers.

While today's e-readers are considered by many to be a modern idea, the National Museum of Science and Technology in La Coruña, Spain, houses what some believe to be a forerunner of today's e-reader: the Mechanical Encyclopedia, invented in 1949 by Angela Ruiz Robles, a schoolteacher. Although there are obvious differences between this reader and today's digital versions, the Mechanical Encyclopedia allowed users to manipulate coils of preloaded content in search of the content of their choice. The inventor hoped that the device would lighten the load students had to carry to school but her concern was also to make reading accessible to more people (Moran, 2013).

Tablet computers, among them the Apple iPad launched in 2010, are larger devices than e-readers and have capabilities of a small-scale computer (Clay, 2011: 193). Tablets can be, and are, used as devices for reading e-books. Their larger screen is conducive to reading but drawbacks are the screen display, which is liquid crystal and does not have the same properties of e-ink, and the weight of the device which is heavier than an e-reader.

At the other end of the size spectrum for mobile devices is the smart phone. Although a cellular telephone has a smaller screen size compared to e-readers and tablets, the convenience of its portability and the fact that more and more people own one, makes it an option for e-book consumption (Clay, 2011: 194).

Figure 2.1.
E-book development timeline



2.4. What is an e-book? Definitions and contentions

Lebert writes that the term “e-book” has come to represent commercial digitised books – those sold for profit, such as offered by Amazon. She contends that any digitised book, whether it is for sale or being delivered free of charge, in whatever format as long as it is digital, is an e-book (Lebert, 2008). Her complaint is that many users do not view the books of non-commercial websites such as Project Gutenberg as e-books when, in fact, they pre-date commercial e-book ventures. Many readers tend to view an e-book as simply an electronic version of a traditional book, with a front cover, contents page, page numbers, and so forth. Often they do not realise that an e-book can also be presented, for example, as non-formatted, scrollable text on a white background (as Project Gutenberg does) or as a collection of HTML documents with a non-linear flow. Lebert points out that no e-texts should be considered “lesser” e-books than others simply because of their format or price (Lebert, 2008).

Nelson considers an e-book to be “an electronic book that can be read digitally on a computer screen, a special e-book reader, a personal digital assistant (PDA), or even a mobile phone” (Nelson, 2008: 42). His definition suggests that there is no difference between electronic books and print books, except that, physically, e-books are read on a digital display as opposed to a printed page.

Gardiner and Musto define an electronic book as a “text- and image-based publication in digital form produced on, published by, and readable on computers or other digital devices” (2010: 164). For them, e-books are “publications” as opposed to “books”, discarding the idea that e-books have to look and function like traditional print books. Their definition focuses on the digital nature of e-books and suggests that books that were not born digital – those that have been scanned from the original print copy, for example – cannot be termed “e-books”. They are, however, careful to emphasise that their definition is a work in progress because of the relatively new nature of the e-book.

Armstrong and Lonsdale feel it is less important to emphasise the format or origin of a book, than to focus on its content. They define an e-book as “any content that is recognizably ‘book-like’, regardless of size, origin or composition, but excluding serial publications, made available electronically for reference or reading on any device that includes a screen” (Armstrong & Lonsdale, 2011: xxv). Armstrong makes a distinction between books and other publications: books, he says, essentially have “a substantive amount of related content, or

content with inherent continuity, that is not published serially” (2008: 197). Armstrong identifies many variations of e-books: those that have been digitised from print versions, or those that never existed in print and were “born digital”; those whose text is presented linearly, such as in a traditional book, and those where text is less linear and where hyperlinks take readers to other parts of the text; those that are made up of plain text, like the original Project Gutenberg offerings, or those that are supported by sound, video and graphics (2008: 197). What distinguishes an e-book from a website is its “continuity of purpose” (Armstrong, 2008: 199).

Writers have debated the exact nature of a book: whether a “book” implies the text to be read or the object – the container - that holds the text.

Armstrong and Lonsdale clearly refer to the content of a book rather than the container in which the text appears. Gomez, writing in 2008 before the mass uptake of tablets and e-reading devices, agrees that it is the content, such as the ideas, stories, illustrations and photographs of a book that is its most important attribute. The content, not the package, is why people want to read a book. He compares the evolution of the written word to the evolution of music. A large amount of music is consumed digitally, downloaded onto iPods and MP3 players. Records and compact discs are seen as collectors’ items. In his opinion, books, too, will evolve to be mostly digital without any physical manifestation (Gomez, 2008: 16). Resource Description and Access (RDA), the new cataloguing standard for libraries, focuses less on the manifestation of a work and more on its content. RDA will index information according to the content rather than according to the form it takes, such as print book or e-book.

In an opinion piece, Horava laments the loss of the “unique reading experience” that a printed book provides (2011: 84). For Horava, reading is as much about the container – the book cover, font face and style, placement of images in relation to words on the page – as it is about the narrative (2011: 84). For him, the “standardisation of experience” that comes with reading a book on a device – often just words on a screen – means digital books offer readers less than what they would get from a printed book.

Suarez, director of the Rare Book School at the University of Virginia, also argues the case for a “book” being more than just the words on a page. For Suarez, a book is made up of different elements, only one being the words on a page. Other elements that make up the book

as whole – and which are not present in an e-book - are aspects like the paper on which it is printed, the typeface, illustrations, cover design, and book binding (Howard, 2012). These elements, according to Suarez, are a book's bibliographic codes. The words make up the linguistic code of the book. For many people, the linguistic code is most important, but to historians and for some library collections, it is the bibliographic codes that tell part of the story.

Gardiner and Musto acknowledge the elements that make up a print book by recognising that the print book is produced by “craftsmen” who have the required skills for printing and layout. With digital production, the craft is lost and instead a “workforce” produces encoded text, image and links (2010: 166). In this way, e-books are different publications from print books.

Thompson's approach is broader than Suarez's and more relevant to academic or research libraries: he feels that the important elements in books will be different depending on fields of study or purposes of use (Thompson, 2005: 318). Because users have diverse needs, they will have different levels of demand for the various versions of the book. Their demands will include whether they want to make use of a print book or an e-book.

In an academic setting, e-textbooks have become a talking point as they have the potential to offer much more than a printed textbook. Chesser (2011) finds that it is difficult to define an e-textbook because of all the possibilities that exist. E-textbooks have the potential for multimedia, interactivity and community input, and the possibility to be read on a number of devices, including computers, tablets and smart phones (Chesser, 2011: 28). Chesser does, however, say that what all e-textbooks have in common is that they are delivered digitally, read on screens and encompass “a finite content and/or activity set ... collected to support the mastery of a given area of study” (Chesser, 2011: 32). This definition correlates with Armstrong's assertion of content of a book having a common purpose, whichever way it is presented. The JISC Observatory project focused on e-textbooks but its results, which will be discussed later in this chapter, can be applied to e-books in general.

2.5. Libraries and e-resources

Anderson writes that “it is now generally assumed and expected that the majority of a research library's journal collection and reference resources will be available electronically”

(2009: 133). Users accept that, should they need access to a journal article or a reference work, looking online is their first course of action.

These days, looking online for academic book material is becoming more common, and a range of e-books is available to users. Schell (2011: 76) lists digital versions of popular reading books, scholarly monographs, monographic series, reference works, audio books and textbooks as e-books. Libraries, by now familiar with processes around including e-journals in their collections, are having to deal with issues surrounding introducing a variety of different e-books into their collections. They have found that dealing with e-books is different from dealing with both print books and e-journals.

Galbraith has noted that the publishers who were quickest to adopt e-books were those who were already successful e-journal publishers, like Springer and Elsevier (Galbraith, 2011: 10). E-journal articles typically come as part of a database package and initially e-books were offered as part of these database packages (Anderson, 2009: 133). The consequence of e-books residing in databases made up predominantly of e-journals is that there is a certain amount of confusion among users as to the difference between e-journals and e-books. Abdullah and Gibb write that they noticed that even e-book users get the two types of e-resources confused (Abdullah & Gibb, 2008: 603).

As will be shown, this confusion is only one of the many issues that libraries still have to overcome for e-book integration to reach the same level of e-journal integration, and for all parties – libraries, publishers and patrons – to be happy with the outcome. At the core of this study is the question of the issues facing the growth of e-book collections, focusing on what users expect from the e-book collections at their academic libraries.

2.5.1. Library association and policies

No formal policy document on e-books in academic libraries has been released by the Library and Information Association of South Africa (LIASA), by the professional bodies in the United States of America, United Kingdom, Australia, or by the worldwide body, the International Federation for Library Associations and Institutions (IFLA). E-book licensing contracts seem to be a major concern for all organisations, however.

The American Library Association (ALA) has released a document entitled “A scorecard for public libraries: ebook [sic] business models” (ALA digital content and libraries working

group, 2013) as a guide for libraries to assess licensing agreements. Librarians are confronted with a range of business models and licensing agreements from which to choose. In an attempt to alleviate their confusion, the document explains the different features that come with different business models.

The ALA says it is attempting to make more e-books available at good prices in libraries, in line with its strategic plan to lead the way for libraries in the increasingly digital space in which they find themselves (Sullivan, 2013). It realises, however, that there is a lot of work to be done before a solution will be found that benefits publishers, aggregators and vendors, as well as libraries and their patrons.

In August 2012, the United Kingdom's Chartered Institute of Library and Information Professionals (CILIP) released a briefing paper on e-book acquisitions and lending in public, academic and research libraries, outlining key challenges for e-book collection development, such as copyright and licensing agreements (Chartered Institute of Library and Information Professionals [CILIP] policy department, 2012). It has also submitted recommendations to government about e-book lending at public libraries ("Libraries should lend ebooks for free 24/7" professional body tells government, 2012).

The Australian Library and Information Association (ALIA) is prioritising discussions about e-book lending rights, copyright and interlibrary loan issues¹.

Also in an attempt to help libraries deal with complicated licensing agreements, IFLA launched its "Principles for Library eLending" in February 2013 in which it provides guidelines for librarians regarding what they should expect from e-book licensing agreements (International Federation of Library Associations and Institutions [IFLA], 2013).

2.6. Reasons for adoption or non-adoption of e-books in academic libraries

2.6.1. The traditional view and role of libraries

The role of libraries and librarians today is not the same as it was in the past. With the widespread use of the World Wide Web, the availability of digital versions of a range of material and with user expectations therefore changing, the view and role of the traditional

¹ Rob Miller, email message to author, 5 June 2012.

library – that of a building to visit in order to consult and borrow books and journals – is no longer applicable in much of the academic world.

As Law (2009) explains, many traditional library services now have a free, online version unrelated to the library, which allows the non-discerning, or naïve, user access to reams of information without the need to consult his or her library. An example of one such resource is *Wikipedia*, the online encyclopaedia, which, for many users, is used as a replacement for printed reference works. *Wikipedia* is easy to consult via an internet connection, simple to navigate once there, with an interface that quickly becomes familiar to users. *Wikipedia*'s English edition contains over four million articles (4 May 2013) and access to all articles is free. However, while *Wikipedia* is a convenient source of information, the information it contains has been supplied by a community of contributors, most of whose credentials cannot be verified. Users must therefore check the information rigorously before citing it for academic use.

Instead of bypassing the library as information provider, users should be able to opt for a library offering which has elements of both the convenience and interactivity of the free websites with which they are familiar, and the reliability and scope of the academic library. Information provided to users by their libraries can immediately be trusted as it has already been verified by the librarian sourcing the material. In order to stay relevant to users, libraries should offer them the convenience of *Wikipedia*, with the trustworthiness of the hard-copy reference books of old. Reference books, which usually cannot leave the library and are in any case cumbersome to consult, must be replaced with links or subscriptions to trusted online resources (Law, 2009).

As Anderson asserts, “the library is not about books; it’s about information” (Anderson, 2008: 564). Thus, academic libraries must offer access to online resources or become obsolete. This concept is very different to that of the traditional library where physical books played a major role. With a change in the way libraries operate comes the need for librarians to be willing and able to change as well. This is the first major issue facing the growth of e-book collections in academic libraries.

There are many reasons some librarians object to the introduction of e-books to their libraries. As Schell reports, one of the reasons is that e-books are not physical objects and the money spent on them is not immediately obvious because the books are not physically part of the

library's collection (Schell, 2011: 83). In addition, the re-allocation of funds from print books results in a smaller print collection, adding to the decrease in objects for the library to put on its shelves. Another objection by librarians is that subscription or pay-per-view e-book business models, with their "big deals" or patron-driven purchases, may give the impression that librarians are no longer in charge of title selection, suggesting that they have lost control over their collection or do not have the necessary expertise to make the right choices (Schell, 2011: 83).

Other issues for traditional librarians are that e-books threaten the library's role as archive because e-books are not owned outright, but are usually loaned from aggregators; librarians are also concerned that they are not serving their community effectively because of the perception that patrons do not want e-books (Schell, 2011: 83). An additional concern, provided by CILIP, is the uncertainty of the privacy of patrons once e-books are added to collections (CILIP policy department, 2012: 10) – since much electronic activity can be tracked, patron privacy might not be able to be guaranteed.

Many of these concerns could be addressed by changing the attitudes and perceptions of libraries and librarians. In an opinion piece about the future of libraries, Medeiros writes that the issue is that libraries (and librarians) deal with books (2011: 85). Once the perception of libraries as places for information rather than places for books changes – and as the attitudes of librarians change – the introduction of e-books will gain more acceptance. Librarians will cease to worry about the size of their physical collection and the proportion of print books to e-books. They will find ways to ensure they have a measure of control over e-book titles. They will also come to see the value of the digital archive.

Libraries will have to measure their user interest in e-books to see whether their community is ready for the introduction of e-books on a large scale. Some public library users have started to request e-books for leisure reading because they own an e-book reader or have read e-books elsewhere, resulting in public libraries experimenting with and then introducing e-book lending. Similarly, if indications are that e-books are being used more in academia, then academic libraries will have to adapt to what their users will consequently be demanding from them. Edwards states that if e-books become the norm in academia, then libraries must redefine themselves around this "new normal" (Edwards, 2005: 159).

In the end, a commitment by the library administration and staff to grow its e-book collection is the first step to make this growth a reality. The staff at Merced Library at the University of California made a concerted effort to grow its e-book collection. Knowing that the library would always have access to the large print collections at the other libraries at the University, and with the support of academic staff who were excited about this new technology, Merced Library's collection is almost entirely made up of electronic resources (Dooley, 2011).

Even once attitudes have changed, the process of introducing e-books to libraries is not a simple one. The usual systems used for collection, organisation, and preservation that are suitable for print collections are being challenged by the introduction of electronic material (Zhao & Zhao, 2010: 94).

Zhao and Zhao write that many libraries do not have comprehensive policies in place when it comes to managing their e-books (2010: 95). In addition, they note that standards for records have not yet been set which could be the reason policies have not yet been established (2010: 96). According to Gardiner and Musto, the reason the CD-ROM lost its appeal for libraries – which led to publishers discontinuing their wide use – is that libraries did not know how to catalogue them (2010: 166). While MARC records are provided with many e-books, there is no standard as to their extensiveness (Zhao & Zhao, 2010: 97; Schell, 2011: 91). Setting e-book cataloguing standards should be a priority (Zhao & Zhao, 2010: 102).

A big issue for cataloguers – and possibly another reason policies do not yet exist in all libraries – is that of inventory control. Because an e-book can relatively easily be withdrawn from a library's collection (for whatever reason), Zhao and Zhao say that collections are not stable which adds to the difficulty of cataloguing them (2010: 100). A catalogue entry for an e-book does not disappear once access to the e-book is withdrawn, so keeping an up-to-date catalogue is a near-impossibility. Some libraries, therefore, have chosen not to include e-books in their library catalogues until a solution to the problem is found. For this reason, e-journals and e-books have their own discovery tool separate from the catalogue. For Vasileiou, Rowley and Hartley (2012: 285), the fact that there is no single discovery tool able to meet the needs of all resources in the library is problematic. It not only scatters the catalogue function, but is confusing for users. Library administrators should be striving for one discovery tool for the entire collection.

To encourage the growth of their e-book collections, libraries and librarians need to move out of their traditional roles. A change of attitude about what makes a “good” overall collection and a commitment to improving the processes involved in the curation of new technologies will go a long way to encouraging growth of e-book collections.

2.6.2. Collection development

2.6.2.1. Collection development policies

A starting point for libraries committing to growing e-book collections is a collection development policy. The policy is what guides librarians in the expansion, organisation and maintenance of the library’s collection, addressing issues such as its size and potential for growth. Collection development policies help to maintain the standard to which the library strives and to satisfy users’ needs.

An IFLA draft paper on e-resource collection development (Johnson et al., 2012) suggests that policies include sections on the selection and evaluation of e-resources, their licensing, and their review and renewal processes. In some instances, like the selection of content, policies for e-resources will be similar to those for print collections, but when considering, for example, technical issues, use, support from suppliers, pricing models, and licensing of e-resources, collection development policies must be developed specifically for e-resources (Johnson et al., 2012).

Because of the relative newness of e-books in libraries, it is crucial to review and revise the policy often to assist with making e-books an established part of the library collection (Vasileiou, Rowley & Hartley, 2012: 285). Advances in technology, changes in budgets and changes in the needs of the library community demand a review of the policy on a regular basis (Vasileiou, Rowley & Hartley, 2012: 285). Patterns of use should also be studied to determine if the mix of content is right. A policy is therefore an organic document with the possibility and potential to change regularly if it is part of an organic environment – one that is open to change.

Price (2009) writes that, considering the high costs of e-resources, collection development policies are even more important in times of budgetary constraints, such as most libraries are experiencing today. Vasileiou, Rowley and Hartley found that only one of the five libraries they studied included an e-resources section in its collection development policy (2012: 284).

If this is indicative of other libraries, then policies, as a means of planning ahead and for budget control, need some attention.

Building collections is a complex exercise with many factors affecting decisions, some of which are more or less important, depending on the institution (Vasileiou, Hartley & Rowley, 2012). The way each factor should be dealt with must be addressed in the policy. For e-books, policies should address the complicated matters of business models and licensing in particular, issues that will be discussed later in this chapter.

2.6.2.2. Print versus electronic books in a library collection

There are those who see little future for print in library collections. Anderson (2009: 140) recommends that libraries, publishers and vendors firstly accept and then adapt to the fact that print is being marginalised and electronic books are here to stay. Gomez (2008), writing about the demise of print, would agree. More often, though, the feeling in the literature is that both forms serve a purpose.

In a UCL study of a large group, Rowlands et al., (2007: 504), found that the use of e-books was related to dissatisfaction with the print collection, especially in the disciplines of engineering and sciences. This finding gives the impression that users are still eager to make use of the print collection and would do so if they were provided with the required materials.

The JISC Observatory project user surveys found that, even if users were dissatisfied with the print collection, they would be less likely to complain about the print books in the collection where there was access to e-books (Rowlands et al., 2009: 14). Users did not feel that using the print book was a necessity but, rather, were happy with access to whatever version was available, particularly for short loan books. An earlier study conducted in 2004 at Duke University Libraries on the use of print books and their electronic counterparts had found that 39% of titles had been used in both print and electronic formats, suggesting a “format agnosticism” similar to that of the JISC Observatory project (Littman & Connaway, 2004: 261).

Medeiros reports on a yearlong patron-driven acquisition pilot that ran in a small library consortium, examining, among other things, what effect the programme had on the circulation of corresponding print titles. The theory was that, on discovering a title via the e-book database, users would use the information to seek out the print book instead. Medeiros reports

that, while a direct link between the two could not be ascertained, it was noticed that the print and electronic copies tended to circulate within two weeks of each other (Medeiros, 2012b: 65).

Breeding (2012) stresses the importance of library collections not committing to an “either / or” strategy of growing only print or only electronic titles. In reality, he says, most library collections are “heterogeneous” comprising titles and objects in a variety of formats: print, digital and electronic (2012: 23). He feels that the challenge for libraries is not about choosing which format is “best”, but on focusing on the best management of the mixed collection that they have. Joint (2010) agrees that libraries need to view their electronic collections as equal to, not better or worse than, their print collections in order to make choosing one over the other easier.

2.6.2.3. Subject areas

Some disciplines are heavier users of monographs than others, and some have a higher affinity for using electronic versions. Determining which subject areas make more use of e-books should provide guidance to libraries on collection development in these areas.

Tucker’s study (2012) at the University of Nevada, Las Vegas (UNLV) Libraries sought to explore, among other things, which subject areas had the highest use of e-books by looking at the circulation rates of each subject collection. His paper explains the usefulness of identifying subject areas that are heavier users of e-books and skewing the collection development strategy that way. Each institution will be different and should strive to be aware of those subject areas which demand e-books the most.

2.6.2.4. Content

Should a library embark on a collection development programme for academic e-books, there is still the question of the availability of quality content to be considered; some titles are simply not available as e-books, or not in the format or business model which the library requires. Lack of academic content is a big obstacle in the growth of e-book collections in academic libraries (Dewan, 2012: 31).

Link (2012) reports on a small-sample study at the College of New Jersey Library which examined the circulation of a small selection of print books in the collection that it would be possible to replace with electronic versions. The aim of the study was to ascertain whether it

would be wise to stop the collection of print books in favour of e-books. While the study showed that the library user would benefit from having the option of accessing popular print titles in electronic format, discarding print from the collection as a whole was not recommended because of the comparatively few titles that are presently available as e-books.

Publishers would do well to ensure the content that is needed by researchers is available in the format in which they require it, which is oftentimes digital (Anderson, 2009: 136). This will make growing e-book collections an easier prospect for libraries.

2.6.3. Budgets

While writing e-book procurement and management into library policy can be seen as the second major issue for the adoption of e-books in libraries, the third major issue is the question of setting aside a sufficient budget for this new resource. E-book procurement cannot go ahead without the budget to make purchases, but the budget to use should be separate from that of print or e-journals.

A dedicated e-books budget ensures that e-books are seen as a viable part of the collection. Vasileiou, Hartley and Rowley maintain that budgets for e-books at academic libraries are insufficient, with e-books only given a small percentage of the entire resources budget (Vasileiou, Hartley & Rowley, 2012: 22). Keeping a separate budget will ensure that not all e-resources monies are spent on e-journals, leaving whatever is left for e-books.

Allocating budgets is not without its issues. Collins (2012) says that libraries are moving from print to e-books as a cost-saving exercise: no longer investing in print and renegotiating contracts to their best advantage are seen as the big areas in which libraries can save money. However, as the section on business models that follows will explain, e-books are not necessarily cheaper than print books in the long term, and so the e-book share of the budget still needs to be substantial.

2.6.4. Business models

2.6.4.1. The publishing industry

Publishing is an industry and, in order to remain in business, publishers have to produce a profit. A general misconception is that digital publishing is far cheaper than print publishing because of the ink, paper and distribution costs that do not need to be taken into consideration.

There is a large amount of work that goes into the creation of a monograph before the printing stage, all of which adds to the cost of the end product (Thompson, 2005: 317). The task of producing reliable content, which may involve paying an author, researchers and an editor, is a large cost in itself. Quality editorial is, after all, what forms the basis of academic publishing (Janke, 2011: 154). After copy editing, design and marketing costs, the amount saved on physically printing the object may not be as comparatively large as imagined.

Even then, and as Janke (2011) explains, the money saved on paper, printing and distribution cannot translate into a direct saving for electronic publishers as print-only expenses are offset by additional digital-only costs that must be taken into consideration. Expenses that must be added to the overall cost of a digital edition range from converting the digital file from the format in which the work was created into a useable format, to securing digital rights, creating and maintaining the software on which the electronic copy is made available, and adjusting print runs to reflect the presence of an electronic copy of the same work (Janke, 2011). In addition, smaller print runs usually mean a bigger cost per unit.

Libraries can therefore not expect publishers or aggregators to offer them e-books at greatly reduced rates, but the pricing models that businesses make available to libraries are not only expensive, they have complicated licensing agreements attached to them. A fourth major issue, therefore, that has affected the adoption of e-books in libraries is the publishing industry, more specifically, the various business models offered by publishers and aggregators to libraries.

2.6.4.2. Pricing models

Business models dictate how libraries are able to purchase e-books and in what way e-books may be used in order to protect the property of the author and publisher. Morris and Sibert (2011) maintain that there is currently no ideal business model as all models strive to be attractive to libraries, while generating an income for the business, and at the same time taking into consideration issues of copyright and digital rights management (Morris & Sibert, 2011: 98). Because not all publishers run their companies alike, business models are not yet standardised. However, the type of business model that publishers commonly offer are a subscription model, a purchase or perpetual access model, and rental or pay-per-view. Some models offer additional elements such as patron-driven acquisition features.

Morris and Sibert (2011) explain the different models:

- The purchase or perpetual ownership model is the most similar to buying a print book. Because there is no need to replace an electronic copy because of damage or loss, purchasing an e-book is usually more expensive than purchasing its print equivalent. The e-book may have been purchased by the library, but often it is still hosted elsewhere and accessed via a platform provided and maintained by an aggregator and, for this, there is usually an ongoing fee.
- Subscription models allow libraries to buy access to a large number of e-books for a set period. Like an e-journal subscription, this model requires an annual renewal fee. Subscription models often do not offer new or individual titles – if they do, these titles are usually at a higher fee – but rather offer a collection of books, often known as the “big deal”. All e-books in a collection cover the same subject matter but they are not individually selected by the librarian. This has led to librarians feeling that they are no longer in control of their collections (Schell, 2011: 83).
- The rental or pay-per-view model is one where libraries only pay for content used, such as a section or chapter of a book, for a limited time period only. Rental models might offer a patron-drive acquisition option which can give patrons access to e-books that are not already part of the library’s collection.
- Publishers offer a single-user model where an e-book can be accessed by one user at a time, or a multiple-user model where several or unlimited users are allowed. The multiple-user model, understandably, comes at a higher price. Libraries therefore need to predict the usage patterns of a book before committing to a user model.

There seems to be no overall preference by librarians for one particular business model. If perpetual access is preferred, as in Vasileiou, Hartley and Rowley’s study (2012) of librarians at seven UK academic libraries, this may be because it is the closest model to traditional print purchase models. Collins (2012) has found that libraries no longer like the subscription model – they would prefer to purchase smaller packages – and predicts the end of the “big deal” if publishers do not come up with more creative e-book packages for libraries.

Vasileiou, Hartley and Rowley’s study found that business models are considered one of the biggest challenges for librarians. Librarians are quoted as saying they find business models

particularly confusing in their range of offerings and their “complexity”; they also do not feel that the offerings are particularly transparent (Vasileiou, Hartley & Rowley, 2012: 34). Being unsure of a product creates a lack of confidence when called to make a purchase decision, resulting in the wrong decision – or none at all – being made. Vasileiou, Hartley and Rowley say that ultimately it seems that librarians are still “feeling their way” around the different models, viewing and reviewing the strong and weak points of each (Vasileiou, Hartley & Rowley, 2012: 30).

Libraries should be mindful of a fourth model for e-book acquisition: that of open access. The Open Access (OA) movement encourages the sharing of academic content free of charge and is growing as a distribution channel for digital materials. The Open Access model is an alternative to conventional publishing business models. A 2012 survey by Intech, an Open Access publisher, of librarians and library users in relation to Open Access, found that 64% of librarians surveyed would prefer to see a mixed business model available to them in the future – one that includes OA as well as other forms of access (Intech, 2012). While offering some content free of charge would not generate any profit for publishers, doing so could be a strategic gesture of goodwill on the part of publishers.

At this stage, the optimal model, especially one with straightforward licensing agreements has not yet been found (Wilkie, 2012). Schroeder and Wright (2011) comment that publishers have not found the perfect business models because they still view print as their primary business and electronic publishing as less important (2011: 216). Carreiro (2010) agrees that e-books should be considered an integral part of publishing, instead of a subsidiary of print.

Anderson feels that e-book suppliers should make all attempts to offer libraries business models that work for them, both from a pricing and a content perspective. Libraries must be willing to buy into the models on offer because the publishers’ own survival may be determined by the survival of libraries (Anderson, 2009: 136). Publishers should be aware that Open Access can become a realistic option for libraries on which to build their e-book collections.

2.6.4.3. Patron-driven acquisition

Patron- or demand-driven acquisition (PDA or DDA) is one way publishers have become more creative in what they offer libraries. Libraries typically add certain items to their collections in order to have them readily available should they be requested by patrons in the

future. PDA is a way of supplying items only when they are needed, thus changing the acquisitions process from one where items are bought “just in case” to one where they can be bought “just in time”.

PDA is not a new concept (Schroeder & Wright, 2011: 218). Libraries have been purchasing items on the request of patrons for a long time. The model for e-books, however, is a more sophisticated way of processing requests, much of it automated, with a much-reduced delivery time because of the nature of electronic products.

There are different models of PDA, but often a list of titles is made available through which users may browse. Once a title has been clicked on or read a certain number of times, or more than a predefined number of pages has been downloaded, the book is purchased by the library. In this way, users are able to find and use content that the library did not previously own. PDA is, therefore, a way for libraries to allow their purchases to reflect user demands and, in addition, improve the cost per use of each item as a purchase only takes place if an item is used (Schroeder & Wright, 2011: 218).

Johnson (2011) points out that if a library wishes to embark on a PDA programme, there are many factors to consider and the following questions should be answered. Firstly, what is the step in the user’s browsing process that activates the purchase? Are there a certain number of clicks, for example, that result in a purchase, or a certain number of loan periods whereafter purchase is automatic? Secondly, how much content in an e-book collection should be made available for PDA? Would newer books be included, for example? How many users at a time will the system allow to make use of PDA? Will patron-driven acquisitions be able to be loaned through interlibrary arrangements?

Schroeder’s study (2012) at Brigham Young University found that, even if the cost of an e-book was the same as its print equivalent, the cost-per-use of e-books purchased via PDA was significantly lower compared to books purchased in the traditional way. Although return on investment thus seems to be better on books purchased using PDA, Schroeder emphasises that libraries should not discard traditional acquisition models altogether. Collections, she says, should not only be built on what is needed at that moment (Schroeder, 2012). Levine-Clark (2011) agrees with this sentiment, but not for the same reasons. He predicts that once vendors have refined the PDA process and once there are enough titles available to make it viable, patron-driven acquisition could become the only method of collection building for libraries.

For now, though, there is still much for acquisitions teams to do. Levine-Clark stresses the importance of maintaining the number and “mix” of titles available for selection so that what is offered to users is useful to them, will fit in with the overall library collection, and will fall within the library’s budget (Levine-Clark, 2011). Acquisitions librarians, therefore, must still play a role in the direction their collections take by customising their PDA offerings to ensure new purchases still fit into the collection development policy of the institution. It is also the job of the acquisitions or subject librarian to exercise oversight on what titles are never selected – and can thus be removed from the PDA cluster – and what new titles may be available to be added to the pool. Schroeder and Wright add that there may be some subject areas where print books will still be preferred and, unless the library wants duplications, the PDA pool should not include titles that are already available on the shelves (Schroeder & Wright, 2011: 220).

For Smith (2011), a big problem with PDA is that it allows only those “engaged with the technology” to have an influence on what makes up the library’s collection. Those users who expect what the library stocks to be sufficient for their needs will not have their needs met. In addition, little-used but important titles, particularly classics, may never be selected, yet they are foundational texts that should be part of a collection.

From a publisher’s perspective, PDA will mean fewer books bought “just in time” (Seger & Allen, 2011). This could mean that publishers will become even more selective in what they choose to publish. For scholars who rely on publishing for promotion, this could be a serious drawback (Levine-Clark, 2010: 205).

Anderson calls patron-driven acquisition an important “game-changer” in the current library environment – it is one of the issues that libraries must take note of and to which they must adapt their acquisitions processes, or risk becoming obsolete (Anderson, 2009: 139). Levine-Clark (2011) feels that, at the very least, PDA will mean the end of interlibrary lending (ILL) as far as digital books are concerned as libraries will purchase or borrow e-books they do not already have in their collection directly from suppliers as they are needed. ILL will, however, still have a place for items that are not digitally available.

2.6.4.4. Copyright, licensing and digital rights management

Copyright law protects a work from being copied and passed off as someone else’s creation. The South African Copyright Act of 1978 includes a fair dealing exemption which allows

works to be copied and used by anyone “to the extent reasonably necessary” for purposes such as private use, research, or reporting, provided citations are provided for work that is not for personal use (Masango, 2009: 233). Under copyright law, for example, copies may be made of a chapter of a book, those pages may be lent to a friend, and the friend may use them for scholarship.

Books, both print and electronic, are protected by copyright law. Digitising a print book is equivalent to making a copy of it; doing so for commercial gain is illegal. Copyright became an issue for Google Books because it was making digital copies of books, whether or not they were still in copyright. Google Books contravened United States copyright law when it digitised books that were in copyright without first obtaining permission from the creators of the works, the rights holders (Price, 2011: 58). Of particular concern was the copyright of orphan works – those still in copyright but where the author cannot be located or contacted to secure an agreement to allow digitisation. A settlement was reached in 2009 between Google and copyright holders whereby in-print copyright holders had to give permission for Google to include their books on the website, while out-of-print copyright holders’ books would be included until they opted out (Grimmelmann, 2011: 705). The settlements resulted in opposition from third parties on, among others, fair trade grounds; subsequently, the settlement was rejected in March 2011 (Grimmelmann, 2011: 707).

Electronic books may be protected by copyright, but they are also subject to licensing agreements which publishers or e-book aggregators impose in order to restrict the re-use of content to authorised users only (Masango, 2009: 234). Libraries are bound by licensing agreements negotiated with their e-book suppliers.

Quoting Cohen writing in 1998, Masango (2009: 235) says that libraries are bound by their licensing agreements over copyright law as “contract law rather than copyright law is paramount”. Therefore, while print books are bound by copyright law only, it is the licensing agreement that determines the use of e-book content in libraries.

Digital Rights Management (DRM) concerns the restrictions that have been agreed to under licensing terms. DRM enforces these restrictions by imposing certain limits via the software on which the e-book is being accessed. DRM software can, for example, allow only authorised users access to content, or it can limit the downloading, printing or copying of the

text. DRM is thus more restrictive than copyright; copyright allows information to be used to a certain extent by anyone.

A CILIP policy department paper on the problems associated with adding e-books to library collections identifies licensing agreements as a key issue faced by librarians, both public and academic. While libraries acquire print books according to the “first-sale doctrine” (once sold, publishers no longer have control over what is done with the book), e-books are not physically distributed, and how libraries make e-books available to the public is dependent on the licensing agreement it has with the publisher or aggregator (CILIP policy department, 2012). Accordingly, licensing agreements have implications for ILL, and any allowances have to be written into the agreement.

According to focus groups held with librarians at nine UK universities as part of the JISC Observatory project, librarians feel that licensing agreements are too complex, being hard to understand and sometimes difficult with which to comply (Armstrong & Lonsdale, 2009a: v). While DRM software can force complicity, it can, in many cases, be removed (Blankfield, 2012: 88), making the library once again liable for unauthorised use.

Vasileiou, Rowley and Hartley (2012) found that licensing negotiations – identified as one of the biggest challenges (alongside business models) of the management of e-books in academic libraries – can be better handled through a consortium, where a team effort can make negotiations on the part of libraries more effective (Vasileiou, Rowley & Hartley, 2012: 286).

2.6.4.5. Format

Format is an expensive consideration when it comes to purchasing e-books for libraries. Some e-book formats require specialised software or hardware to display. While Project Gutenberg e-texts were initially available in plain text only, which could be read on any system, they are now available in a number of more user-friendly formats including HTML, PDF and e-PUB, and mobile and Kindle formats.

PDF (portable document format) has, however, been found to be the preferred format for librarians because of its ease of use, search capabilities and text linking (Vasileiou, Hartley & Rowley, 2012: 29). It could be argued that the familiarity of the format adds to its appeal. Still, there are as yet no format standards for e-books, creating an uncertainty within e-book

collection development of what format to purchase for the future (Coulson, quoted in Wilkie, 2012). The e-PUB format is as close to a standard as can be at the moment because it can be read on almost any device. It is, however, the format that has the most DRM limitations attached to it (Delquie & Polanka, 2011: 137).

A blog post by Pooley (2013) argues for publishers to consider producing formats that are the most practical for researchers to use – those without any restrictions and which allow for annotation and sharing in particular. He argues that some academics would rather not read a book than struggle with its format, which is often device-specific, its DRM restrictions and what are, according to him, complicated features.

Format is also linked to the preservation of e-books. A change in format in the future might impact on access to the archives (Crosetto, 2011: 126).

For libraries, business models are altogether a big consideration, encompassing a range of issues which included pricing, copyright law, licensing agreements, digital rights management and e-book formats. These concerns impact the growth of their e-book collections.

2.6.5. Hardware and software

Whichever format libraries choose for their e-books, they must provide the relevant hardware and software so that patrons can make use of the collection. For example, a library should provide enough work stations, with sufficient memory capabilities on which users can access e-books. Work station operating systems should be compatible with library-supplied e-book requirements and the correct version of reading software must be available on the system. A stable power supply and adequate bandwidth is necessary for downloads and on-screen reading. Devices should be available for loan if the library has purchased a large number of e-books in the proprietary software of an e-reader supplier.

The growth of e-reference material and e-journals has already meant that libraries have converted much of their space into work stations. Bennett (2009) writes about three paradigms that have driven the design of library spaces over time: one, the reader-centred approach, where readers were the focus; the second, the book-centred approach, where the physical collection was the focus; and the third and latest, the learning-centred approach, where work space with access to the library's virtual collection is provided.

If the introduction of e-books means fewer print books, libraries can afford to convert former shelf space into more work stations. An increase in work stations would be needed, not only because of more library resources being offered electronically, but also because, unlike e-journal articles which can often be read relatively quickly or downloaded and read elsewhere at another time, e-books, often not downloadable in their entirety, need to be used for a longer length of time at the point of access.

E-book aggregators and vendors usually provide their own platform from which to access their material. So, for access to their e-books, the library would more often than not need to ensure internet browsers are installed on each computer in the library. If e-books are not read via a browser, programs compatible with the format of the e-books are required. Because there is no current standard for e-book format, this could mean users might find it difficult to access e-books from outside the library. The library could ensure that it, at least, offers complete access to its e-book collection on site, no matter what the format is.

With the growth in popularity of e-reading devices such as tablets and dedicated e-readers over the past few years, this area of technology is a concern for libraries. Libraries must investigate what e-readers, if any, they should stock, what the lending process should be, what formats are compatible with the devices their users own (if they own any) and whether these formats should be prioritised in the collection, and what the cost implications are associated with the above.

One of the reasons e-readers have not been introduced to academic libraries in the past is the concern about format (Wexelbaum & Miltenoff, 2012: 279). This concern translates to a hesitancy to commit to one make of e-reader. Buying an e-reader that is only compatible with, for example, e-books in the e-PUB format is not an effective use of library resources, especially if e-PUB e-books do not make up a vast percentage of the collection. Ultimately, what is needed is an e-reader that has the ability to read a variety of formats (Wexelbaum & Miltenoff, 2012: 279).

A lending programme run at Texas A&M University proved to be extremely popular – so much so, that the lending period had to be changed from two weeks to one – and seemed to indicate that lending e-readers, Kindles in this case, could be something for libraries to explore for leisure reading titles (Clark, 2009). While the display on e-readers such as Amazon's Kindle may be easy to read because of the lack of backlighting and the use of e-

ink, e-readers are notoriously bad at displaying anything other than text, which is why they are most popular for leisure reading. Graphs and tables found in articles and textbooks would, for example, not always render correctly on an e-reader. It is for this reason that Tees suggests that universities should not yet introduce e-readers on a large scale (2010: 184). Clark's report predicts that the future of the Kindle (and e-readers in general) for academic use will rely on hardware that allows for academic publications, inclusive of graphs, to be viewed correctly (Clark, 2009: 149). With the ever-growing popularity of tablet devices, such as Apple's iPad, with their colour screens and Kindle applications, the library may have found its solution.

The 2012 Educause Center for Applied Research (ECAR) study of undergraduate students and information technology examined, among other things, the technologies that undergraduate students prefer to use. The report found that, while undergraduate students may be familiar and comfortable with a wide range of technological devices, they do not want to make use of every technology for their studies (Dahlstrom, 2012: 10). Zimmerman (2011: 97) and Janke (2011: 161) both suggest exploring student interest in using their cell phones as e-readers.

From the perspective of publishers, there is an uncertainty about committing to publishing their content to be read on e-readers as they are unsure how many of their potential readers or libraries own e-readers, and, if they do own them, what type they are (Janke, 2011: 161). Publishers need to make a call on whether to limit their output to one format technology or expand to include a number of them, all of which carry a cost.

2.7. The demands and expectations of library users with reference to e-books: evidence of use

2.7.1. Why ask users about e-books?

Finding out what users want with regards to e-books can guide libraries in growing their e-book collections. By giving users a collection of material that is relevant to them and that they are able to use, a library's collection will be used, thus justifying the resources spent on it. In the long run, finding out what users want will save libraries time and money by ensuring that they do not investigate and buy material that their patrons will reject and which will ultimately have to be replaced.

Because the correct approach to growing e-book collections is still being debated, e-book studies have made a point of asking users what they would like to see offered by their library.

Foasberg (2011) writes that, if libraries want their collections used, it would not be sensible for them to rely solely on what publishers or librarians want, or only on what they think their users want. Similarly, as Sprague and Hunter (2009: 156) have said, even if numbers show that e-books in general are being used, patrons themselves must be asked why it is certain e-books, or certain types of e-books, are not being used. Also important, according to Rowlands and Nicholas (2008: 3), is to ask users how they use e-books. In addition, different demographic groups may use e-books differently.

2.7.2. The level of awareness of e-books in libraries

One of the important questions to investigate related to users is the level of awareness that users have that e-books exist, that they are available for academic use, and that their libraries stock them.

While it may be assumed that most students and staff at academic institutions know that e-books exist in general, Abdullah and Gibb found that the main reason e-books were not being used at their institution of study was that patrons were not aware that they could access e-books in their library (Abdullah & Gibb, 2008: 602). Without knowledge of their presence in the collection, users will not seek out e-books available from the library. (As has been mentioned, patrons experience a certain amount of confusion between e-journals and e-books, so it is quite likely that some users had used e-books without being aware that that was what they were using.). In a study to determine the degree of e-book awareness, use and format satisfaction, Levine-Clark found that, even where e-books were used by about 50% of the campus, library users were eager to use more e-books but were often not aware that more were available for their use (Levine-Clark, 2006: 297).

Awareness levels also differ depending on demographics. In the 2007 UCL study, for example, awareness of e-books in the library was greater for students than for academics and researchers (Rowlands et al., 2007: 508) Indeed, the lack of awareness among academics of e-books being offered by both their library in particular and publishers in general has meant that e-books are rarely promoted by academics (Armstrong & Lonsdale, 2009b: 104).

Even if users are aware of e-books, the JISC Observatory project focus groups results suggest that readers have a fundamental preference for print because of its familiarity, the ease with which extensive reading can take place, and paper's capacity for annotation and highlighting (Armstrong & Lonsdale, 2009b: 95).

It is therefore incumbent on libraries to promote their e-book collections in order to increase awareness of what is on offer and to educate users about the advantages of using electronic versions instead of print books. Increased awareness will result in increased use (if the offering is appropriate) and a better return on investment for libraries. Promotion is therefore important and must be backed up with a strategic e-resources marketing campaign in order to be effective (Vasileiou & Rowley, 2011: 637).

The library website and catalogue seems a logical place through which to tell users about e-books. Various studies have found that these are indeed the places where awareness is generated: 54% of respondents at the University of Strathclyde found out about e-books from the library website (Abdullah & Gibb, 2008: 597); at UCL, 43.4% of respondents became aware of e-books via the library website and 37.2% through the library catalogue (Rowlands et al., 2007: 509). Other popular sources include librarians, lecturers or tutors, and friends or colleagues (Abdullah & Gibb, 2008: 597; Rowlands et al., 2007: 509).

Users have indicated that, besides the library website and catalogue, what they would like is for e-books to be promoted via the user guides, email alerts and reading lists as well (Rowlands et al., 2007: 509). Wilkins (2007) mentions that, where academics are aware of e-books themselves and place them on their reading lists, there is a better awareness and use of them (2007: 248).

2.7.3. How e-books are found for academic use

A library wants its e-books to be used in order to demonstrate a good return on the investment made in them. E-books, like print books, have to be found in order to be used. Unlike print books, however, e-books cannot simply be displayed on a shelf in the hope that they will be discovered serendipitously.

In a discussion on an ebrary student survey conducted in 2008, Soules reports that an important reason students do not use e-books is because they do not know where to find them (Soules, 2008: 11). Used to finding print books on display in a certain order on shelves, newcomers must be pointed in the right direction when it comes to finding the e-books they need.

While the JISC Observatory project surveys showed that over 50% of staff and students who use e-books sourced their last e-book from their university library, users are often confused by

the many ways e-books can be found (Rowlands et al., 2009). The project focus groups agreed with this sentiment: although e-books are generally found via the library catalogue or OPAC, there is confusion over the numerous access points (Armstrong & Lonsdale, 2009b: 104). These access points could, in many libraries, include the library website homepage, the catalogue, the databases, the institutional repository, and the library federated search facility.

2.7.4. How e-books are used

How patrons make use of e-books – for example, whether they use them more for study or leisure, whether they read them from the screen or print them out, and when and where they use them – can help libraries decide how to grow their collections. Licensing agreements often prohibit certain behaviour (printing, for example), and knowing what the majority of their users want can help librarians decide for or against a certain business model.

In academic libraries, any material, including e-books, is mostly used for work or study, as in the UCL study, where, for 71% of survey participants, this is the case; 14% use e-books mostly for leisure and 15% use both equally (Rowlands et al., 2007: 498).

The amount of time spent reading on a screen and the eyestrain it causes is a sensitive topic when it comes to e-books. At UCL, many readers (39%) varied their preference between screen and print, depending on the task at hand, though most readers (48%) preferred to read from the screen (Rowlands et al., 2007: 497). Other studies have also found support for screen reading, though they say that this may partly be due to the fact that downloads and printing of material is often not allowed (Rowlands et al., 2009: 18). Readers dislike reading on the screen for many reasons, some of them being the scrolling and navigation involved, the inconsistency of page display, and the “visual clutter” that appears alongside text (Rowlands et al., 2009: 21).

There is no total preference for using e-books specifically on campus and during working hours. E-books are often used off campus at all hours of the day though most heavily from 8am to 2pm (Rowlands et al., 2009: 19). Usage is higher in the months where academic workload is higher (Rowlands et al., 2009: 20; Simon, 2011: 271).

2.7.5. User demographics

Rowlands and Nicholas (2008) posed the question of whether demographic differences affect e-book discovery and use. They found that demographic differences, such as discipline, gender, age and level of study do make a difference, albeit a subtle one.

2.7.5.1. Discipline

Because of the ways information is used in different areas of study, it seems that the various disciplines have a different level of demand for e-books. Simon (2011) maintains that discipline dictates usage and cites those involved in business studies as being “heavy” e-book users. She says that e-books suit the way business studies students look for information: they tend not to browse for information but look to find facts as fast as possible, for which the search functionality of e-books allows.

Tees has suggested that disciplines like science and mathematics, which rely more on equations, diagrams and colour images, would be less inclined to make use of e-books as often non-text elements do not render correctly (Tees, 2010: 181). At Oakland University’s Kresge Library, however, science and technology students show a preference for e-books while humanities students show a preference for print (Slater, 2009: 40).

Level of use is usually related to the number of e-books in a collection (Lamothe, 2013: 50). In the case of UNLV, the arts and health sciences were the disciplines using e-books the most. On closer inspection, it was found that these two disciplines had the largest number of e-books in the collections under investigation (Tucker, 2012: 42).

2.7.5.2. Age

In the Pew Research Center’s 2012 Internet & American Life Project, conducted among Americans over 16 years of age, it was found that those in the age group 30-49 are most likely to read e-books (Rainie & Duggan, 2012: Who reads e-books). The UCL study, however, showed that 29% of e-book users were in the 17-21 age group, and that after thirty-five, use declines. It should be noted that the Pew survey was conducted among the general population, while the UCL study centres on academic use.

The 2012 ECAR study of undergraduate students and information technology found that older students tend to own e-book reading devices such as tablets and e-readers; cost is perhaps a factor (Dahlstrom, 2012: 25).

2.7.5.3. Level of study

It has already been discussed that there is a general lack of awareness among academics about e-book offerings (Rowlands et al., 2007: 508; Armstrong & Lonsdale, 2009b: 104). Lamothe (2013) reports on a nine-year study at the J.N. Desmarais Library of Laurentian University which found that it was, in fact, doctoral students who seemed most comfortable with e-books. Undergraduates were less inclined to use e-books, possibly because they are not being recommended by academics, who are themselves the least interested in using them (Lamothe, 2013).

The ECAR report (Dahlstrom, 2012: 12) agrees that undergraduates do not seem to consider e-books of such great importance to their studies. Dewan (2012: 29) writes that undergraduates may be familiar with e-book technology and use e-books for leisure reading, but that their way of dealing with academic texts is different resulting in a slower uptake for academic e-books by the younger generation. While the uptake might be slow, e-book use among undergraduates grew from 24% in 2010 to 70% in 2012 (Dahlstrom, 2012: 21). This may, in part, be because they are being more exposed to e-books in general now, or that their library in particular is stocking more of them.

2.7.6. Devices

Knowing the degree of familiarity which users have with various e-reading devices will help libraries make more informed choices about e-book procurements. What are the devices that users own and are willing to use for academic study? Knowing the answer to this question might help libraries put into perspective the growth of their e-book – and, possibly, e-reader – collections.

A recent Springer white paper on the use of e-books among undergraduates at Wellesley College found that those who own reading devices are more interested in using e-books than those who do not own a device (Lenares, Smith & Boissy, 2013: 10).

The 2012 ECAR study of undergraduate students and information technology examined, among other things, the technologies that undergraduate students prefer to use. A wide range

of institutions in the UK and US were included in the study; one from South Africa was represented. Ownership trends seem to be for smaller, portable devices such as smart phones, tablets and laptops, which many undergraduate students now own (Dahlstrom, 2012: 16). The study showed that, of the students who own a tablet or e-reader, 12% to 15% actually use the device for their studies, while smart phones are being used for academic purposes by 67% of those who own them (Dahlstrom, 2012: 14).

The ECAR report points out that tablets are good tools for consumption, while laptops and desktop computers are important for production (Dahlstrom, 2012: 16). From a library perspective, therefore, the fact that their patrons own tablets, bodes well for the reading (consumption) of e-books.

Students are well aware that technology is an aid to their studies yet the report points out that, instead of demanding access to the latest technology, they would rather have the ability to use the technology to which they already have access at its best (Dahlstrom, 2012: 19). According to the ECAR report, “more students rated laptop and desktop computers as very or extremely important to their academic success than any handheld mobile device” (Dahlstrom, 2012: 24).

This fact may help libraries with decisions about the implementation of new technologies. Instead of introducing new devices, they should first consider upgrading what they already have.

2.7.6.1. E-readers and tablets

Foasberg (2011: 108) reports that according to the 2010 Pew Internet and American Life survey, e-book readers were still considered to be a luxury item three years ago – only 5% of Americans owned one, many in the wealthy and well-educated group. The 2012 Pew Internet report found that e-reader ownership is now up to 12% among Americans (Rainie & Duggan, 2012: Findings). Should e-book readers be heavily adopted by library users, it would serve libraries well to find material for use on e-readers, thereby providing users with content to use on the technology (Foasberg, 2011: 109). Again, though, it should be remembered that users owning e-readers is not necessarily an indication that they want to read academic content on them.

E-reader technology has improved greatly over the past few years and one of the biggest hurdles to using them is simply becoming more familiar with them. A two-year study at

Sawyer Business School of Suffolk University, where e-textbooks on tablets and e-readers were provided to some students for use in class while others used a print textbook as usual, found that as devices became more mainstream and as their functionality improved, so the attitudes of those using them became more positive (Weisberg, 2011).

E-readers may, in fact, be rendered less useful at an academic level than tablets. In her paper on the viability of introducing e-readers into library collections, Tees (2010: 182) concludes that e-reader functionality is not conducive to study: PDFs do not display, there is no note-taking functionality and graphics do not render well. E-readers, according to Tees, will only be useful in an academic environment if fiction is being studied, in literature studies, for example (2010: 184). She recommends the use of tablets (the Apple iPad in particular) as an alternative (Tees, 2010: 182).

There has been a huge upsurge in the release of new models and subsequent use of tablets in general since her article was published in 2010. The Pew Internet Report found that 25% of Americans (age 16 and older) owned tablets in late 2012, compared to 10% in late 2011 (Rainie & Duggan, 2012: Findings). A report from information company Information Handling Services (IHS) describing e-book shipments worldwide, plots the decline in e-book reader sales over the past year at the same time as tablet sales continue to grow. The report attributes the decline in fortunes of the e-reader to the “versatile” tablet, which, it says, users are simply using in place of e-readers instead of feeling the need to own both devices (Selburn, 2012).

2.7.7. E-book features patrons want to use

Because e-book packages come with added features and because of the confusion over licensing agreements, it is helpful for libraries and publishers to find out what features in particular their users want to use, which features they consider to be less important, and which they find unnecessary. Knowing what is important to users will help libraries and publishers with the decision-making process when it comes to designing and choosing e-book packages.

The JISC Observatory project posed an open-ended question to participants asking them what they thought were the biggest advantages of e-books compared to print. Online access was seen by most participants as the biggest advantage. Other noted advantages were search ability and cost (participants perceived of e-books as free) (Jamali, Nicholas & Rowlands, 2009). Advantages mentioned, though less often, were portability, convenience,

environmental friendliness and storage. The JISC focus groups report notes that interactive features such as note-taking are not used much, possibly because they are not always available (Armstrong & Lonsdale, 2009b: 79).

Also mentioned by participants were features such as ease of navigation, the possibility of having multiple users, ease of location, copying and pasting abilities, display flexibility, ease of annotation and highlighting, quality of graphics, interactivity and others (Jamali, Nicholas & Rowlands, 2009: 39).

As has been shown earlier in the discussion on licensing agreements, many “advantages” of e-books – including those just mentioned – are not guaranteed to be available in all e-books and are therefore simply assumed or perceived. Some features of e-books that are seen as either advantageous or disadvantageous may, in fact, not be so, and, rather, are envisaged as advantages, rather than being real ones.

E-books come with many clear advantages such as off-campus availability, zero loss due to theft, and no deterioration to their condition (Romero, 2011: 176). E-books have also been viewed as more convenient than print because of their ease of copying, their currency, the space saving they offer, and their twenty-four hour accessibility (Rowlands et al., 2007: 500). These advantages associated with e-books are not necessarily standard features of every e-book – they come as part of the agreement between the library and the book supplier. Copying an e-book, for example, may not always be possible, and currency is not always guaranteed simply because the book is in a digital format. On both these points, a print book may prove to be the better choice. On the other hand, a perceived disadvantage of e-books is the difficulty of reading off a screen (Rowlands et al., 2007: 500). Depending on text size, screen quality and device, reading from a screen might be as easy as reading off a page.

2.7.8. E-textbooks

There seems to be a great future for textbooks in the electronic publishing sphere. Studies have found that textbooks are the most popular e-books used (Abdullah & Gibb, 2008: 599; Rowlands et al., 2007: 499). E-textbooks are highly convenient, being much easier to carry than their print versions (Rowlands et al., 2009: 103).

There are different types of e-textbooks, as pointed out by Chesser (2011): page-fidelity e-textbooks, which are simply digital versions of the print book in PDF format; reflowable e-

textbooks where content is dynamic and can, for example, be customised for a particular screen or personalised; and media-rich e-textbooks which offer interactive features and incorporate multimedia.

The potential for interactivity, such as note-taking, problem-solving and hyperlinking, associated with e-textbooks could be another reason for enthusiasm for them. A study conducted at five US universities involved in an e-textbook pilot project, where each university placed bulk orders for e-textbooks with each individual student paying for access to “his” e-textbook, however, found that students were not making the best use of the entire e-textbook package. Students were not using the additional features, such as note-sharing or linking, that came with the equipment, resulting in users not valuing the experience as much as was anticipated, even though e-textbooks were less expensive than the print copy. It was found that student use was reflective of general teacher use in that, in cases where the professor made use of the e-textbook’s added features, students found value in the advantages of the e-textbooks (Chen, 2012). E-readers are not proving to be highly effective for e-textbooks because of the lack of potential for interactivity (Chesser, 2011: 31). If, for example, the e-textbook was being read on a computer or tablet, the graphics would render correctly, users could seamlessly follow links to external websites, or work on a word-processing document at the same time.

There is, of course, the question as to whether it is the library’s duty to stock e-textbooks and this consideration will be written into its collection development policy. Additional challenges to the library introducing course-related e-textbooks into its collection are managing the contract with the publisher and the associated payment, access and distribution issues, bearing in mind the relatively large number of users per copy that e-textbooks would require (Schell, 2011: 92).

2.8. Conclusion

Libraries were some of the earliest advocates of e-books, digitising their collections for the sake of preservation and sharing. Their desire to provide content for their users is being tested by the challenges of growing e-book collections. Some of these challenges are dealt with in much of the literature on e-books and have been discussed in this chapter. While growing e-book collections is being challenged by libraries and librarians holding onto their traditional ways of doing business, collection growth can be encouraged through library policies directed

at e-books, budgetary allowances, and the procurement and installation of the necessary hardware and software. Understanding business models and purchasing the best one is most crucial to the growth of the e-book collection in a library.

Without taking users into consideration, however, meeting the challenges mentioned above will not be enough. By investigating what their users want from e-books, libraries will more confidently be able to grow their e-book collections, knowing that the collections will be made use of to their full potential.

University of Cape Town

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1. Survey method chosen

Having consulted the literature, it was decided to conduct this study of student and staff attitudes to e-books using a survey research method. According to Marshall and Rossman, surveys are used for “making inferences about a large group of people based on data drawn from a relatively small number of individuals in that group”, thus enabling the researcher to show the distribution of attitudes within a population (2006: 125).

Surveys are made up of questionnaires, and attitudes of participants are measured by what they report about themselves (self-reporting). Questionnaires rely on participants being honest in their responses (Marshall & Rossman, 2006: 125). An assumption made by the researcher is that what is reported is accurate.

In this study, surveys of university staff and students were conducted to discover their attitudes towards e-books. A self-administered, standardised questionnaire, made up of questions with structured response categories as well as some open-ended questions, was used for all participants.

Potential survey subjects were invited, either by email or via a website, to click on a link that took them to the survey. The survey was run online using SurveyMonkey software (gold package). The answers to the questions – the data – were stored on SurveyMonkey’s secure server. Results were accessible to the researcher only via a unique login and password, protecting the data from unauthorised access. On completion of the research, the data was removed from the server. Analysis of the data was done using Microsoft Excel.

The subjective nature of self-reporting is the foundation of this research. Library e-book usage statistics are one way of examining the use of e-books in libraries, but user statistics cannot explain why there may be more use of certain e-books than others, or predict what users want, or could potentially make use of, with regards to e-books. A danger of self-reporting, however, is that some respondents might want to please the researcher by providing answers that reflect well on them or that they think the researcher would like to hear. The fact that the survey for this study was run online and anonymously would, it was hoped, encourage participants to be as honest as possible.

Data triangulation which, according to Miller, is a replication of the study using a different population group (Miller, 2003: 328), then took place. Data from library users was compared with the data obtained from the acquisitions or e-resources librarians at the four participating libraries. The aim was to compare the views of the users to those of the librarians themselves to see whether they corresponded. Where their opinions differ is also of interest as it can further illustrate the level of understanding libraries have about their users' behaviour and demands.

3.2. Strong and weak points of survey research method

Marshall and Rossman write that the benefits of using surveys are that they are accurate, generalisable and convenient as a means of research (2006: 126). Babbie agrees that a strong point of surveys is that their results are accurate and can be generalised. He adds that their flexibility, which gives the researcher an opportunity to explore a particular point thoroughly by asking many questions about it, is another strong point (Babbie, 2013: 262). The online surveys used in this study have the additional benefits of being easy to distribute and manage, with data collection that is secure.

While Babbie asserts that flexibility is a strong point of surveys, he also regards it as a weak point because the standardisation of a questionnaire does not usually allow the researcher to make changes to it as the study progresses (2013: 263).

Marshall and Rossman consider a weak point of using surveys for research the perception that they are an invasion of privacy (2006: 126). In the case of this particular survey, participation was voluntary and anonymous. Subjects could follow the link to the survey and answer the questionnaire on any computer; Internet Protocol (IP) addresses were not recorded. Demographic questions that were posed were unobtrusive and providing answers to them was optional.

One of Babbie's concerns about survey research is that the structure of a survey can be quite limiting. For example, questions posed are carefully designed to suit as many respondents as possible, thus possibly missing more complex issues; on the other hand, limiting the scope of a question ensures the reliability of its response (Babbie, 2013: 263). Similarly, because surveys have a question and answer structure, they cannot take into consideration respondents' "total life situation" (Babbie, 2013: 263).

The survey for this study was run online and not in person, a consequence of which was that participants were unable to query any meanings of questions. Every attempt was made to structure questions as simply, logically and clearly as possible, with the minimal use of library jargon. A pre-test was conducted to test the clarity of the questions. For the sake of additional clarity, the questionnaire gave participants opportunities to include comments in free-text boxes. The likelihood, however, of some questions being misunderstood by some respondents cannot be ignored.

Marshall and Rossman state that they consider sample size to be another weak point of surveys. For the sample to be representative of the population as a whole, it has to be accurate (Marshall & Rossman, 2006: 126). Sample size is therefore of crucial importance in order for survey results to be deemed accurate.

3.3. Sample size

South Africa has a total of twenty-three universities. This study targeted the four universities in the Western Cape, the province in which the researcher is based, to allow for regular visits to each institution if this proved to be necessary.

It was thought that the four institutions chosen would be representative of the country's universities as a whole, being inclusive of both previously advantaged and previously disadvantaged institutions, and representative of traditional universities as well as the newer universities of technology.

Because conducting a census of each institution would be prohibitively expensive, it was decided to use a sample survey instead. Fowler states that sampling is "to select a small subset of a population representative of the whole population" (1993: 4). The students and staff chosen as the sample would thus stand in for the entire student and staff contingent at each of the universities. Citing Roscoe writing in 1975, Sekaran asserts that sample sizes should be between thirty and 500 for the results to be useful (2003: 295).

The sample size for the student bodies, which ranged in total size from 19,589 to 32,658 at the four universities, was based on Sekaran's guidelines for population sampling (2003: 294) and was to be applied to all four institutions independently. Staff sampling was done differently: fifty staff members (or a proportionate random sample of 25%) from each faculty in each institution were to be selected randomly. Gaining access to staff email addresses at the

universities was a particularly trying process, and it was suggested by the first institution where the process was attempted, that supplying a certain number from each faculty would be preferable to randomly sampling from all staff members. This had the advantage of ensuring an even spread across faculties; the disadvantage being that the same could not be said about the student sample which would be taking part in the same survey.

The total population and sample size of each university is presented in the table below.

Table 3.1.
Populations and sample sizes

	Academic staff		Students	
	N	Sample size	N	Sample size
University A	936 ²	238	30,835 ³	380
University B	738 ⁴	313	32,658 ⁵	380
University C	965 ⁶	500	25,500 ⁷	Not applied
University D	488⁸	Not applied	19,589⁹	Not applied

N = total population

3.4. Representativeness

Owing to administrative issues related to gaining access to student and staff email addresses, a random sample of students could be selected from only two of the universities. The third university sent an invitation to participate in the survey to all students, while the fourth placed the invitation on their library website homepage, in theory inviting its entire community, but in reality only those who actually visited the website.

It was hoped, as far as the sample of staff was concerned, that fifty staff members from each faculty (or a proportionate random sample of 25% of each faculty) would be selected

² Allison Mlitwa, email message to author, 5 November 2012.

³ Gavin Nimmo, email message to author, 25 October 2012.

⁴ David Bleazard, email message to author, 4 March 2013.

⁵ David Bleazard, email message to author, 4 March 2013.

⁶ University of Cape Town. 2012. *Excellence and impact: annual report 2011*. Cape Town: University of Cape Town.

⁷ University of Cape Town. 2013. About UCT 2012/13: A brief introduction to the University of Cape Town. Cape Town: University of Cape Town. Available: http://www.uct.ac.za/downloads/uct.ac.za/about/aboutuct_2012-13.pdf [2013, March 28].

⁸ Vincent Morta, email message to author, 20 May 2013.

⁹ Vincent Morta, email message to author, 20 May 2013.

randomly. Again, only two institutions were able to provide this, while a third invited 500 staff members across the board, and the fourth, as mentioned, invited its community via a website link.

The survey research method allows results to be generalised to the population as a whole. However, Sekaran (2003: 294) writes that if correct sampling is not done, results cannot be generalised. Because of the difficulty of attaining the correct sample sizes at all institutions, due caution should thus be taken when considering the results of this study.

3.5. Qualitative and quantitative research

Based on Bless, Higson-Smith and Sithole's table of the comparison between quantitative and qualitative research (2013: 17), the research carried out for this study has characteristics of both approaches. The survey's rigid structure and the objective stance of the researcher categorise the research as quantitative, as does the relatively large representative sample, which produced results that were then generalised to the population as a whole.

However, the data collected was not restricted to counts; attitudes of respondents were measured by the opinions they provided in the questionnaire's comments sections. As a result, data analysis looked at statistics as well as recurring themes discovered via the coding of written responses. Variables were looked at independently but relationships between variables were also sought. These factors categorise the research as qualitative.

So, while surveys and questionnaires are often said to be quantitative (Bless, Higson-Smith & Sithole, 2013: 16), the methods used for this study are both quantitative and qualitative. Axinn and Pearce (2006: 5) argue that surveys do not have to be seen as quantitative simply because of features such as their rigidity and the statistics the results produce. For this study, therefore, both approaches are employed.

3.6. Pre-test

A pre-test was conducted using a small group of Library and Information Science (LIS) graduates from the University of Cape Town. As all participants in the pre-test are employed in the LIS field and thus have an interest and industry knowledge about e-books, they were asked for feedback on their overall survey experience, including their opinions on the clarity of the questions and the range of choices offered in the closed-ended questions. Their responses were used to test the survey process.

3.7. Ethics

Adapting from Kent writing in 1996, Silverman lists four features of “informed consent”. They are: giving the subjects pertinent information that might sway their decision to participate in the research; ensuring that this information is supplied in a clear and understandable fashion; making sure that participation in the research is purely voluntary; and, if subjects are minors, getting consent from their parents or guardians (Silverman, 2005: 258).

Because this study involved gathering information directly from human subjects, ethical clearance to embark on the study was required and duly obtained from the Ethics Committee of the Faculty of Humanities of the University of Cape Town. The research was dependent on gaining access to staff and students from each participating institution and so each institution was approached individually for clearance to conduct the study on its campus and to approach its staff and students. Once permission to conduct the study was granted, a request was made for email addresses of staff and students so that an invitation to the survey could be dispatched.

Because the research was in the form of a questionnaire and not interviews with individuals, the survey could be viewed as of potentially minimal risk. Participants were in no way compelled to take the survey. They were given the choice of clicking on a link that took them to the first page of the survey. This page informed them of their anonymity and advised that, should they want to exit the survey, this could be done at any time and they were thus not obliged to answer all questions or to complete the entire questionnaire. Personal data was not collected and participants could thus not be identified except as being members of a particular institution, faculty, age group or level of study.

There was no direct benefit to individuals who participated in the survey. No incentive was provided to encourage participation.

3.8. Problems encountered

Flick (2002) points out that there are two “participants” involved in research: those who are surveyed and those in a position to give permission for the survey to take place. The latter participant gives the researcher access to the former group (Flick, 2002: 54). Dealing with the second group of participants is therefore a vital part of the research process.

Gaining ethical clearance from the four institutions was a reasonably straightforward exercise, with institutions advising the researcher about the process that needed to be followed. The process involved providing them with a copy of the research proposal and filling out forms stating the details of the research. However, once ethical clearance to conduct the study at the institutions had been obtained, a number of obstacles were encountered in the acquisition of email records of staff and students. These problems are discussed below.

In order to invite potential research participants to take part in the survey, access to a random sample of email addresses belonging to students and staff members was needed.

There seemed to be confusion at three institutions as to which channels to follow to get access to email addresses: while ethical approval had been obtained, the divisions responsible for granting the approval were unable to direct the researcher to a department that had the authority to provide the email addresses needed to contact potential participants.

One institution suggested recruiting student participants by placing a notice on the Virtual Learning Environment (VLE) with a link to the survey. This request was denied by the VLE administrator because of the large number of researchers who would want to recruit via the VLE if this was allowed. The administrator had no objection to the research being conducted via the tool once volunteers had been found. Requests for email addresses from Student Records were met with silence. At a second institution, Student Records were helpful in providing the details for the student distribution list. There was, however, some confusion as to who the correct contact person was for staff email addresses. Ultimately staff details were provided by the person through whom permission to conduct the research on campus had initially been requested. The first institution subsequently took the same decision to allow the department that had initially granted permission to conduct the research on the campus to supply a list of staff and student email addresses.

Similar to the cases above, the person processing the ethics request at the third institution was not initially able to direct the researcher to the next contact point where access to student and staff email addresses could be requested. Suggestions to place a notice on the VLE or to contact Student Records were followed up on, without result. On further consultation with the academic office that had initially given its approval for the research to take place, the researcher contacted the Information Systems department. As supplying email addresses to

third parties was said to be unusual for this department, procuring them took some time but eventually email details of both staff and students were successfully obtained.

It must be noted that, at all three institutions mentioned (at the fourth, it was agreed to invite participants via a website rather than by email), procuring email addresses was a protracted exercise. While individuals at all institutions were willing to help, the researcher found the process of being directed from one unsuccessful contact person to another extremely frustrating.

The frustration on the part of the researcher was exacerbated because the end of the academic year was approaching and students would more than likely not be available to take part – or interested in taking part – in the survey once their final examinations were complete. In the case of staff, it was considered likely that a large number of staff would take their annual leave at the end of the year. The longer it took to obtain email addresses from the institutions, the more likely it would be to coincide with the university holiday period. Owing to this, the decision was made to delay gathering responses at institutions where progress was particularly slow until the following year.

CHAPTER FOUR

4. DATA ANALYSIS

4.1. Participating universities

Four institutions were chosen for this study, namely Cape Peninsula University of Technology (CPUT), University of Cape Town, University of the Western Cape and Stellenbosch University. All are universities with their campuses in the Western Cape of South Africa. For the purposes of confidentiality they are referred to here as A, B, C and D.

The four Western Cape universities can be considered fairly representative of the universities in South Africa as a whole: they include both previously advantaged and previously disadvantaged tertiary institutions, as well as traditional universities and universities of technology. In the table below, CPUT consists of two former institutions which were respectively previously advantaged and previously disadvantaged. It will be interesting to see whether these differences translate to differences in the use of e-books in each community.

Table 4.1.
The four universities in the Western Cape

	Previously advantaged	Previously disadvantaged
Traditional university	2	1
University of technology	1	1

4.2. Number of responses

The intention was to secure a balanced sample in proportion to the number of students and staff registered at each institution. This objective was, however, not realised because of problems securing access to student and staff contact details at some institutions. The number of responses from each university therefore varied greatly.

University A provided access to 380 of its students. This number is the required amount for a random sample according to Sekaran's table of sample size for a given population size (Sekaran, 2003: 296). In addition, a quarter of the academic staff in each faculty was invited to participate – 238 in total. University B also provided access to 380 students; staff numbered 313.

University C invited all its students (25,500) and 500 staff members to participate in the survey. At University D, no one was directly invited to participate. Instead, an invitation was

placed on the library website and any students and staff who saw the invitation could participate in the survey by clicking on the link provided directing them to the questionnaire.

The total number of responses from each institution is tabulated below.

Table 4.2.
Number of responses by institution

A	62
B	76
C	1,182
D	35
Total	1,355

Table 4.2 clearly shows the difference in the number of responses between the institutions. In the data analysis that follows, percentages are used most often so that statistics are comparable. Since the total number of responses differs so greatly across institutions, the numbers cannot be directly compared. For example, for question one, the 903 respondents from University C who read academic journals electronically cannot be directly compared to the 27 respondents from University D who do the same. Converting the numbers to a percentage of the total number of respondents for that question from each institution is fairer. Thus, 76.59% from University C may be more fairly compared to the 81.82% from University D represented by the 27 respondents for that question. Although this method represents a loss of data, it allows for ease of comparison.

In the discussion of Western Cape university libraries as a whole, where responses from the four institutions have been added together, it should be kept in mind that the volume of responses from University D under-represents the institution, whilst those from University C are, in comparison with the other institutions, an over-representation. Their responses thus cannot necessarily be representative of the whole. Where pertinent, discrepancies between institutions will be pointed out.

The variation in response rates does represent a significant, but unavoidable, loss of data and due caution should be exercised in considering the results from institutions where there has been a low response rate.

4.3. Description of the questionnaire

The numbers presented in Table 4.2. (“Number of responses by institution”) are the number of survey participants who answered at least one question in the survey. Because participants were able to skip questions or leave the survey altogether whenever they wanted, not all questions were answered by everyone, resulting in some questions having fewer responses than others.

The structure of the questionnaire used a funnel approach whereby the first section incorporated questions that were broader in nature than the rest of the survey, in this case questions about e-resources in general. As the survey progressed, questions became more specific, pertaining directly to e-books for academic use in university libraries. Questions about internet access and device ownership followed. Since not much thought needs to be put into them, demographic questions were placed towards the end of the survey to help respondents who were experiencing survey fatigue. Easily-answered questions also give respondents a feeling of accomplishment as they finish the questionnaire on a positive note. A final question about users’ overall attitude towards e-books was included.

Most questions were multiple-choice in nature. Some allowed for only one answer and some for more. Where participants chose “other” or “it depends”, they were asked to specify what they meant by their choice. They tended to comment even when it was not required which, perhaps, indicates their level of interest in the subject matter.

4.3.1. Breakdown of questions

The questionnaire was divided into five sections: general e-resource use, e-book use, internet access and device ownership, demographics, and a concluding question.

The five sections, the questions for each section and the number of responses for each question are tabled below. The entire questionnaire, with answer choices, appears in Appendix 1 of this dissertation.

Table 4.3.
Survey questions

Number	Question	Responses
Section one: general preferences for e-resource use		
1	What sort of material do you, or would you like to, read electronically?	1,348
2	If both a print and an electronic copy of a book were available for you to read, which would you choose?	1,345
3	What is your reading preference when it comes to electronic content?	1,344
Section two: use of e-books		
4	Do you, or have you in the past, read e-books from your university library?*	1,340
5	What are the reasons you haven't used e-books from your university library?	758
6	Do you consider the e-book collection at your library to be sufficient for your requirements?	567
7	For what reason have you used e-books from your university library?*	570
8	For what purposes have you used e-books in your work or studies?	530
9	When using e-books for study or work purposes, how do you mainly make use of them?	529
10	How do you go about finding e-books for work or study?	525
11	Which of the features [listed] would you like to be able to make use of when you read e-books for work or study purposes?	498
12	For what length of time would you want access to an e -book from your university library?	499
Section three: access to e-book reading devices and the internet		
13	Which devices do you own or have regular, unlimited access to?	1,282
14	Do you have internet access off campus (not at your university or residence)?*	1,284
15	What is the main way you access the internet off campus?	1,091
Section four: demographics		
16	What is your primary association with the university?*	1,281
17	Are you registered on a full-time or part-time basis?	993
18	Indicate the faculty to which you belong.	1,261
19	Indicate to which age group you belong.	1,277
Section five: concluding question		
20	Did your attitude to e-books change while filling out this survey? Please elaborate.	1,268

The asterisk (*) denotes compulsory questions.

In order to encourage participants to answer as many questions as possible without a feeling of being forced to do so, the only questions that required an answer were those which led to contingency questions. Question numbers five to twelve and question seventeen were contingency questions to which only respondents who had answered a certain way to a preceding question were directed. These questions necessarily have a smaller number of responses.

The first compulsory question, number four, was used for the purpose of separating those participants who had read e-books from their university libraries from those who had not. An

answer to the question was required to ensure that those who had not read an e-book from their university library would not be faced with questions which assume that they have made use of e-books before.

4.4. Demographic responses

The researcher was keen to gather responses from those across the demographic spectrum, including representatives from each faculty and all levels of study. Non-academic staff members were not targeted in the study but there were some staff members who identified themselves as such in the survey and their responses were taken into consideration as they, too, are library users.

The demographic breakdown across the institutions is presented in the table that follows.

University of Cape Town

Table 4.4.
Demographic breakdown of survey respondents

Level of study	
Undergraduate student (first degree)	623
Postgraduate student (Honours, Masters or PhD)	372
Postdoctoral researcher	29
Academic staff member	241
Non-academic staff member	16
Registration status	
Full-time	939
Part-time	54
Faculty	
Architecture or Design	12
Arts or Humanities	232
Commerce or Business	239
Education	28
Engineering or the Built Environment	220
Health Sciences	220
Law	29
Natural or Applied Sciences	224
Social Sciences	47
Theology	1
Support and other services	9
Age group	
17-21	421
22-25	303
26-35	267
36-45	127
46-55	98
56-65	58
Over 65	3

Very few non-academic staff members are represented as they were not targeted in the survey. Undergraduate students and the 17-21 age group are most represented as these two groups make up the majority of the university population.

4.5. Analysis of the data

4.5.1. Section one: general use of e-resources

Question one

The first question posed in the survey was to find out what readers are reading, or would like to be reading, electronically. The question was a general one about the use of e-texts and therefore did not specify e-books in particular, but did include, in the list of answer choices, materials that are available both in print and digitally. The question also did not specify that it related to material available at a library, academic or otherwise. The question was posed in order to gain an understanding of the population's comfort with e-resources and its interest in using e-books compared to other e-resources. According to Schell, there is "anecdotal 'evidence' that patrons do not like or want to use e-books" (Schell, 2011: 83); question one sought to discover if there was any such evidence among the population being surveyed here.

Respondents were able to select as many answers as were relevant to them. Answer choices included academic journals, newspapers and magazines, academic books, leisure titles, reference books, and textbooks or manuals. Two additional options – "other" and "none of the above" – were included for those who like to read e-resources not listed or for those who do not read electronic material at all.

A total of 1,348 subjects responded to the question, 76.41% of whom read academic journals in electronic format. While e-journals are the most popular electronic reading material, all other formats are – or have the potential to be – used to a large extent: newspapers and magazines are read by 66.69% of respondents, academic books by 63.50%, leisure titles by 58.38%, reference books by 57.79% and textbooks or manuals by 57.64%.

Of the 2.97% who read "other" material electronically, comics, biblical texts, blogs and lecture notes were material mentioned most regularly by respondents. Only 2% of respondents do not read any material electronically.

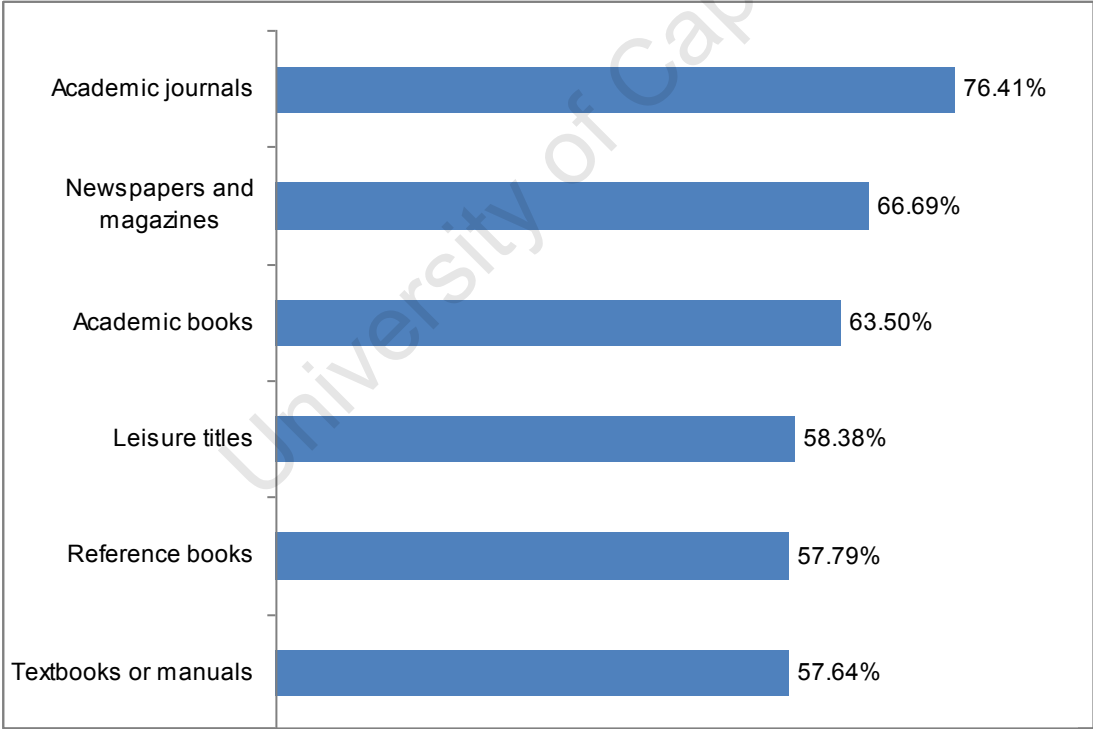
The number of responses is presented in table 4.5.

Table 4.5.
What sort of material do you, or would you like to, read electronically? Select as many options as apply to you
All respondents (n=1,348)

Leisure titles	787
Newspapers and magazines	899
Academic books	856
Academic journals	1,030
Reference books	779
Textbooks or manuals	777
None of the above	27
Other	40

Figure 4.1. depicts electronic reading material use as a percentage of the population as a whole and in descending order. Academic books are shown to rate third-highest, below newspapers and magazines and academic journals.

Figure 4.1.
What sort of material do you, or would you like to, read electronically?
All respondents (n=1,348)



A large percentage of all ages, except for the over-65s, claim to read e-books. A relatively smaller percentage is represented in the 17-21 and 56-65 age group.

Table 4.6.
Age groups that read academic books electronically
All respondents (n=1,277)

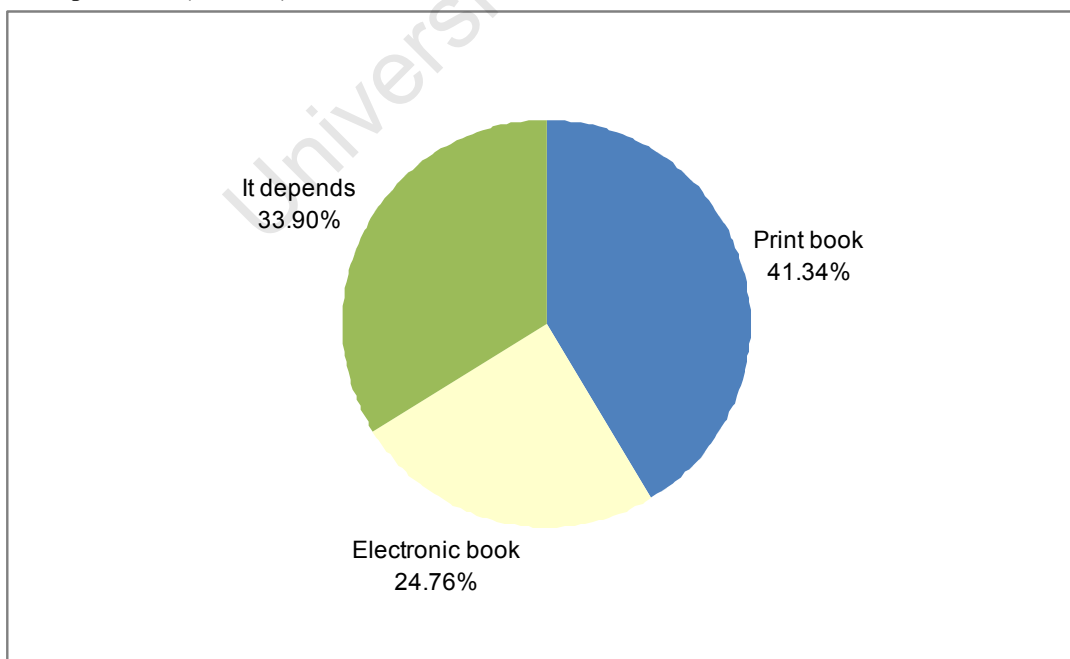
	17-21	22-25	26-35	36-45	46-55	56-65	over 65
Read academic books	59.38%	63.04%	71.91%	61.42%	70.41%	55.17%	33.33%

Questions two and three

The next two questions sought to discover population preference between print and electronic reading material. Question two identified preference of choice between print and electronic versions of books, asking respondents which version they would choose if both were available. Question three identified preference between reading electronic material on-screen or reading a copy that has been printed out.

As shown in the pie chart below, 41.34% of respondents would choose to read the print version of a book if both a print and an electronic copy were available. Less than a quarter of respondents (24.76%) would choose the electronic version. A relatively large part of the population (33.9%) responded that whether they chose a print or an electronic book to read would depend on certain factors.

Figure 4.2.
If both a print and an electronic copy of a book were available for you to read, which would you choose?
All respondents (n=1,345)



In particular, 17.54% of respondents who stated that their choice would depend on certain factors, mentioned that, if their purpose of using the book was to find information quickly, an electronic version would be preferred.

Similarly, 16.67% and 11.62% of the same group of respondents stated that, for leisure or long-term reading purposes respectively, print is preferred; 7.02% of the group showed a preference for the electronic version for leisure reading purposes. However, 11.84% of this group of respondents specified a preference for electronic versions of academic texts, indicating that, while e-texts are a good source for academic content, the length and complexity of the document dictates whether users seek out a print copy of it or read the electronic version.

The convenience of electronic texts is seen as particularly appealing by 16.32% of those who stated that their choice would depend on certain issues. The physical bulk of print books is seen as a drawback and the portability of e-books when travelling or commuting is considered advantageous, as is not having to visit a library in person to collect books.

A general preference for print was expressed by 12.94% of this group of respondents. While this group would seek out a print book before an electronic version, it is aware of the advantages of electronic copies and would therefore not be averse to using them under certain circumstances.

The ability to search an e-book was cited specifically as a function for which electronic versions are preferred: 7.24% of this response group mentioned that this was an important factor for them, underlining the quick-reference capacity for which electronic texts are favoured.

Because of their cost and weight, textbooks are an area where it might have been thought that respondents would weigh in heavily on the side of electronic books. In reality, more respondents (6.14%) expressed a desire to use print textbooks than those who wanted electronic textbooks (2.41%). This, perhaps, reflects the desire for using printed texts for long-term access and for the ease and familiarity of note-taking when using a printed book, a comment that was made by 9.87% of this group.

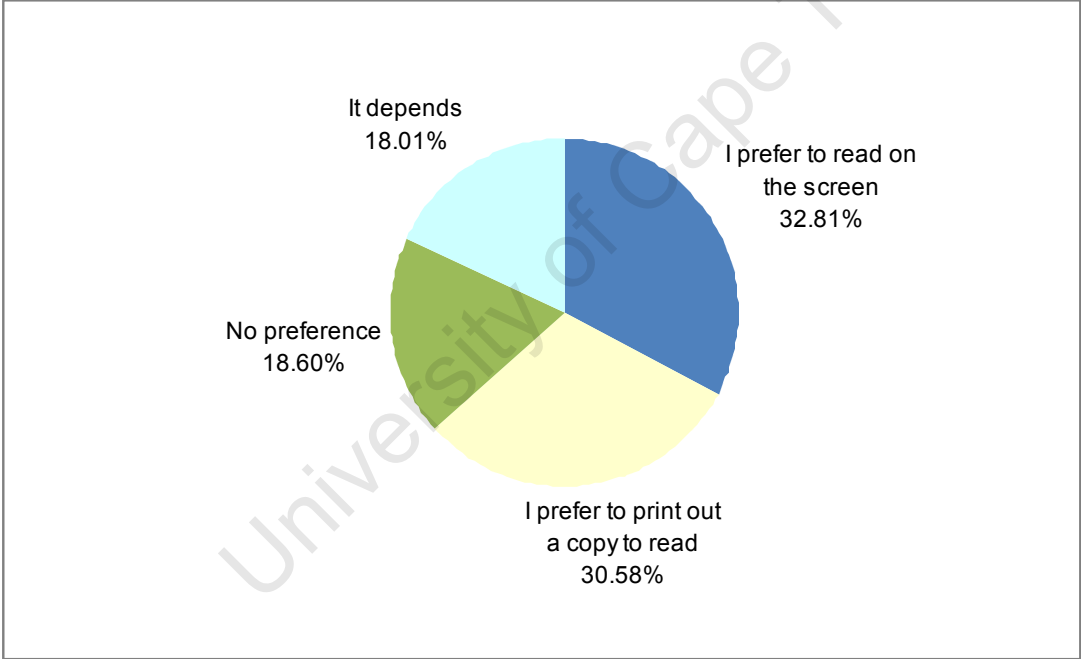
Question three explored preferences when it came to on-screen or print reading of electronic content. The factors influencing the choices made by those who do not have a clear preference

are dependent on the type of content being read, its format and its length. These results are consistent with those found in question two.

In addition, a particular concern is eyestrain associated with screen reading and so, while screen reading might be the preference, health concerns are a reason readers choose to read on paper instead.

Overall, however, screen- or print-reading preferences were not very different with 32.81% of respondents preferring to read on screen and 30.58% preferring to print out a copy to read. 18.6% of respondents indicated that they had no preference, signifying a level of comfort with both old and newer technologies.

Figure 4.3.
What is your reading preference when it comes to electronic content?
All respondents (n=1,344)



When comparing the results of questions two and three, it is evident that there is a similarity between them. The percentage of the population who prefer to read a print copy of a book and who prefer to print out a copy of electronic content is 54.05%. The proportion of those who would choose an electronic book over a print book and who prefer to read on screen instead of on paper is 56.63%.

25.30% of those who would choose an electronic copy over the print version of a book have no preference for the medium on which they read the content, suggesting that, having used

print in the past and now having embraced electronic, they are comfortable with both reading methods. Even those who prefer print over electronic material are not averse to reading on screen: 19.10% state that they would, in fact, prefer screen reading when it comes to electronic content.

A table containing both sets of data, displayed in percentages, is presented below.

Table 4.7.
Preferences for electronic or print content and on-screen or print reading
All respondents (n=887)

	Would print out a copy	Would read on-screen	It depends	No preference
Would choose print over electronic	54.05%	19.10%	12.79%	14.05%
Would choose electronic over print	9.94%	56.63%	8.13%	25.30%

For a small percentage of the population, print is still a clear preference: all but one respondent who stated in question one that he or she does not read any material electronically (twenty-six respondents out of 1,348), would choose a print book over an electronic book if both were available and would print out a copy of any electronic content to read on paper.

4.5.2. Section two: use of e-books

Question four

Abdullah and Gibb (2008: 603) found that users can be confused between e-books and e-journals. For this reason, it was important to include a description of an e-book at this point in the survey before questions became focused on e-books in particular. The description provided was as follows.

An e-book can be considered to be a book (biography, novel, reference work, textbook, etc; fiction or non-fiction) in electronic (digital) format, accessible online, which can be read on an electronic device, such as a computer, tablet, e-reader or cell phone.

The aim of the description was to provide respondents with a meaning of the term “e-books” that was clear and easy to understand for the purposes of the questions that followed. The description, therefore, did not include detailed definitions such as what a book is, the structure of e-books, or the question of content versus container.

The description of e-books led to question four, “Do you, or have you in the past, read e-books from your university library?”.

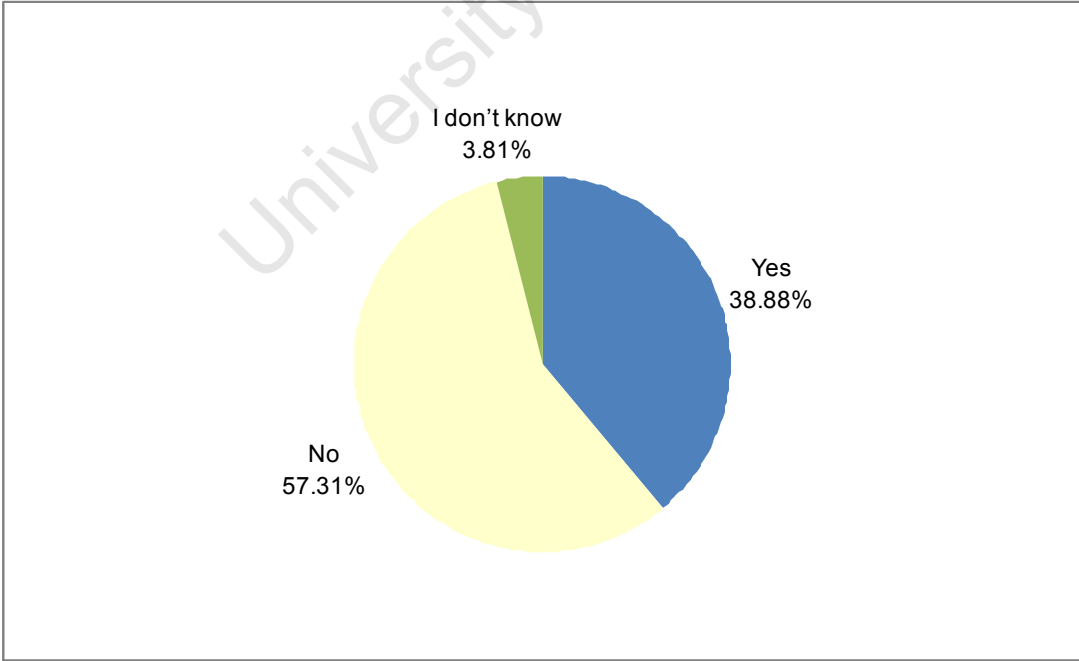
While it was hoped that the description of an e-book would result in participants being able to answer “yes” or “no” definitively, it was still necessary to include the third option of “I don’t know” for those participants who still did not understand what an e-book is. It is entirely probable that not all survey participants read or took note of the description provided.

The table and pie chart below show that a larger percentage of respondents (57.31%) stated that they had not read e-books from their university library, while 38.88% of respondents had read them. A small number – a percentage of 3.81 – said that they did not know whether they had or had not read e-books from their library before.

Table 4.8.
Do you, or have you in the past, read e-books from your university library?
All respondents (n=1,340)

Yes	521
No	768
I don't know	51

Figure 4.4.
Do you, or have you in the past, read e-books from your university library?
All respondents (n=1,340)



Overall in the Western Cape, more library users have not read e-books from their university library than those who have. In the breakdown of institutions, this is also true for Universities

B, C and – to a lesser degree – University D. At University A, more people have read e-books from the library than those who have not.

Table 4.9.
Do you, or have you in the past, read e-books from your university library?
Percentages at Western Cape universities
All respondents (n=1,340)

	A	B	C	D
Yes	55.74%	39.47%	37.84%	42.86%
No	44.26%	56.58%	58.30%	48.57%
I don't know	0.00%	3.95%	3.85%	8.57%

Question five

It is important to find out why users are not using e-books from their university libraries. Therefore a question in this regard was posed to respondents who had stated in the previous question that they had never used e-books from this source.

There can be many explanations for the large numbers not making use of library e-books, and so survey participants were asked to tick as many options as were relevant to them and to add any reasons that were not listed. The researcher was aware that allowing users to add their own reasons could result in a repetition of what was already listed, but as an exhaustive list could not be provided, this option was deemed more suitable than missing a reason because there was no opportunity for the participant to state it.

Taking all options into account, including reasons stated in the free-text section, the main reason patrons are not making use of e-books from their university library is that they are not aware that there are e-books in stock. They have consequently not sought them out.

The list of reasons for not using e-books at the university library is tabled below. A breakdown of the top five reasons, presented as percentages, is displayed in graph format in Figure 4.5.

Table 4.10.

What are the reasons you haven't used e-books from your university library? Select as many statements as apply to you

All respondents (n=758)

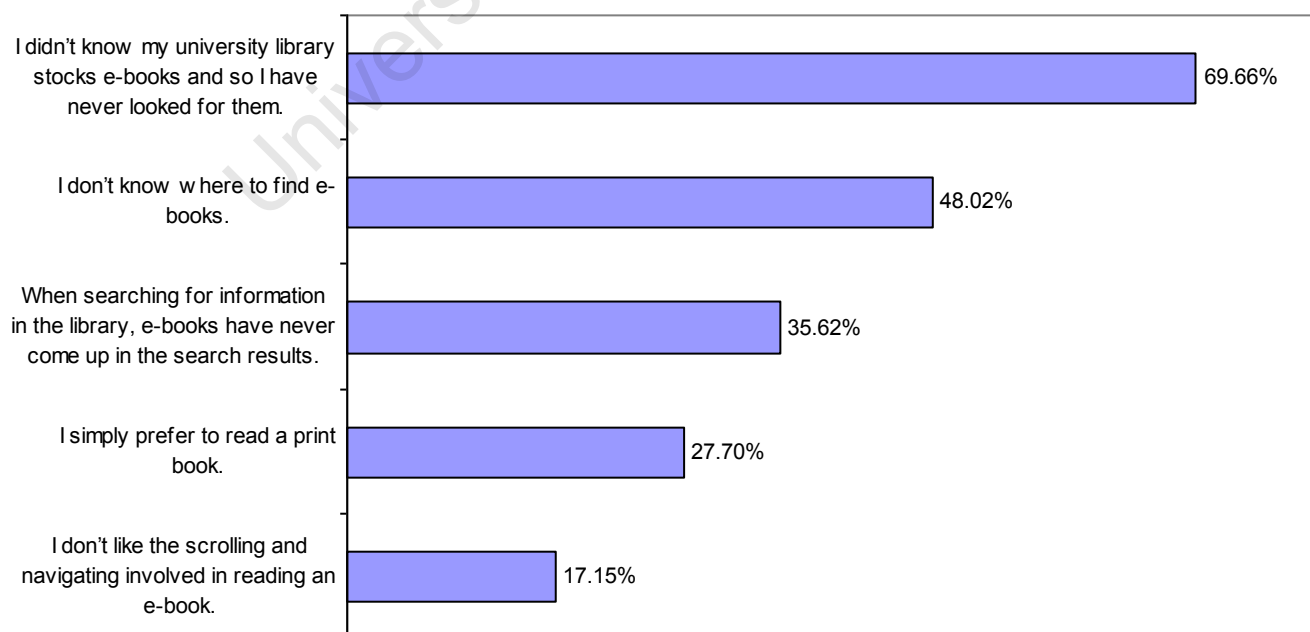
I didn't know my university library stocks e-books and so I have never looked for them.	528
When searching for information in the library, e-books have never come up in the search results.	270
The information that I need is never available in e-book format.	118
I don't know where to find e-books.	364
I don't know how to use e-books.	98
I want training before I start using e-books.	55
I don't have access to a suitable reading device all the time.	83
I don't have access to the internet all the time.	92
I don't like the page layout/design on which I have to read e-books.	55
I don't like the scrolling and navigating involved in reading an e-book.	130
E-books are confusing to use.	16
My friends and I like to share books and we can't share e-books.	21
I'm used to reading print books and don't want to change.	64
I simply prefer to read a print book.	210
Other reasons	87

Figure 4.5.

What are the reasons you haven't used e-books from your university library? Select as many statements as apply to you

Top five reasons

All respondents (n=758)



The chart above shows that the top three reasons for not using e-books from the university library are associated with the service provided by the library. The fourth reason refers to personal preference and the fifth reason to e-book functionality.

It should be noted that the expression “from your university library” used in the phrasing of the question may be problematic. Because library users are usually able to access content unreservedly on campus, the distinction between what they are accessing via the library and what they are finding on the World Wide Web is more than likely not always apparent to them. When, however, they access content remotely, through an off-campus login for example, the difference between free content accessed on the Web and what is being provided by the library becomes clearer.

The question of why some users are not using e-books from their university libraries should be examined as a whole but also for each institution as each is run independently of the other and thus has different policies, staff and collections in place.

In all cases, the most popular reason for not using e-books from the library is that users do not know that there are e-books available and have consequently not looked for them. While this reason is the most popular reason for not using e-books at all the universities, it was selected as a reason by a different proportion of respondents at different universities, as is shown in the first row of the table below.

A large percentage of respondents at University C (71.81%) chose this reason for not using e-books, compared to smaller percentages at University B (54.76%) and D (56.25%) and an even smaller percentage at University A (38.46%). The results show that it is likely that University C is not actively promoting its e-book collection, or has as yet not built a collection large enough to promote to its users. In contrast, users not being aware of its e-book collection is not as significant an issue for University A, especially considering the results for question four where a larger percentage of its population have read e-books from its library.

Table 4.11.
The top reason for not using e-books from university libraries
Percentages at Western Cape universities
All respondents (n=758)

	A	B	C	D
I didn't know my university library stocks e-books and so I have never looked for them.	38.46%	54.76%	71.81%	56.25%
I don't know where to find e-books.	26.92%	35.71%	49.11%	50.00%
When searching for information in the library, e-books have never come up in the search results.	19.23%	19.05%	36.94%	43.75%
I simply prefer to read a print book.	30.77%	30.95%	25.96%	18.75%
I don't like the scrolling and navigating involved in reading an e-book.	19.23%	11.90%	17.36%	18.75%
The information that I need is never available in e-book format.	11.54%	14.29%	14.54%	31.25%
I don't know how to use e-books	7.69%	16.67%	12.76%	18.75%
I don't have access to the internet all the time.	30.77%	14.29%	10.98%	25.00%
I don't have access to a suitable reading device all the time.	11.54%	14.29%	10.39%	25.00%
I'm used to reading print books and don't want to change.	3.85%	4.76%	8.01%	12.50%
I don't like the page layout/design on which I have to read e-books.	11.54%	4.76%	7.27%	6.25%
I want training before I start using e-books.	3.85%	19.05%	6.68%	6.25%

Not knowing where to find e-books is more of an issue at Universities C and D than at Universities A and B. The same is true for e-books not coming up in search results.

An issue where University A and B should be relatively concerned is that more of their population “simply prefer to read a print book”. This is less of an issue for University C and even less so for University D.

The percentage of users who “don't like the scrolling and navigating involved in reading an e-book” is similar for all institutions, except for University B, where a smaller percentage is of this opinion.

Considering that more people at University D than at the other universities know that their library stocks e-books, a relatively large issue for University D is that information sought is not available in e-book format. For the other three institutions, this is not as much of an issue because fewer users are aware of e-books in their libraries to start off with.

Whether users know how to use e-books is necessarily a concern for all of the institutions surveyed but, from the responses, it is evident that substantially more users from University A are confident about their abilities to use the technology.

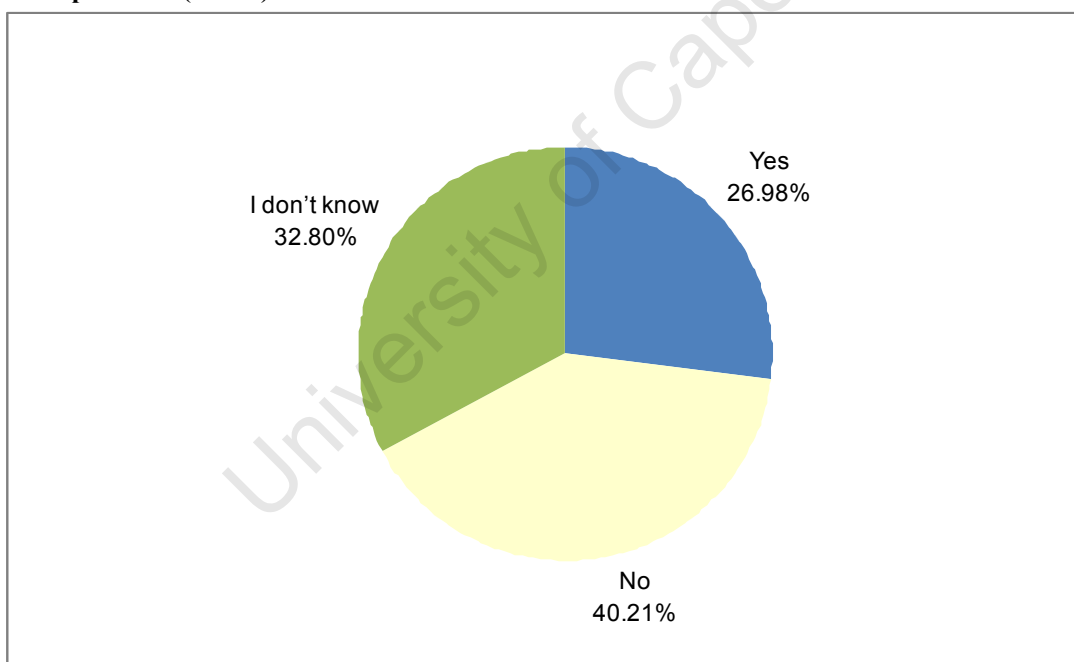
Question six

Those who had used e-books from their university library and those who stated that they did not know whether they had done so, bypassed question five and were directed instead to question six, “Do you consider the e-book collection at your library to be sufficient for your requirements?”. They could give a reason for their answer, if they chose to do so.

The question was posed, not to reflect positively or negatively on the library collections of the participating universities, but, rather, to gain an understanding of user perceptions of the collections.

While the majority of respondents feel that the e-book collection at their university library is not sufficient, a large number do not know. Results are depicted in the pie chart below.

Figure 4.6.
Do you consider the e-book collection at your library to be sufficient for your requirements?
All respondents (n=567)



Among the reasons given for the dissatisfaction with e-book collections is that there is a lack of availability of titles that researchers have looked for in the past, that certain disciplines are under-represented, that local content is missing, and that, in general, the collection is too small compared to e-journal collections. Some view the collection as insufficient compared to institutions outside South Africa at which they have studied.

Those who commented on their reasons for stating that the collection was sufficient for their requirements felt only that the collection was generally suitable for their needs. The fact that respondents felt it necessary to comment meant that many of them had some reservations and were not unequivocally happy with the collection. Reservations included a feeling that the number and variety of e-books in the collection was small and that particular disciplines were not well stocked. Reasons were thus similar to those provided by respondents who had stated that they were unhappy with the collection.

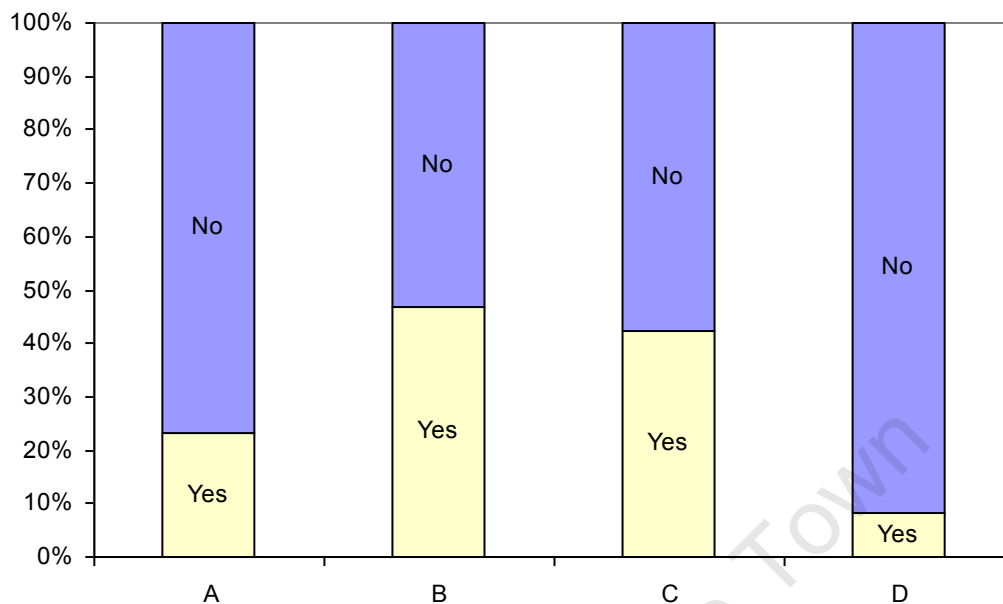
Concerning the specific universities, of those who responded “yes” or “no” to the question, respondents from University D were shown to be the least happy with their library’s collection. Respondents from this university had already shown, in question five, that they are not finding information in e-book format. Their feeling of dissatisfaction is further reflected here. University B is the least unhappy with its e-book collection.

Table 4.12.
Satisfaction with e-book collections
Percentages at Western Cape universities
All respondents (n=381)

	A	B	C	D
Yes	23.08%	46.67%	42.17%	8.33%
No	76.92%	53.33%	57.83%	91.67%

Figure 4.7. below is a graphical representation of the satisfaction levels at the different universities. The levels of satisfaction do not correspond to the size of each university’s e-book collection. University A, for example, claims that e-books are a prominent part of its offering. University C, on the other hand, has not invested heavily in e-books yet.

Figure 4.7.
Satisfaction with e-book collections
Percentages at Western Cape universities
All respondents (n=381)



Question seven

Question seven attempted to establish whether e-books from the university library are used for study or work, leisure, or both purposes. As university libraries stock mainly academic books, it was expected that “study or work” would elicit the most responses.

In total, 16.84% of respondents use e-books for both work or studies and for leisure reading, but the majority of respondents (77.54%) use them for work or study purposes only. This statistic indicates that, as far as their current e-book collections are concerned, the university libraries in the Western Cape are on track with providing e-book content suitable for academic institutions.

Table 4.13.
For what reason have you used e-books from your university library?
All respondents (n=570)

	Responses	Percentage of total
Study or work	442	77.54%
Leisure	3	0.53%
Both	96	16.84%
I don't know	29	5.09%

Respondents who selected the options “Leisure” or “I don’t know” were directed to question fourteen, thus skipping questions eight to thirteen which concerned the use of academic e-books.

Question eight

In order to ascertain the academic purposes for which e-books are generally used by the university community, survey participants were asked to select as many options as they wished from a list of study activities. The list included “recommended course readings”, “studying for exams”, “research”, “teaching” and “other”.

93.96% of respondents use e-books for research purposes. When their level of study is considered, it is not surprising to discover that postgraduate students, postdoctoral researchers and academics are the groups to which most respondents who use e-books for research belong.

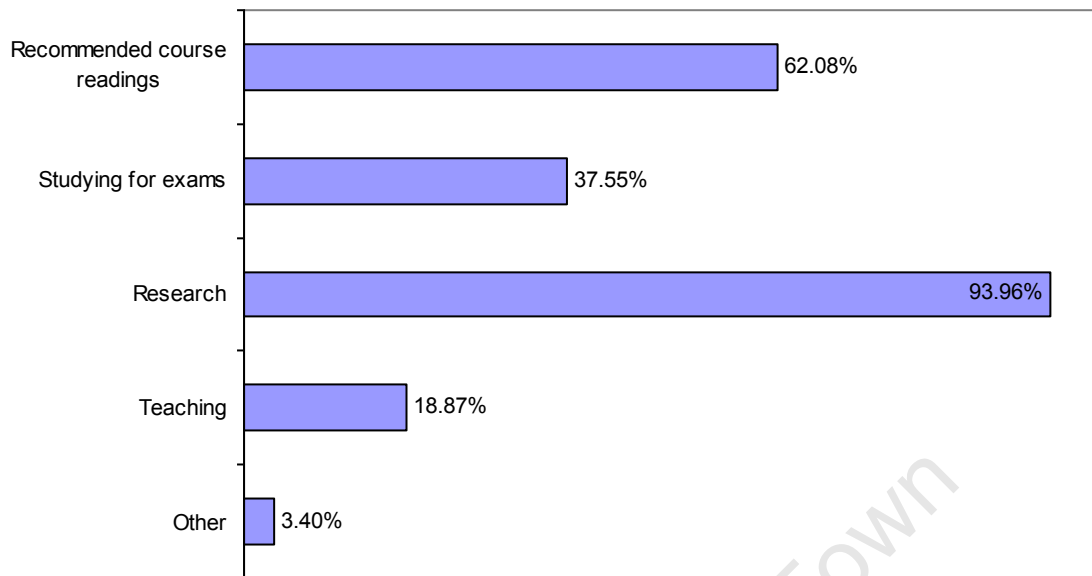
62.08% of respondents use e-books for recommended course readings, including 33.88% of academics, demonstrating that about a third of academics are placing e-books on their course reading lists.

E-books are used for study and teaching purposes by 37.55% and 18.87% of the entire population respectively.

It was suspected that some participants might not see a clear distinction between all the list items. For example, undergraduates unfamiliar with the research process might not differentiate between recommended course readings and research. There is therefore the chance that the results are over-represented in some categories.

Results are depicted in the bar graph below.

Figure 4.8.
For what purposes have you used e-books in your work or studies? Select as many options as apply
All respondents (n=530)



Question nine

In order to find out what the habits of library users at the universities in the Western Cape are, the question “When using e-books for study or work purposes, how do you mainly make use of them?” was posed.

Respondents were asked to select one of the following statements:

- For fact-finding: I look up the piece of information I need.
- For relevant content only: I read a few paragraphs or pages here and there, looking for important information.
- Selective reading: I usually read a whole chapter at a time.
- Extended reading: I often read the whole (or most) of an e-book.
- It depends.

Even though the question asked respondents to choose the way they “mainly” use e-books, it was thought best to include the last option for those who could not identify a chief use.

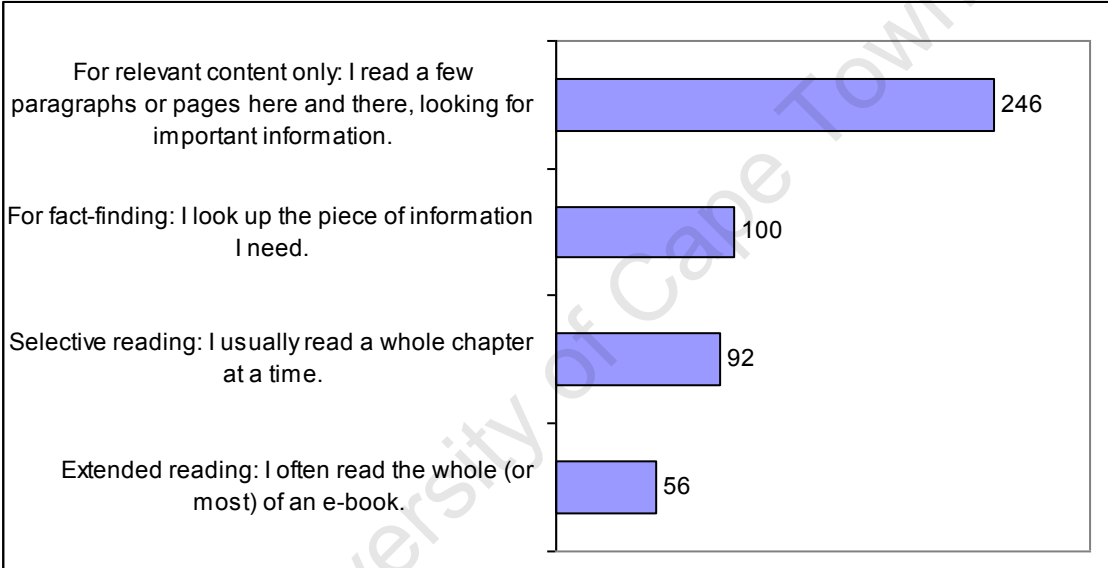
The majority of respondents (46.5%) read relevant content only, skimming the text for important information. Fact-finding – looking up a snippet of information only – is used by 18.9% of respondents, and a similar number, 17.39%, use e-books for reading a chapter at a

time as needed, as they would a print book. Extended reading of e-books was done by 10.59% of respondents. Of the fifty-six respondents who read an e-book extensively, only eleven (19.64%) own dedicated e-book reading devices.

Those who were unable to choose a way in which they mainly read e-books stated that their reading method would depend on the purpose of the reading, the time needed to complete the reading, and the relevance of the reading matter to their work.

The bar graph below represents how readers primarily use e-books.

Figure 4.9.
When using e-books for study or work purposes, how do you mainly make use of them?
All respondents (n=529)



Question ten

Libraries tell their communities about their products in different ways and this will affect how users go about finding the products when the need arises. The more a library promotes its e-book collection, the more users will use library discovery tools, such as the library catalogue, website, or databases, to search for books that they are hoping to find in electronic form. Whether this is happening or not can be seen in responses to question ten, “How do you go about finding e-books for work or study?”.

This study, similar to that of Rowlands et al., (2007), found that e-book discovery was mostly through the search engine Google: 75.43% of respondents find e-books for work and study via Google. The name Google, instead of the generic term “search engines”, was used

intentionally as Google is a popular search engine and search engines are considered a serious competitor to library discovery tools. The university library catalogue is the next most likely place library users will look for e-books, with 70.29% of the population using it as a discovery tool. Databases (56.76%), reading lists (44%), links from the university library website (36.19%) and from the VLE (34.10%) constitute the next group of popular discovery tools. Links sent from friends (27.05%), online bookstores (24.19%) and book reviews (15.62%) are the least popular source of e-books but still represent significant amounts of use.

Respondents who mentioned other sources were in the minority and no source in particular was mentioned more than five times (0.95% of the total). It is, however, interesting to note what other possible sources are available for sourcing e-books. Some of these are personal recommendations, television programmes, documentaries, lectures, radio shows, other university libraries and serendipitous discovery.

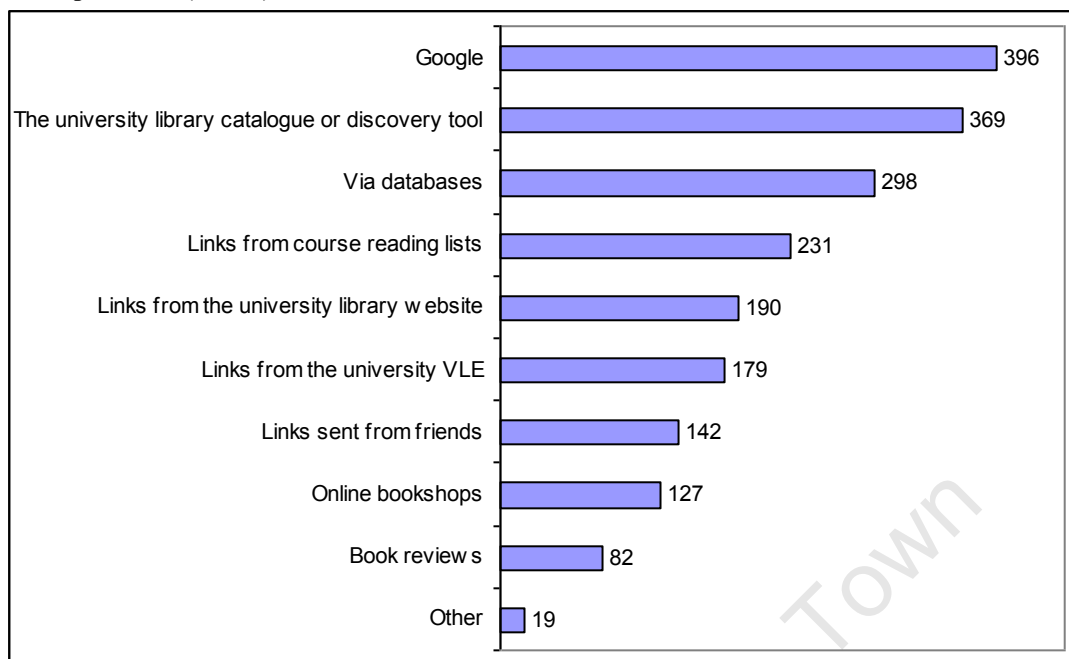
The results for question ten are depicted in the table below. Participants were able to select as many options as they wished as it is most likely that they find e-books in a variety of places. A bar graph representing the discovery tools in order of popularity of use appears after the table.

Table 4.14.
How do you go about finding e-books for work or study? Select as many options as apply to you
All respondents (n=525)

The university library catalogue or discovery tool	369
Via databases	298
Links from the university library website	190
Links from course reading lists	231
Links from the university Virtual Learning Environment	179
Links sent from friends	142
Book reviews	82
Online bookshops	127
Google	396
Other	19

Figure 4.10.

How do you go about finding e-books for work or study? Select as many options as apply to you
All respondents (n=525)



As in the case of the Western Cape as a whole, Google is the primary starting point for searching for e-books at Universities A, C and D. A slightly lower percentage use the university library catalogue or discovery tool for e-book searches. University B is the only institution where the university library catalogue or discovery tool is used to find e-books by more people than those who use Google. At Universities A and D, over 60% of their communities source e-books from the library databases too.

Table 4.15.
Finding e-books for work or study
Percentages at Western Cape universities
All respondents (n=525)

	A	B	C	D
The university library catalogue or discovery tool	72.73%	74.19%	69.64%	76.92%
Via databases	69.70%	45.16%	56.47%	61.54%
Links from the university library website	48.48%	51.61%	33.71%	53.85%
Links from course reading lists	9.09%	29.03%	47.10%	61.54%
Links from the university VLE	9.09%	29.03%	36.38%	30.77%
Links sent from friends	12.12%	29.03%	27.46%	46.15%
Book reviews	9.09%	32.26%	14.73%	23.08%
Online bookshops	30.30%	32.26%	23.21%	23.08%
Google	78.79%	58.06%	76.34%	76.92%
Other	3.03%	6.45%	3.35%	7.69%

Question eleven

A list of e-book features was used in question eleven as the basis for a set of statements ranked using a Likert scale. Survey participants were asked to rate each statement according to whether they thought it was “essential”, “important, but not essential”, “not that important, but nice to have” or “not important at all”. The aim of the question as a whole was to ascertain what users consider important features of an e-book and what they consider less important, which reveals what their expectations are of library e-book collections. Statements incorporated questions of access, use, borrowing, downloading and format.

Unlike groups associated with the e-book industry, such as publishers and librarians, library users might not be aware of e-book business models and restrictions; users are simply interested in accessing the content in the way that suits them best. Some statements in question eleven are unlikely scenarios – for example, it is improbable at this stage that an e-book will be downloadable onto any or all devices – but the statement was included to gauge the level of expectation of this feature by users. It is beneficial for libraries to be aware of user expectations and meet them if at all possible. If not, a system can be set in place whereby the limitations of the software can be explained to users. This way, users understand that libraries are aware of what they want, even if libraries are unable to offer it to them at the time.

The table below presents the points and how users ranked them in degrees of importance. The last column collapses the first two response categories to show an overall level of importance to users. The level of overall importance is shown as a percentage of the number of responses for each statement.

Table 4.16.
Which of these features would you like to be able to make use of when you read e-books for work or study purposes?

I would like to be able to ...	Essential	Important but not essential	Nice to have	Not important at all	Total responses (n)	Essential and important
Access						
access e-books from any internet connection, not only on campus	400	68	13	2	483	96.89%
access e-books anytime of the day or night	398	69	14	4	485	96.29%
TOTAL	798	137	27	6	968	96.59%
Use						
search the full text of e-books	372	90	19	2	483	95.65%
highlight text in e-books	275	119	62	23	479	82.25%
print out chapters from e-books	250	146	70	19	485	81.65%
make notes in e-books	253	118	86	22	479	77.45%
copy and paste text from e-books	227	136	83	35	481	75.47%
customise e-books to make them easier to use	209	131	117	23	480	70.83%
TOTAL	1,586	740	437	124	2,887	80.57%
Borrowing						
request access to any e-book, not only those that the library already owns	290	152	35	2	479	92.28%
borrow course textbooks as e-books	298	113	53	19	483	85.09%
borrow e-books from the library	276	125	60	20	481	83.37%
borrow short loan books as e-books	250	150	59	22	481	83.16%
borrow interlibrary loan (ILL) books as e-books	205	168	82	20	475	78.53%
borrow e-readers from the library	111	130	170	63	474	50.84%
TOTAL	1,430	838	459	146	2,873	78.94%
Downloading						
download e-books onto my hard drive or flash drive	337	101	42	7	487	89.94%
download e-books onto my cell phone	106	100	168	103	477	43.19%
download e-books for use on any/all devices	220	153	91	19	483	77.23%
download e-books onto my dedicated e-reader	184	142	111	39	476	68.49%
share e-books with my friends via email	127	160	126	65	478	60.04%
TOTAL	974	656	538	233	2,401	67.89%
Format						
read e-books as PDFs	298	138	43	7	486	89.71%
read e-books in any/all available format/s	208	158	88	25	479	76.41%
read e-books as web pages	75	129	176	83	463	44.06%
read e-books in e-PUB format	64	140	170	85	459	44.44%
TOTAL	645	565	477	200	1,887	64.12%

Pertinent points that can be extracted from table 4.16. are discussed below:

Issues of access are paramount to library users. Combining the number of responses for the two questions about access and measuring them against the total number of responses for them, it can be seen that 96.59% of respondents consider issues of access as either essential or important to e-book use, while 3.41% consider them to be not important (“nice to have” and “not important at all”). Having access to e-books anytime and from anywhere is considered not only important, but essential, by 82.44% of respondents.

Questions of use or extraction are considered of importance to 80.57% of respondents. This percentage can be contrasted with the 19.43% who consider issues of use in general of not much, or no, importance. Searching the full text of e-books and highlighting, printing, marking up, copying and pasting text are all seen by most respondents as either essential or important. Customising e-books is considered the least important of e-book use, with 70.83% of users considering it important – still a substantial percentage of the total.

Comparing issues of access and use, features of use are seen as less essential, though still important. This can be explained by the fact that there is an alternative to, for example, highlighting text or making notes next to the text: users can simply print out pages and mark them up in pencil, making these features less indispensable to the user.

The process of borrowing e-books from libraries is one with which libraries are still grappling. Of the respondents, 78.94% are eager to borrow e-books from their library in some way or another (“essential” or “important”). Of importance to users is the borrowing of e-textbooks, short loan books and items on ILL.

Borrowing e-book readers from the library is considered important by about half (50.84%) of respondents; it is less important or not important at all to the rest (49.16%).

The aspect of borrowing that is considered essential or important by the largest number of respondents is that of having access to (being able to borrow) any e-book, not only those already owned by the library. The statement was posed in order to find out if PDA could be viable in the participating libraries. The large number of responses indicates that there is a demand for PDA; the form the PDA package takes might, of course, not

be as straightforward as the statement “request access to any e-book, not only those that the library already owns” suggests. Reinforcing the need for PDA are the responses to question ten (“How do you go about finding e-books for work or study?”) where a large number of users said that they search on Google for e-books. Google books are not always available free of charge; if they could be requested via the library instead, fewer people would need to use the search engine to source them.

Although the ideas of borrowing and downloading e-books are related in the mind of librarians, for a user the term “downloading” suggests a more permanent access to an e-book than “borrowing”, which normally means ownership of an item for a limited period only. Nevertheless, in general, users do not consider downloading e-books to be as important as borrowing them. In particular, though, downloading books onto disk is one aspect of downloading that is very important: 89.94% of users want to download e-books onto a memory device. The high percentage suggests that users want access to the e-book on all their computing devices wherever they choose to work (at university, at home, or away) or want to upload or email the e-book to other destinations.

Not surprisingly, a larger percentage of respondents (77.23%) want to download e-books to any device. Again, there is eagerness to access the e-book from anywhere and on whatever device the user is able to use at the time. Downloading to dedicated e-readers is also considered important (68.49% of respondents).

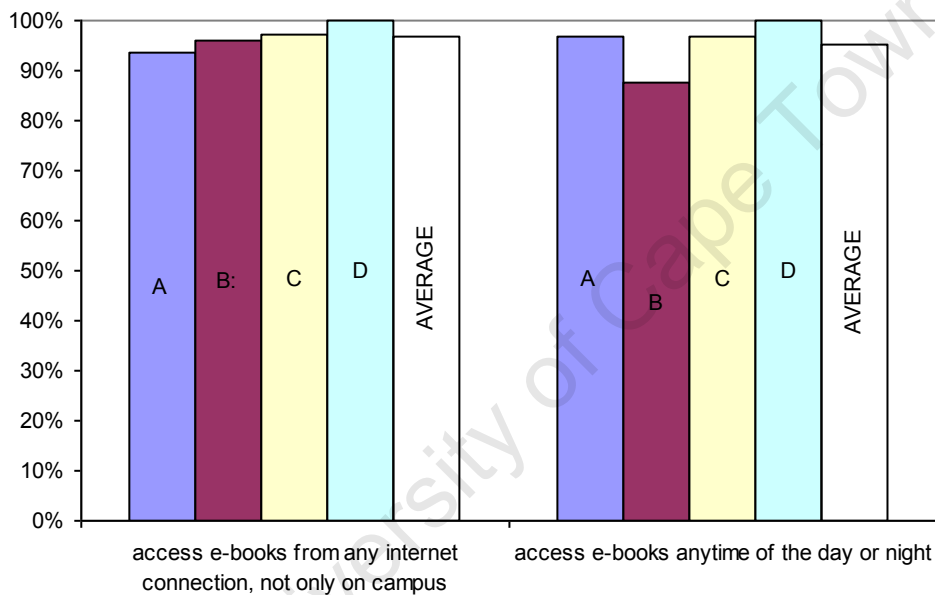
Downloading onto cell phones which, considering the proliferation of cell phones in the country as a whole, might have been considered of utmost importance, is only of importance to 43.19% of respondents. The rest (56.81%) consider it “nice to have” or “not important at all”. As shown in a later question about device ownership and access, 77.54% of survey participants have access to a cell phone with internet capability, yet the majority of respondents consider downloading e-books to their phones to be not of great importance. Small screens, perhaps, make reading academic texts uncondusive.

Another pertinent issue for librarians is e-book format. Format is also important for users but the responses to the statements of format posed in this question show that they are not yet very discerning about which format they prefer. PDF, the most familiar format for e-text reading, was felt to be important by 89.71% of respondents. “Any or all available formats” was also considered important (76.41%) but the other options of

reading e-books as web pages or in e-PUB format were both considered less important by users.

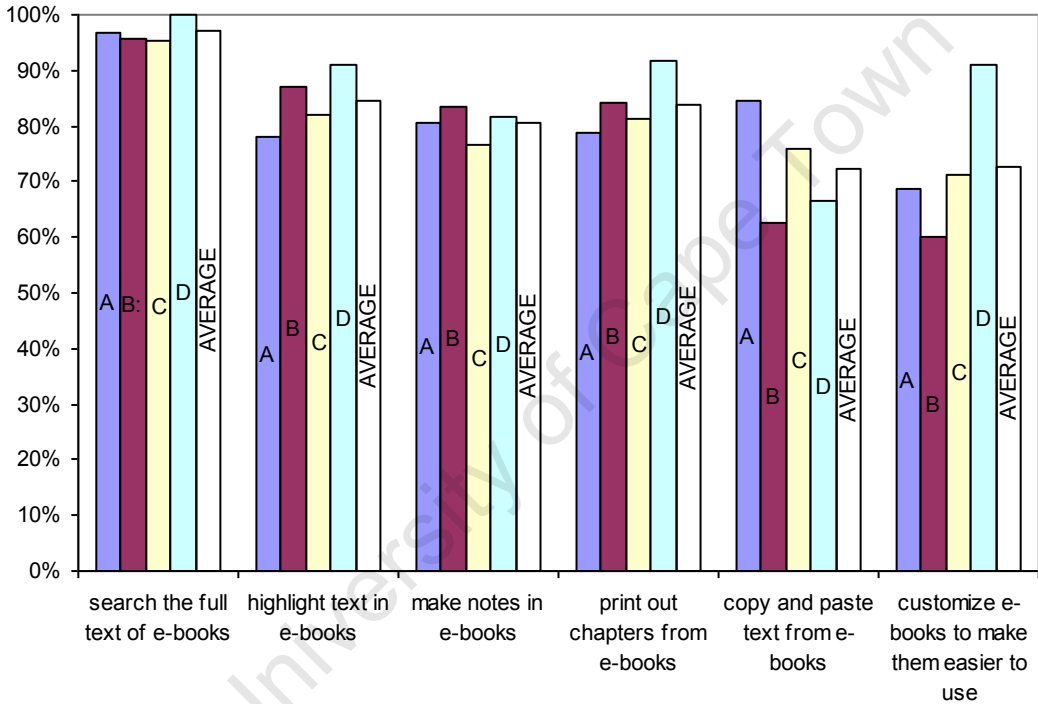
The figure below illustrates that issues of access are almost equally important at all four Western Cape universities and they do not differ much from the average. One exception relates to University B where 87.50% of users want access to e-books anytime of the day or night compared to the average of 95.25%.

Figure 4.11.
Access to e-books: essential + important
Percentages at Western Cape universities
Access e-books from any internet connection, not only on campus (n =468)
Access e-books anytime of the day or night (n =467)



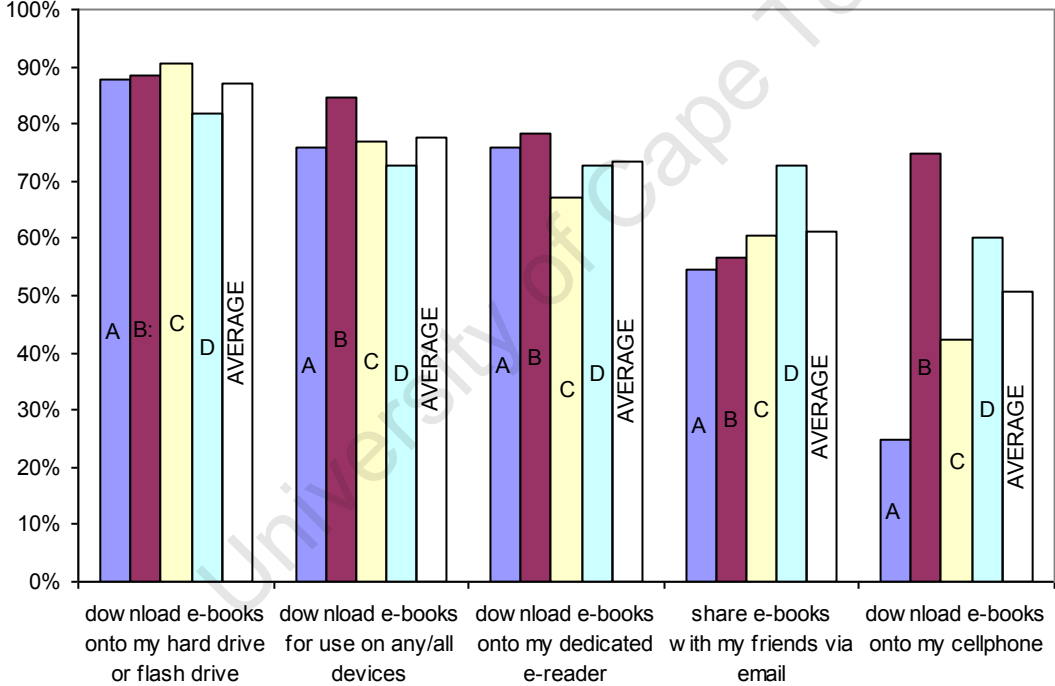
Regarding questions of use, institutional responses do not differ drastically from the average although University D has mostly an above-average demand for the added-value features of e-books that make them more useful – these users demand a lot from e-book offerings.

Figure 4.12.
Use of e-books: essential + important
Percentages at Western Cape universities
Search the full text of e-books (n =462)
Highlight text in e-books (n =394)
Make notes in e-books (n =371)
Print out chapters from e-books (n =396)
Copy and paste text from e-books (n =363)
Customise e-books to make them easier to use (n =340)



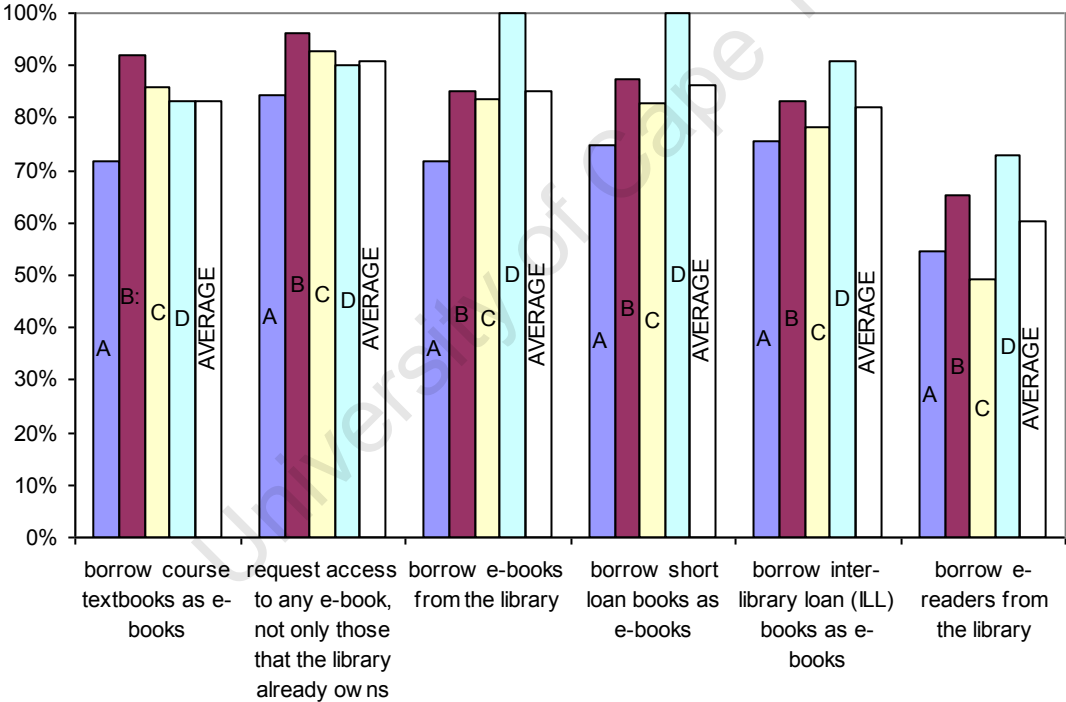
An interesting characteristic shown when viewing required download features, is that University B, especially, wants to download e-books onto cell phones – only 25% at this university says this feature is only “nice to have” or “not important”. The profile of responses at University A is markedly different: 75% regard this feature as “nice to have” or “not important”. At Universities C and D, those who do not think this feature is important is at 57.66% and 40% respectively.

Figure 4.13.
Downloading e-books: essential + important
Percentages at Western Cape universities
Download e-books onto my hard drive or flash drive (n =438)
Download e-books for use on any/all devices (n =373)
Download e-books onto my dedicated e-reader (n =326)
Share e-books with my friends via email (n =287)
Download e-books onto my cell phone (n =206)



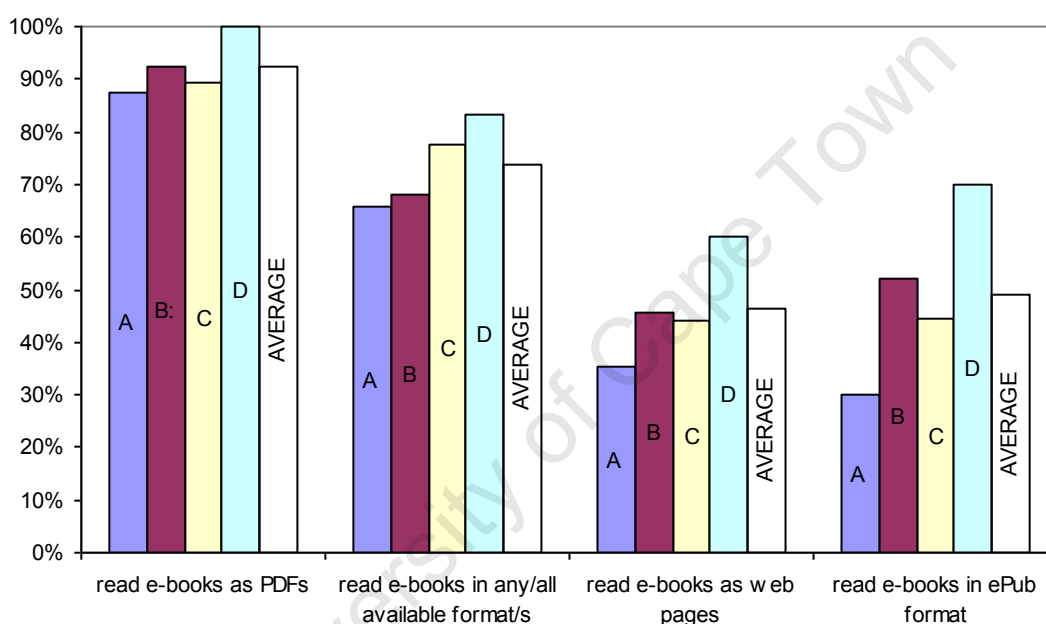
University A is consistently below the average with regards to borrowing e-books from the library, while University B has a more-than-average demand for borrowing. University D considers it especially important to borrow books, as well as short loan and ILL electronically. Universities B and D have an interest in borrowing e-readers from their library. University B has a small population of e-reader owners (8.22%); however, University D's e-reader ownership is 23.33%, above the average of 18.39%.

Figure 4.14.
Borrowing e-books: essential + important
Percentages at Western Cape universities
Borrow course textbooks as e-books (n =411)
Request access to any e-book, not only those that the library already owns (n =442)
Borrow e-books from the library (n =401)
Borrow short loan books as e-books (n =400)
Borrow interlibrary loan (ILL) books as e-books (n =373)
Borrow e-readers from the library (n =241)



Again, University D shows a great demand for e-books by indicating that all available formats are important for e-book use. At University A, formats outside PDF and “any” (not specified) are not important, which indicates a desire to use what is familiar to them but perhaps, too, a trust that the library will deliver e-books in the best formats it sees fit.

Figure 4.15.
E-book formats: essential + important
Percentages at Western Cape universities
Read e-books as PDFs (n =436)
Read e-books in any/all available format/s (n =366)
Read e-books as web pages (n =204)
Read e-books in e-PUB format (n =204)



Question twelve

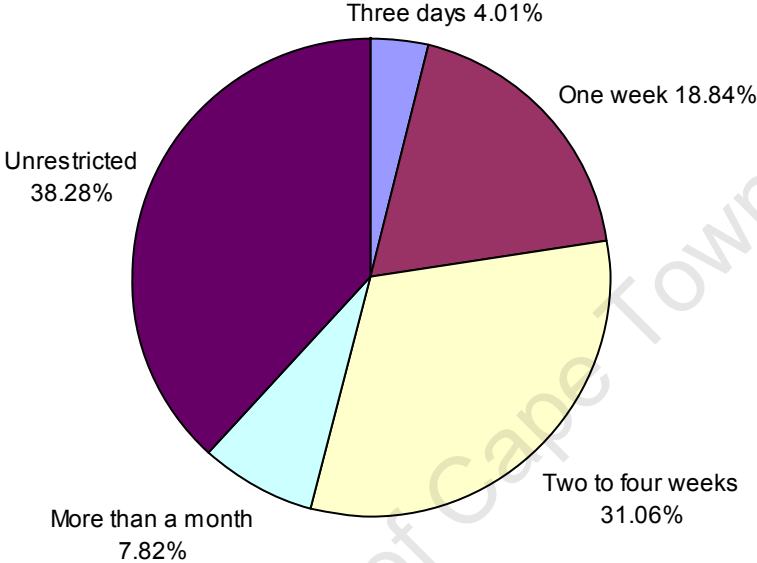
Survey participants were asked about the length of time that they want access to university library e-books. It is somewhat surprising to see that only 38.28% of respondents want an unrestricted time period to borrow e-books. While this was the most popular choice, the standard borrowing time of one to four weeks is preferred over other limited lengths of time, such as three days, one week and a month or more.

In question eleven, borrowing and downloading were dealt with separately but, in reality, they are similar processes for e-texts. Users, however, see them as distinct, with downloading considered akin to ownership. It might be the case, therefore, that users view borrowing as

something they would not choose to do. This might have led them to select a standard borrowing time as a response to question twelve.

The pie chart below represents the borrowing times selected.

Figure 4.16.
For what length of time would you want access to an e-book from your university library?
All respondents (n=499)



4.5.3. Section three: internet access and device ownership

Question thirteen

With questions relating to e-book use completed, survey respondents were then led to a section on device ownership and internet access. All respondents, whichever way they were routed through the questionnaire, were eventually taken to this section of the survey.

Questions about device ownership and internet access were posed in order to see whether there was any relationship between access to technology and e-book use. The focus of the survey is not on student or academic use of technology but the questions were posed to gauge how access to devices and the internet might affect attitudes to e-books and the use of e-books. Ownership or regular access to an e-book reading device, for example, could suggest a higher likelihood of using e-books.

The electronic device more commonly owned by university students and staff is a laptop or netbook, followed by access to a cell phone with internet capabilities (a smart phone). A

home desktop computer appears relatively low in the list. As campuses offer access to computers in their libraries, computer laboratories and residences, the question did not include access to a desktop computer in general, only one from home. Music players, tablets, e-book readers and cell phones without internet capabilities are owned by far fewer people.

Results are presented in table 4.17. below.

Table 4.17.
Which devices do you own or have regular, unlimited access to?
All respondents (n=1,282)

Home desktop computer	573	44.70%
Laptop or netbook	1,173	91.50%
Tablet	328	25.59%
Cell phone with internet access	994	77.54%
Cell phone without internet access	165	12.87%
Dedicated e-book reader	236	18.41%
Electronic music/video device	412	32.14%
None	3	0.23%
Other electronic reading device	9	0.70%

As may be expected, student access to smart phones is higher than that of academics. Home desktop computers are owned mainly by academics and postdoctoral researchers, however there is not a great difference between that number and students who own or have unlimited access to home desktop computers. Laptop or netbook ownership (or access) is similar across levels of study. Academics are the largest percentage of tablet owners, but tablet ownership in general is relatively sparse. Access to e-readers is even less evident.

Table 4.18.
Device ownership and level of study
All respondents (n=1,280)

	Undergraduates	Postgraduates	Postdoctoral researchers	Academics	Non-academics
Home desktop computer	13.86%	14.49%	18.39%	16.98%	11.76%
Laptop or netbook	30.39%	30.48%	31.03%	28.90%	29.41%
Tablet	7.28%	7.60%	8.05%	12.55%	5.88%
Cell phone with internet access	28.86%	25.09%	19.54%	19.39%	21.57%
Cell phone without internet access	3.83%	3.62%	6.90%	5.70%	5.88%
Dedicated e-book reader	3.83%	7.60%	8.05%	8.24%	9.80%
Electronic music/video device	11.83%	10.95%	6.90%	7.48%	13.73%
None	0.05%	0.09%	0.00%	0.13%	0.00%
Other electronic reading device	0.05%	0.09%	1.15%	0.63%	1.96%

Questions fourteen and fifteen

The two questions relating to internet access can be used to determine the potential of patrons accessing e-books off campus. The four institutions participating in the study all have an off-campus library login system – indicating that a fair percentage of their users have the ability to use the internet off campus – and the results of question fourteen confirm that a large number of users (85.05%) can indeed use the off-campus login.

Most survey respondents have access to the internet via a fixed line or wireless modem. Very few access the internet via public internet points, making working with e-books off campus easier for the user, considering the time-consuming nature of reading a book for academic purposes.

Only respondents who responded “yes” to question fourteen (“Do you have internet access off campus?”) were directed to question fifteen (“What is the main way you access the internet off campus?”). Results of both questions are presented below.

Table 4.19.
Do you have internet access off campus (not at your university or residence)?
All respondents (n=1,284)

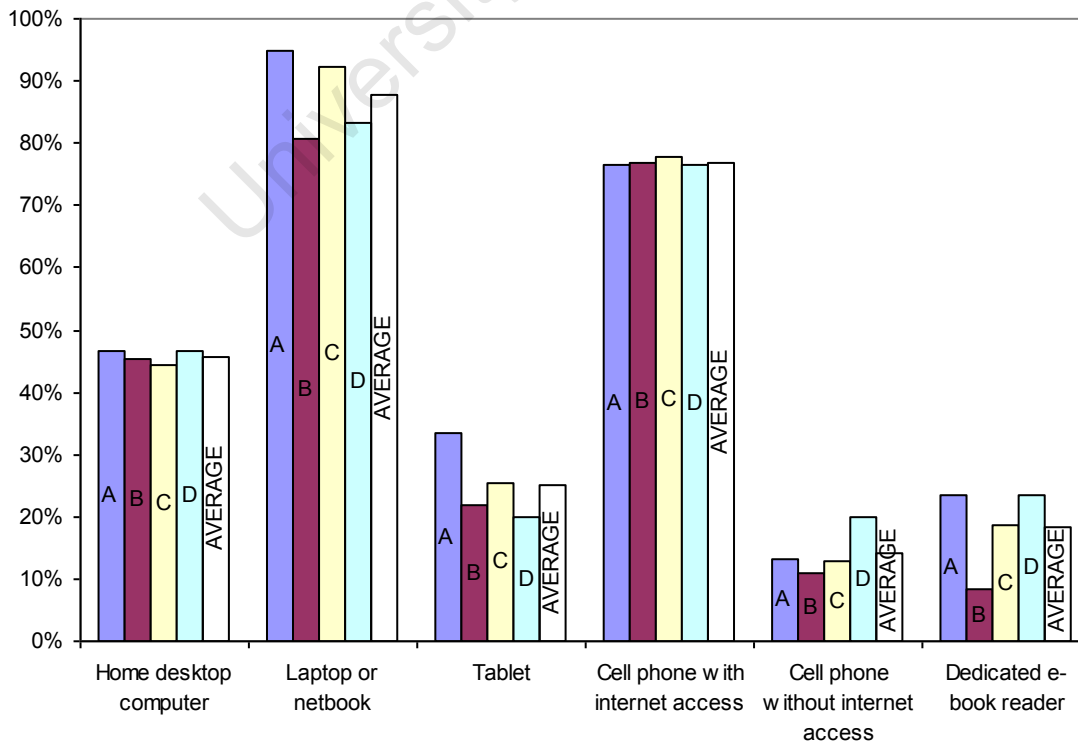
Yes	1,092
No	192

Table 4.20.
What is the main way you access the internet off campus?
All respondents (n=1,091)

Via dial-up, ADSL or 3G	1,027
Via public wireless / internet cafes	58
I do not access the internet off campus	6

Except for one instance, University A is consistently above the average when it comes to device ownership and, except for cell phone ownership, its population owns proportionately more devices than the other universities. At University B, e-book reader ownership is significantly below the average, compared with the other institutions. Users from University B indicated in question eleven that borrowing e-readers from the library is important to them. Congruously, e-reader ownership is relatively high for University D but the indication in question eleven is that they, too, are keen to borrow e-readers from their library. On closer inspection, the results show that only 37.84% of e-reader owners who also answered question eleven stated that borrowing e-readers is important to them, while 62.16% stated that it is not. This makes it clear that e-reader owners – not surprisingly – do not want to borrow e-readers from the library.

Figure 4.17
Ownership of, or regular access to, electronic devices
Percentages at Western Cape universities
All responses (n=1,282)



4.5.4. Section four: demographic questions

Questions sixteen to nineteen

Demographic questions made up the next section in the questionnaire. The results from them have already been discussed – see section 4.4.

4.5.5. Section five: concluding question

Question twenty

The final question in the survey was asked in order to determine if participating in the survey had changed the way respondents felt towards e-books. It was likely – and it has already been shown – that a number of respondents were not familiar with e-books and had not used them before. The possibility existed that simply answering questions about e-books would increase the likelihood of respondents seeking them out in their libraries.

The question posed was: “Did your attitude to e-books change while filling out this survey?”. Respondents were asked to elaborate on their answers. Of those who said that their attitudes to e-books had changed, 179 chose to elaborate.

A number of users stated that they are now more aware of e-books – those provided by their libraries especially. When doing research, they will now make an effort to seek them out for academic use. Mention was made of how the use of e-books might be able to save time, not only because of the fact that finding them is quicker and that finding information in them can be quicker, but because alternating between windows on a computer screen, rather than looking from screen to paper when working, is more conducive to the way some people work.

For those already using e-books, the survey highlighted the fact that their library stocks e-books, which are essentially “free”, meaning that there might not be that much necessity for them to buy their own versions. There does seem to be some misplaced optimism by respondents that a substantial e-book collection translates to e-books in the user’s own personal collection, when, in all likelihood, there would be certain restrictions posed by the library on use.

Some respondents were pleased to have discovered that their library has an “extensive e-book collection”. It seems that being asked their opinion on e-books in their libraries led survey

participants to believe that their library already has a substantial e-book collection, which might not necessarily be the case. In any event, many respondents mentioned that they intend to approach the library staff to enquire about e-books in their libraries.

Some respondents said that, before participating in this survey, they did not know that features such as note-taking, highlighting, bookmarking and customising could be part of an e-book offering. In question two, a number of respondents stated that they would choose a print book over its electronic counterpart simply because they prefer to make notes on a print copy. This emphasises the added-value features of e-books, such as note-taking abilities, that should perhaps be considered in e-book marketing material in the library.

Before taking part in the survey, many respondents had been under the impression that e-books were limited to fiction. This attitude can be attributed to the immense popularity and reach of websites such as Amazon. While Amazon certainly does not restrict its stock to fiction, it is on this area that much of the marketing to the general public focuses. Subsequently, unless academic book stockists or libraries balance the scales by marketing academic monographs, most users will remain under the impression that the term “e-book” refers to a fictional work.

There are still those who have a clear preference for print. Even a respondent who claims to own all the reading devices mentioned in question thirteen, said she prefers to use a print academic book as opposed to an e-book. On the other hand, another respondent admitted that, while he had been “against the use of e-books over the use of a printed book” before taking the survey, during the survey he had come to realise the many benefits of e-books for academic use. Other users agree with this sentiment and said they feel the need to adapt to this “new” technology after taking part in the survey.

A number of users commented that they have discovered that, without realising it, they have been using e-books. This feeling is supported by one commentator who realised, judging by the questions in the survey, that there are a lot of people who do not know what an e-book is.

Overall, comments about the use of e-books were positive, indicating that respondents have gained a better understanding of e-books and will consequently try to make use of them.

4.6. Triangulation of the data

Data triangulation replicates a study using a different population group (Miller, 2003: 328). For this study, the library user population survey data was triangulated with that of the acquisitions librarians at the participating universities. The triangulation of the data allows the views of the two groups to be compared to see where they correspond and where they differ. To see whether the library's view of users correlates with actual user behaviour, opinion or need, librarians were asked for their opinions on what the views of library users are.

In question one ("What sort of material do you, or would you like to, read electronically?"), user survey respondents ranked academic journals the highest as the sort of material that they do read, or would prefer to read, in electronic format. Two of the three librarians who answered this question were in agreement. Among user responses, e-journals were followed, in order of preference, by newspapers and magazines, academic books, leisure titles, reference books, textbooks and manuals, and "other" materials.

There is a significant disparity between the opinions of librarians and users regarding the use of reference books in e-format. Librarians thought reference books were likely to be read more than they are in reality: librarians placed reference books second on the list; users placed them fifth. Librarians also ranked the preference for electronic academic books lower than users. Leisure titles were sixth on the librarians' preference list while users themselves placed them fourth.

Table 4.21.
Material library users like to read electronically, ranked in order of preference

Ranking	Library users say	Librarians say (median)
1	Academic journals	Academic journals
2	Newspapers and magazines	Reference books
3	Academic books	Newspapers and magazines
4	Leisure titles	-
5	Reference books	Academic books Textbooks or manuals
6	Textbooks or manuals	Leisure titles
7	Other	Other

In the case of question two ("If both a print and an electronic copy of a book were available for you to read, which would you choose?"), it was noted that the majority of user respondents (41.34%) would choose to read a print version of a book if both a print and an

electronic version were available. However, a percentage close to that (33.9%) chose the answer “it depends” and stated that the version of the book they chose depended on certain factors. Factors mentioned by users were cost, format, frequency of use, location of the user and the occasion of use. In the case of librarians, one librarian was certain her users would choose a print book over the electronic version. Another said that it would depend on the type of book. A third said that it would depend on the availability of each version (the e-copy, in her opinion, would be more readily available). This last point was not voiced in the user responses at all. Nonetheless, the sentiment that “it depends” is held by two out of three of the librarians.

With regards to question three (“What is your reading preference when it comes to electronic content?”) roughly a third of user respondents selected screen reading as their preference and another third selected printing out a copy as their preference. Of the two librarians who responded to this question, one chose screen reading as a preference but only for shorter texts such as an article or a chapter. Longer texts, they felt, would be printed out. This attitude is shared by many user respondents. The second librarian surmised that her users would print out a copy for reading, but she clarifies her choice by saying that printing would only take place if users could afford the printing costs. Cost was a concern raised by a number of respondents to question two, referring mainly to the cost of print books over electronic books but it does suggest that, for users, cost can become an issue.

In question four (“Do you, or have you in the past, read e-books from your university library?”), librarians were asked to estimate the percentage of their patrons who have read e-books from their library. It was difficult for librarians to guess, but one librarian responded that it seems likely that almost all patrons have used e-books from her library as e-books are a prominent part of the library’s collection. Most users (57.31%) responded that they had not read e-books from their libraries. There is a discrepancy here that could be addressed by libraries looking more closely at the user reports generated by e-book suppliers to ascertain if users are in reality reading e-books. There is also the possibility that users are not always aware when they are using an e-book. It is possible that some users might not recognise material as an e-book unless it is presented in a recognisable book-like format. A chapter, for example, in a list of search results might not necessarily seem like an e-book to a user.

Question five concerned the reason that users are not making use of e-book collections at their university libraries (“What are the reasons you haven’t used e-books from your university

library?"). The top five reasons given by users are that they do not know their university stocks e-books and have thus not looked for them; they do not know where to find e-books; e-books do not appear in search results done in the library; they prefer to read print; and the navigation involved in using an e-book is disliked.

When asked to identify the top five reasons (no ranking) according to their users, librarians were in agreement with each other and with student sentiment that users do not know that their library stocks e-books and therefore do not seek them out. The only other reason that the librarians agreed on was that users are not using e-books because they do not have access to the internet all the time. This reason was ranked eighth on the users' list.

There were two reasons that were of importance to users but that librarians did not mention. One of these reasons is that users do not use e-books because they do not know where to find them. It suggests that some users are aware of the existence of e-books but not where in the library system they can be located. If a library does not yet stock a reasonable collection of e-books, then the fact that its users are not finding the e-books cannot be surprising. Perhaps, though, it suggests to the library that more should be done to point its users to the e-books they already have in their collection, however few.

The second reason librarians apparently do not perceive as extremely important is that some users simply prefer a print book. While librarians might think that users should be more concerned about the content of a book than its format, it is worth noting that growing an e-book collection should not come at the cost of user satisfaction with the print collection.

When asked, in question six, whether their e-book collections are suitable for user requirements, all libraries said that theirs are not. Users themselves responded mainly in the negative to this question too, although a large number did not know. One librarian stated that some disciplines are more represented than others and that there is always a general demand for more books, both print and electronic.

Not all survey respondents submitted an answer for this question but, of those who did, the biggest difference in numbers between those who think the e-book collection at their library is sufficient and those who think it is not, is evident in the disciplines of law, social sciences, commerce or business, and health sciences. One librarian was of the opinion that her library

does not stock enough social science and humanities in e-book format; she said that the e-books in stock are mostly in the science, technology and medical fields.

Table 4.22
Satisfaction with e-book collections
Faculty members (n=1,251)

	Faculty - total	Sufficient	Sufficient (percentage of total)	Not sufficient	Not sufficient (percentage of total)
Architecture or Design	12	2	16.67%	2	16.67%
Arts or Humanities	232	38	16.38%	41	17.67%
Commerce or Business	239	28	11.72%	47	19.67%
Education	28	4	14.29%	4	14.29%
Engineering or the Built Environment	220	28	12.73%	32	14.55%
Health Sciences	220	18	8.18%	33	15.00%
Law	29	2	6.90%	8	27.59%
Natural or Applied Sciences	224	17	7.59%	26	11.61%
Social Sciences	47	4	8.51%	11	23.40%

In question seven (“For what reason have you used e-books from your university library?”), the majority of users use e-books from their university libraries for work or study purposes which corresponds to what the librarians say – since their libraries stock only academic e-titles this is not surprising.

The purposes for which e-books are used for work or study were explored in question eight (“For what purposes have you used e-books in your work or studies?”). Most users say that they use e-books from their university libraries for the purposes of research. Librarians agreed with this sentiment, as they do with the rest of the list. In order of the amount of use, research purposes are followed by recommended course readings, studying for exams and teaching.

Table 4.23.
Purposes of e-book user, in the order of popularity

Ranking	Library users say	Librarians say (median)
1	Research	Research
2	Recommended course readings	Recommended course readings
3	Studying for exams	Studying for exams
4	Teaching	Teaching

How their users make use of e-books for studying was the next question used for triangulation (question nine). It had been shown that patrons mainly make use of e-books for finding relevant content in texts – reading paragraphs here and there. Librarians agree that this is the main method of use. They also agree that fact-finding and selective reading follow.

Channels through which users are finding e-books in their library were investigated in question ten (“How do you go about finding e-books for work or study?”). Librarians agree with users that Google is the main source for e-books, with only one librarian saying that she thinks databases are the main source for her users. For librarians, links from course reading lists and from the university VLE are considered likely places users look, following use of Google. This, however, is not the case as user responses clearly show that the university library catalogue or discovery tool is almost as well-used as Google as a source for e-books. Librarians rank the library catalogue fourth; users are using this resource a lot more than librarians think. Links sent from friends, book reviews and online bookshops are at the bottom of the rankings for both users and librarians.

Table 4.24.
Discovery tools for e-books, ranked in order of preference

Ranking	Library users say	Librarians say (median)
1	Google	Google
2	The university library catalogue or discovery tool	-
3	Via databases	Links from course reading lists Links from the university VLE
4	Links from course reading lists	The university library catalogue or discovery tool
5	Links from the university library website	Via databases Links from the university library website
6	Links from the university VLE	-
7	Links sent from friends	Links sent from friends
8	Online bookshops	Book reviews
9	Book reviews	Online bookshops
10	Other	-

In responses to question eleven (“Which of the features [listed] would you like to be able to make use of when you read e-books for work or study purposes?”) it is shown that desire for access to e-books at any time and from any place is universal – librarians are aware that users consider issues of access to be largely essential to e-book use. Librarians also recognise the importance of methods of extraction for users: printing, copying and pasting text, highlighting text, making notes, full-text searching and customisation.

Librarians recognise how necessary it is to have short loan books and textbooks available as e-books and for there to be a form of PDA where users can request any e-book, even if the library does not own it. Librarians, however, consider ILL in the form of e-books to be less important to users.

Librarians recognise, correctly, that borrowing e-reading devices is not a main concern of library users. In terms of downloads, an area where users and libraries differ is that librarians think users want to download e-books onto their cell phones, whereas only about half of students consider this a priority. Downloading concerns for users centre around the ability to copy an e-book onto a removable memory device, specifically, but generally to any device. Some want to download to e-readers. Librarian responses show that they are in touch with what users want with respect to downloading e-books onto memory sticks and “any” device.

PDF or “any” was the preferred format for users for reading e-books; e-PUB format was considered rather less so. Librarians, however, consider e-PUB to be important. Their opinion is possibly because they are aware that this format is an e-book standard, whereas library users generally are not.

Borrowing time was discussed in question twelve (“For what length of time would you want access to an e-book from your university library?”), the last part of the survey in which librarians were asked to participate. One librarian stated that users “would prefer to have everything forever” but that three to seven days should suffice. Users prefer a longer time period of two to four weeks.

The above triangulation of the data provided by users and librarians was used to gauge librarians’ views of student demand and expectations in relation to the e-book collection at their libraries. From the comparison of the data, it is clear that, while librarians might not understand their user relationship with e-books in all respects, there are many instances where

they do: they know that many users are not aware of e-books in the library, but that those who are, consider the e-books collections to be inadequate. Still, libraries seem to overestimate the number of users who have in fact read an e-book. While they know that there might not yet be great numbers of patrons searching for e-books, libraries have to make e-books more visible for this group. Considering that users are looking for e-books in the library catalogue more than librarians imagine, perhaps incorporating e-books into the catalogue effectively is a good place to start.

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CHAPTER FIVE

5. DATA INTERPRETATION, RECOMMENDATIONS, CONCLUSION AND FUTURE RESEARCH

5.1. Introduction

E-books have already found a place in the libraries of the four universities in the Western Cape. While the issues around adoption of e-books – particularly those around business models and licensing agreements – are unresolved, all four libraries include a page, or pages, on their respective websites for their e-reference and/or their e-book collections. These pages contain links to collections of e-books to which the libraries subscribe and to free e-book collections, such as Project Gutenberg or African Digital Library. Users must be working within the university network to access e-books to which the library subscribes, or they must login with a user name and password if they are working off campus. Compared to the size of the e-journal collections at each institution, the e-book collection is very small. Organisationally, each collection is accessible via a separate link; the e-books do not share a discovery tool.

Over time, these e-book collections will grow. Taking into consideration the data retrieved from the e-books survey run at the four institutions, the discussion that follows attempts to clarify whether users on these campuses really want to use e-books, whether an uptake of e-books will mean less use of print materials, and whether users are keen to make use of the added features that e-book packages offer. It is hoped the answers will give librarians an idea of how best to deal with the growth of their e-book collections to give their users the best possible e-book experience.

5.2. Do patrons want e-books?

Users are certainly interested in using e-books. At the Western Cape universities, the online material read by most library users is in the form of e-journals. There is, however, a need for academic e-books – users have shown that they want to read academic books online almost as much as they want to read newspapers and magazines online, and more than they want to read leisure books, reference books and textbooks online. Librarians do not have to worry that they are doing a disservice to their community if they purchase e-books for their libraries: the community does want them.

As has been shown, there is a definite awareness of e-books in general. Everyone has heard of the term “e-book”, even if its definition is not quite clear. Therefore, while awareness of e-books is not an issue, and neither is the intention to read them, e-books are not being used to a large extent. At the universities in the Western Cape, more people have not read e-books from their libraries than those who have, a fact of which not all librarians are aware.

The main reason is not, as might be suspected, that users do not like e-books (they have shown that they want to read them), or that they prefer print books, or that they do not have a suitable device on which to read e-books. Users like the idea of e-books and want to use them for their academic studies, but they are not always aware that their libraries stock them. As with Levine-Clark’s study (2006) and that of Abdullah and Gibb (2008), many users are not using library e-books because they do not know that they are available via their libraries. It is not being communicated effectively to patrons that e-book collections are available for them to use. There are explanations for lack of communication from libraries: libraries with smaller e-book collections are conscious that they are not doing enough to promote their collections but they do not want to promote something that will inevitably disappoint their users. This, however, leaves users to find out about e-books by chance, a major obstacle to e-book use.

Using promotional material to make users aware of e-book collections would not be so important if, for example, e-books could be fully integrated into the library catalogue. Studies done by Rowlands et al. (2007) and Abdullah and Gibb (2008), as well as this study, have found that awareness of e-books can be generated through the catalogue. A catalogue search query typically returns a page of results that includes all relevant material that is indexed in the catalogue. If any e-books are included in the results lists, users scanning the results will be made aware of them. This means that it is more likely that e-books will be used. In addition, the user, now being aware of e-books, would know that it is possible to search only for e-book material in future, if he or she felt it necessary.

E-book integration into catalogues is a challenge. Libraries do not own most e-books outright; rather e-books reside on a supplier’s server instead of on a server belonging to the library. Even if links to e-books were placed in the catalogue, there would be no guarantee that they would work all the time because of server maintenance downtime or changes in the location of the books on the server. In addition, suppliers have the ability to terminate access to an e-book, making the catalogue entry redundant. Moreover, e-book supplier records are not always complete and cataloguing standards for e-books still have to be incorporated

successfully into local standards. Therefore, the information that is catalogued might not always be of the highest quality and might not be exactly what the user is looking for.

In place of, and in some cases in addition to, catalogue entries, Western Cape universities have tried to keep all their e-books together on one page, making that page in effect the access point for all e-book collections. Unlike the results of the JISC Observatory project, which found that users are confused by the many ways in which e-books can be found, the libraries are attempting to create one access page for e-books. Because of the difficulties described above, e-books are not usually linked to from the library catalogue or even via the library's federated search, and are therefore not often found by users doing a search on the website. In order to find e-books, users have to be aware of them and consciously look for the links to the e-book collections on the library website before they can begin to look through the e-book collections. This fact does not bode well for the growth of the library's e-book collection because the collection, however small, will not be used to its full potential, perhaps discouraging any further e-book purchases.

Rowlands (2007) and the JISC Observatory project (Armstrong & Lonsdale, 2009b) found evidence that there is a particular lack of awareness of e-books among academics. This is not true in this study where academics showed that, although they read e-books less than postgraduate students do, they read them more than do undergraduate students. Age differences, however, show that those between the ages of seventeen and twenty-one and those above fifty-six years of age have less of an interest in reading e-books than the other age groups. Many of the younger members of the population might not currently have a need to read e-books for their studies or they might not own the devices that they think necessary on which to read them. Older members of the population might be able to afford the devices on which to read e-books, but it is probable that some are not willing to work with the new technology.

Librarians admit that their e-book collections are not what they should be and, at this stage, they do not expect patrons to be satisfied with the collections. Indeed, of the patrons who have used e-books from their library, most are not satisfied with the e-book collection at the libraries. Users are greedy for information and the limited number of e-books available is frustrating for them. It has been found that users associate e-books and e-journals and so, once they are aware of the library accommodating some e-books, it is possible that they will expect the e-book collection to rival that of e-journals.

If many patrons are not satisfied with the e-book collection of their libraries, there are still a number of users who claim to be happy with the same collection. If the librarians and the majority of users feel that the collection is insufficient, the question of why some think otherwise should be addressed. On closer inspection of the comments provided by survey participants, what seemed like satisfaction with the collection is in reality not a complete satisfaction; some unhappiness with the collection is expressed. Comments that suggest a less-than-complete level of satisfaction about the adequacy of the e-book collection at their library for their study and research purposes include phrases like “I guess so” and “at times” or, more clearly, “to a satisfactory level, maybe 70%”. Some responses are more specific but indicate that respondents have not had much experience of e-books. Comments included in survey responses were that e-books “helped with my economics essay” or that, when looking for e-books, “I found the books I needed”. The experience of these users, though limited, was good. Other respondents, though mostly happy with the collection, identified what they feel is missing: “I wish there were more academic resources for courses such as drama and film” and “there is a lack of literature from other African countries apart from South Africa” were two such comments. From these comments and others like them, it can be shown that, though satisfaction levels of e-book collections are surprisingly high considering that libraries acknowledge that their collections are not good, many who rate collections overall as satisfactory do not do think they are unequivocally so.

Ownership of an e-reader indicates both an awareness of and the intention to use e-books. Those owning e-readers, it can generally be assumed, want to read e-books. Less than a fifth of the population of the Western Cape universities owns a dedicated e-book reader. Those who own e-readers prefer to read electronic books over print books; however, there are still those for whom use is dependent on whether they are reading for studies or for leisure.

As has been mentioned, many users need to be made more aware of e-books in their libraries. They are open to using e-books but just need to be alerted to the fact that they are available for use. Answers to the final, open-ended question of the survey suggest that simply taking part in a survey about e-books in libraries grew the respondents’ awareness of e-books and of the possibilities they have to offer users via the tools that enhance them. One survey participant wrote that when he started the survey, he had no interest in the topic but, once he began answering the questions, he realised that e-books would be greatly significant for his academic career.

5.3. Do patrons prefer print?

A small number of respondents to the e-book survey expressed an unfaltering attachment to the printed book. However, a larger group of respondents expressed the same preference for print but admitted that, in order to work as effectively as possible, there are circumstances under which they resort to using a digital version of a book. At this stage, there is little evidence that those either resorting or choosing to use e-books from their libraries are using them because they are dissatisfied with the print collection. The libraries simply do not have big enough e-book collections for this to be the case.

Therefore, while users are not resorting to e-books from their libraries because of a feeling of dissatisfaction with print, some do feel they have “had” to resort to electronic books because of their convenience – they are easy to transport – or their cost, which many users think is negligible. E-books have a number of such advantages that users are realising can be of benefit to them. Other e-book advantages that users find attractive are anywhere, anytime accessibility, and good search functionality. Thanks to both these capabilities, e-books let users look up references quickly, allowing them to read relevant content only. This functionality is considered by users to be an enormous aid to research.

Print books also have advantages: they can be lent and borrowed easily; their pages can be reproduced exactly via a photocopying machine; they can be read anywhere and do not need a battery in order to operate; and reading on paper causes less eyestrain than reading on screen. It could be assumed that users want their e-books to have the same advantages as print, that, for example, they want to be able to share them with friends, copy them, read them anywhere, and avoid eyestrain as much as possible. This, however, is not the case. Users who prefer print will not simply switch to electronic books if electronic books were to offer exactly what print books offer. Instead, while some users state a preference for print and others for electronic, most will use whichever version suits them at the time. This does not mean that they will be happy to use any version at any time. Instead, users are very specific about when a print book is more suitable and when an electronic book would be better to use.

For example, users read lengthier works in print. Doing so enables easier note-taking and avoids the amount of eyestrain offered by a digital screen. The same conclusions were found to be true for the JISC Observatory project (Armstrong & Lonsdale, 2009b). However, if a work is available only in electronic format and, because of its length, will be too costly to

print, users will resort to reading it on screen. Some users indicate that they would prefer not to print a long document because of environmental, rather than cost, concerns.

Disregarding the length of a work, users are leaning towards electronic versions for academic texts. Electronic versions of books can be quickly skimmed for pertinent information and often text can easily be copied for use in a working document, making citations easier. Time and urgency is a factor – consulting an electronic book at the last minute before an assignment is due is more practical than going to the library and searching for the print book, which, even then, might not be available on the shelves.

Users are also demanding e-books for when they are travelling or away from their place of work. The mobility of e-books is appealing to users. At home or in the office, where there is more work space, opening a print book is easier.

Print books are preferred for works that have a lot of colour images or complicated graphics. For example, Rout (2010) writes that there is undoubtedly still space in libraries for print books of photography and art.

For leisure reading, users indicate a greater preference for print books at this stage. E-reader and tablet ownership levels are not high among this population so time will tell if leisure reading becomes more popular on electronic devices. While it is suspected that ownership of these devices – especially tablets – will grow, there is still the feeling that print is preferred for books of value, be they for academic or leisure purposes, that the user intends to keep, and that “light reading” and titles that are not worth keeping can easily be left to be read electronically. Besides there being an intrinsic value to a print book that users do not seem to recognise in an e-book, the electronic support that e-books require is off-putting. Because a device is needed on which to read e-books and because this device needs to be electrically charged from time to time, access to e-books requires more management by the user.

Armstrong (2008) and Gomez (2008) write about the idea of the content versus the container and that the choice of what to read should be based on the ideas in the book rather than the item in which the ideas appear. This format agnosticism is not evident among the user population of this study. While users are open to using both print and electronic books, it makes a difference to them when and for what reasons they use each one.

5.4. Do users want the features that e-books offer?

Those already using e-books show a great demand for the features that e-books offer. These features are courtesy of the electronic nature of the product and are therefore “added value” to what print books can offer. University students or academics want to get the best from the material they use for research. They also want what is most convenient for their purposes. There is, however, a misunderstanding among users as to what exactly these added value features incorporate and especially what their limits are.

5.4.1. Accessibility of e-books

One of the conveniences of e-books is their anywhere-anytime accessibility, something in which users have shown a great interest and one of the reasons they like e-books. Similar results were found in the JISC Observatory project (Jamali, Nicholas & Rowlands, 2009). Users envisage being able to access the e-book material they want whenever they need it, even if it is late at night or an hour before an assignment is due. Users might imagine that they will always have access to an e-book if the library has it in stock, but in reality, access is restricted. Examples of restrictions are that e-books are usually only accessible off-campus with a secure password; there is no guarantee that the e-book server will not be undergoing maintenance at the time that the user wants his or her last-minute access; and there might be a user limit imposed on the book that allows only one user at a time.

5.4.2. E-book search functionality

Since the advent of powerful search engines, search has played a major role on the World Wide Web. Library users realise the power of search, and being able to use this power to find exactly the information they are looking for benefits them greatly. This is especially true of books which are, by their nature, relatively lengthy compared to journal articles.

5.4.3. Using e-books

Besides their search functionality which can save hours of time, when it comes to the use of e-books, users would like to use e-books as they would print books: they want to be able to highlight text and have the ability to make hardcopy duplications of pages so that they can make notes alongside the text. The functions that are unique to electronic texts, such as making electronic notes in e-books, electronically copying text and customising the display of e-books, are of less interest though not, by any means, of no interest. Results from the JISC

focus groups suggest that note-taking features on e-books are not used much (Armstrong & Lonsdale, 2009b: 105). The same can be said of this study's findings. Respondents who commented that taking notes is important to them indicated it as a reason for using print books; they do not realise that note-taking is a possibility with e-books. As knowledge about what e-book software can offer increases, and as users use the software, a desire for added features, like electronic note-taking and customisation of the page, will increase.

5.4.4. Borrowing e-books

Users certainly want to borrow e-books from the library. Even though a lot of users do not own e-readers themselves, they are not yet interested in borrowing e-reading devices. Judging by the decline in e-reader sales mentioned previously, there might be more of a case to be made for borrowing tablet devices from the library.

5.4.5. Downloading e-books

Greediness for information is again clear in users' eagerness to download e-books onto all devices, especially onto memory devices. The possession of an e-book on a memory device suggests to the users that the e-book is theirs for an unlimited time – essentially, that they own it. In reality, e-books that are downloadable onto a memory device sometimes have digital rights management limitations in place that restrict use and limit access to the file for a certain period only.

5.4.6. E-reading devices

While downloads to memory devices are in high demand, downloading to cell phones or downloading for the purposes of sharing with friends is not high on the list of priorities for users. With academic texts, it is understandable that users do not feel it necessary to share texts with friends, but, with the high use of cell phones in South Africa, it is easy to imagine that libraries expect users to want to read books on their phones. The indication, however, is that cell phones are not conducive to e-book reading. For many South Africans, cell phones are the only way they access the internet. But for academic reading, where it is likely that one would spend a long time on one text and want to page or scroll backwards and forwards to check and understand what is being written, e-books are possibly too impractical for use. Perhaps if users did not have any other device on which to read, a cell phone would be seen as a more viable option. This study found that most university students and staff members own, or have regular access to, a laptop or netbook, devices on which it is much easier to read e-

books, making the use of cell phones for reading purposes unnecessary. It is understandable that a laptop would be preferred over the small screen of a cell phone for lengthy readings. The 2012 ECAR study (Dahlstrom, 2012) found that, just because a user is comfortable with a certain device, does not mean that she wants to use it for her studies. Similarly, for this study, the idea that users do not necessarily want to use all the devices they own for academic work seems to carry weight.

5.4.7. Format

As far as format is concerned, it seems that users want to make use of the formats that are familiar to them. For example, they are used to reading e-journals in PDF format. This format, then, is the one in which they would choose to read e-books. Reading e-books as web pages or in e-PUB format is less familiar, or perceived as less convenient, and so users are less enthusiastic about using them.

5.5. Conclusion

In all the areas of e-books mentioned above, a process of user education must take place.

One aspect of education should centre on increasing the awareness of the library e-book collection. Even small e-book collections should be promoted to encourage use, with libraries tailoring their promotional ideas according to their patrons, advertising within the library only, or extending marketing to reading lists, email alerts, the university's virtual learning environment, its newspaper, and so forth. Publishers could also consider being involved in the promotion of their particular books in libraries by providing marketing material to libraries together with e-books or e-book packages.

There needs to be a shift in users' perceptions of e-books. While the content of a print book and of its electronic equivalent might be the same, users should be made to realise that e-books are sometimes more useful than print books because of what their software can offer and not just because they offer immediate access to information. Even Project Gutenberg e-books, which are available in the most basic of formats, can be copied and then pasted into another document, courtesy of the browser software on which the books are viewed. Commercial e-books, though expensive, have the added benefit of running on sophisticated software that provides such tools as note-taking, bookmarking, dictionaries and citation exporting. Conversely, the sophistication of the software also imposes restrictions. If, for

example, a collection of e-books is in an unfamiliar format, then users should be advised how the e-book could be adapted to their reading device and about the additional features a particular format might contain that can enhance use. Eventually the unfamiliar format will become as familiar as the format that users are currently using. Similarly, e-books that are presented as web pages should be introduced with a guided tour so that users can see the interactive features that this format can offer.

The education should therefore also encompass familiarising potential e-book users with the limitations associated with the added-value features e-books offer. Education cannot just focus on the positives; users also need to be informed about what e-book access cannot guarantee. For example, 24/7 access is seldom that as servers experience problems and sometimes have to be offline; access via any internet connection does not mean that access is not controlled; permission to print a chapter might not extend to printing the entire e-book; borrowing e-books from the library does not necessarily mean that any number of users may borrow an e-book at the same time; and downloading an e-book does not mean permanent access to it.

At this stage, most users do not realise the limitations imposed on e-books by licensing agreements. Print books are purchased giving owners permanent access to them and, under the first-sale doctrine, the right to do with them (the books, but not their contents) what they please, including lending them to others. While copyright prohibits making copies of the entire work, it is permissible to copy parts of the work for personal use or for use in research, as long as the author of the work is acknowledged (Masango, 2009: 233). Commercial e-books are usually not purchased outright and they never fully become the property of the owner. "Owners" are merely given access to them, with limited ability to share, lend or copy the book. This is a challenge to libraries. They can begin by informing their users of the limitations of e-book "ownership" to avoid users feeling disappointed with the collection the library is offering them.

When growing e-book collections, the focus for librarians should include the enhancements e-book packages can offer, as well as the quantity of e-books a collection should contain. Choosing which business models to adopt should partly depend on users. Users want access to information but they also want tools that will make their research quicker, easier and more accurate. Librarians should therefore be conscious of what users want to use now as well as look ahead to what they could use in the future. Spending extra budget on e-book packages

that offer tools with which none of their users are familiar is a waste of money. Ignoring the possibility that the tools could enhance their users' work is also not advisable. Therefore, informing users of what is on offer and training them in its use is imperative. That way, a library can grow its e-book collection into one with many relevant books and one with top-quality features that users will use, thus enhancing their research.

The points discussed in this conclusion are briefly summarised in the table that follows for the benefit of libraries and e-book publishers and aggregators. The main concerns governing the growth of e-book collections from a user's perspective are tabulated alongside suggested courses of action.

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Table 5.1.
Points of interest for libraries and publishers

	Possible course of action for libraries	Possible course of action for publishers
All users are not aware of e-books in libraries.	Market and promote available e-books, even if the collection is small. Where possible, incorporate e-books into the catalogue and federated search engine. If catalogue integration is not entirely possible, create one access page for all e-book collections. Clearly differentiate between e-journals and e-books.	Increase the visibility of supplied e-books by providing libraries with promotional material alongside e-books and e-book packages. Allow for more stable e-book URLs for use in library catalogues by creating permanent links (DOI) to e-books.
Print collections are still important to users.	Inform users about the relative size of the e-book collection compared to the e-journal collection. Mention e-books in all literature on library resources. Ensure longer texts are still available in print. Acquire works with colour and illustrations in print. If relevant, make leisure titles available in print.	If e-books live in the same database as e-journals, clearly differentiate between the two types of resources.
Users want convenience and demand e-book features that enhance accessibility and speed.	Purchase e-book business models that allow 24/7 and off-campus accessibility, and that include a powerful search tool.	Package print and e-book versions of the same text together for works that are still in demand in print. Offer libraries e-book business models that allow 24/7 and off-campus accessibility, and that include a powerful search tool. Allow libraries to adapt e-book models to best suit their particular users.
Users are not always aware of the added-value features that e-book packages offer.	Show users the potential e-books have for enhancing their research. Educate them on available formats, software and added features that e-books offer.	Design user-friendly software that helps users understand and use the added-value features of e-books and e-book packages.
Users are not aware of the limitations of use and download that licensing agreements impose.	Make the limitations of e-books clear through education and electronic notes wherever links to e-books appear.	Make all limitations imposed by the particular software clear at the beginning of a user's session.

5.6. Future research

This study has not explored the e-book budgets of libraries, what the balance in the collection between conventional and e-resources should be and how it should change over time. Future research could look into the effects of a separate e-book budget for purchase, promotion, discovery and use, especially PDA. It could find out if a dedicated e-books budget is necessary in South African academic libraries or if all e-resources should be managed from one account.

According to this study, the majority of library users are not all that interested in using their cell phones for reading books for academic purposes. Considering the widespread use of cell phones in the country as a whole, an in-depth study of cell phone use in the library is a possibility for future study. It would be interesting to see if users would be more enthusiastic about reading journal articles on their phones, or would prefer rather to use their phones for activities such as book location or citation management. Perhaps phones in the library are more suited to social networking or to simple text-based alerts and messages. With the growth of applications for tablets and cell phones, libraries might want to look into designing a viable application that would be of use to their patrons.

This study focused on e-books in general. A study of the potential of introducing e-textbooks, specifically at South Africa's universities, might be of use. The study could look at whether students have reached a stage where they are comfortable using e-books for long periods of study, what the cost implications would be, what devices students would need on which to use e-textbooks and which disciplines would benefit the most from e-textbooks. E-textbooks have the potential to offer more than just text and images on a page. They can include interactive elements to enhance explanations, live tests, and quick links to related content within the e-textbook or elsewhere. An exploration of the purchasing and distribution methods of e-textbooks would need to constitute part of the study.

E-textbooks could be the first step whereby universities and their libraries adapt to what Massis (2012) calls the "post-literate" user. While libraries must provide their users with reliable, relevant and easy-to-access information, they must also consider users who do not simply want their information presented to them in words and pictures, but who want to experience information through sound, moving images and interactivity. E-books have certainly advanced since the 1970s when they were simply digital versions of the text of the

print books from which they were copied. Their development has coincided with the inception of technology that has allowed for such things as digital book production, the CD-ROM and the World Wide Web, the scanning of print pages for character recognition, the rise in popularity of e-readers and tablets, and, now, the educational possibilities surrounding audio, video and interactive activities. If publishers are willing to produce them, e-books have the possibility to incorporate the needs of the post-literate user. Libraries can play their part by being open to future versions of the e-book, adapting their development policies and budgets for them, providing the space where they can be utilised, and informing and educating their users of all disciplines, ages and levels of study about what they have to offer for the sake of enhancing research.

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Electronic books (E-books) survey

Thank you for taking time to participate in this e-books survey. It should take about 10 minutes to complete.

You will not be required to provide any personal information other than some demographic data.

If you choose to do so, you may exit this survey anytime by closing your browser window.

Please answer the questions that follow as fully as possible. Tick the appropriate box, or boxes, and provide your opinion wherever relevant.

1. What sort of material do you, or would you like to, read electronically (i.e. in digital format)? Select as many options as apply to you.

- Leisure titles (popular fiction or non-fiction such as biographies, novels, self-help books, cookbooks, etc.)
- Newspapers and magazines
- Academic books
- Academic journals
- Reference books (encyclopedias, dictionaries, etc.)
- Textbooks or manuals
- None of the above
- Other (please specify):

2. If both a print and an electronic copy of a book were available for you to read, which would you choose?

- Print book
- Electronic book (E-book)
- It depends (please comment):

3. What is your reading preference when it comes to electronic content (websites, e-journal articles, e-books, etc.)?

- I prefer to read on the screen (computer, tablet, e-reader, cellphone, etc.).
- I prefer to print out a copy to read.
- No preference – I don't mind whether I read on screen or on paper.
- It depends (please comment)

An e-book can be considered to be a book* in electronic (digital) format, accessible online, which can be read on an electronic device, such as a computer, tablet, e-reader or

Electronic books (E-books) survey

cellphone.

* *Biography, novel, reference work, textbook, etc. Fiction or non-fiction.*

*4. Do you, or have you in the past, read e-books from your university library?

- Yes
- No
- I don't know

5. What are the reasons you haven't used e-books from your university library? Select as many statements as apply to you.

- I didn't know my university library stocks e-books and so I have never looked for them.
- When searching for information in the library, e-books have never come up in the search results.
- The information that I need is never available in e-book format.
- I don't know where to find e-books.
- I don't know how to use e-books.
- I want training before I start using e-books.
- I don't have access to a suitable reading device (computer, tablet, e-reader, cellphone) all the time.
- I don't have access to the internet all the time.
- I don't like the page layout/design on which I have to read e-books.
- I don't like the scrolling and navigating involved in reading an e-book.
- E-books are confusing to use.
- My friends and I like to share books and we can't share e-books.
- I'm used to reading print books and don't want to change.
- I simply prefer to read a print book.
- Other reasons (please specify):

6. Do you consider the e-book collection at your library to be sufficient for your requirements?

- Yes
- No
- I don't know

Please give a reason for your answer (optional):

Electronic books (E-books) survey

*7. For what reason have you used e-books from your university library?

- Study or work
- Leisure
- Both
- I don't know

8. For what purposes have you used e-books in your work or studies? Select as many options as apply.

- Recommended course readings
- Studying for exams
- Research
- Teaching
- Other (please specify):

9. When using e-books for study or work purposes, how do you *mainly* make use of them?

- For fact-finding: I look up the piece of information I need.
- For relevant content only: I read a few paragraphs or pages here and there, looking for important information.
- Selective reading: I usually read a whole chapter at a time.
- Extended reading: I often read the whole (or most) of an e-book.
- It depends (please comment):

Electronic books (E-books) survey

10. How do you go about finding e-books for work or study? Select as many options as apply to you.

- The university library catalogue or discovery tool (Primo, ALEPH, etc.)
- Via databases (EBSCOHost, ProQuest, Sabinet, SciVerse, etc.)
- Links from the university library website
- Links from course reading lists
- Links from the university Virtual Learning Environment (VULA, Blackboard, KEWL, Webstudies etc.)
- Links sent from friends
- Book reviews
- Online bookshops (Amazon, Kalahari, etc.)
- Google
- Other (please specify):

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Electronic books (E-books) survey

11. Which of the features below would you like to be able to make use of when you read e-books for work or study purposes? Indicate your preference for each feature by selecting its level of importance to you.

I would like to be able to . . .

	Essential – e-books must have this feature	Important, but not essential	Not that important, but nice to have	Not important at all
borrow e-books from the library	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
borrow short loan books as e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
borrow inter-library loan (ILL) books as e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
borrow course textbooks as e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
borrow e-readers (Kindle, Sony Reader, etc.) from the library	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
download e-books onto my hard drive or flash drive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
download e-books onto my cellphone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
download e-books onto my dedicated e-reader (Kindle, Sony Reader, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
download e-books for use on any/all devices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
share e-books with my friends via email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
print out chapters from e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
copy and paste text from e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
highlight text in e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
make notes in e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
search the full text of e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
customize e-books to make them easier to use (change the font size, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
access e-books anytime of the day or night	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
access e-books from any internet connection, not only on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
request access to any e-book, not only those that the library already owns	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Electronic books (E-books) survey

- | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| read e-books as PDFs | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| read e-books in ePub format | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| read e-books as web pages | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| read e-books in any/all available format/s | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

12. For what length of time would you want access to an e-book from your university library?

- Three days
- One week
- Two to four weeks
- More than a month
- Unrestricted

13. Which devices do you own or have regular, unlimited access to? Select as many options as apply to you.

- Home desktop computer
- Laptop or netbook
- Tablet (iPad, Samsung Galaxy, etc.)
- Cell phone with internet access
- Cell phone without internet access
- Dedicated e-book reader (Kindle, Sony Reader, etc.)
- Electronic music/video device (iPod Touch, MP3 player, etc.)
- None
- Other electronic reading device (please specify):

*14. Do you have internet access off-campus (not at your university or residence)?

- Yes
- No

Electronic books (E-books) survey

15. What is the main way you access the internet off-campus?

- Via dial-up, ADSL or 3G
- Via public wireless / internet cafes
- I do not access the internet off-campus
- Other (please specify)

*16. What is your primary association with the university?

- Undergraduate student (first degree)
- Postgraduate student (Honours, Masters or PhD)
- Postdoctoral researcher
- Academic staff member
- Non-academic staff member

17. Are you registered on a full-time or part-time basis?

- Full-time
- Part-time

18. Indicate the faculty to which you belong:

- Architecture or Design
- Arts or Humanities
- Commerce or Business
- Education
- Engineering or the Built Environment
- Health Sciences
- Law
- Natural or Applied Sciences
- Social Sciences
- Theology
- Other (please specify):

Electronic books (E-books) survey

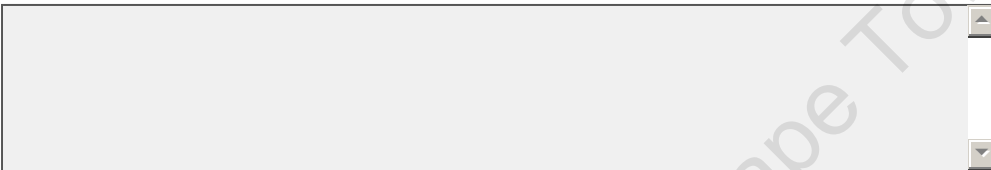
19. Indicate to which age group you belong:

- 17-21
- 22-25
- 26-35
- 36-45
- 46-55
- 56-65
- Over 65

20. Did your attitude to e-books change while filling out this survey?

- Yes
- No

Please elaborate:



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Electronic books (E-books) survey

Questionnaire for Acquisitions/E-resources Librarians

Distributed by Michelle Kahn, MPhil student, Library and Information Studies Centre, UCT Libraries, University of Cape Town

Thank you for taking time to participate in this e-books survey.

Please answer the questions that follow from your perspective as the Acquisitions/E-resources Librarian.

Feel free to include statistics, if you have them on hand, but I am more interested in what you perceive to be the case in your library.

There are spaces for your comments throughout the questionnaire.

You or your library will not be identified by name in the report resulting from this research.

1. What sort of materials (not necessarily stocked by your library) do you think your library users like to read electronically? Rank the list below in order of preference, with "1" being the most popular.

<input type="text"/>	Leisure titles
<input type="text"/>	Newspapers and magazines
<input type="text"/>	Academic books
<input type="text"/>	Academic journals
<input type="text"/>	Reference books
<input type="text"/>	Textbooks or manuals
<input type="text"/>	Other

2. If there are cases where both a print and an electronic copy of a book is available for users to read, which do you think would be used more?

- Print book
- E-book

Your comments:

Electronic books (E-books) survey

3. What seems to be the reading preference of your patrons when it comes to electronic content?

- On-screen reading
- Reading off a printed copy
- No obvious preference

Your comments:

4. What percentage of library users do you think have read e-books from your university library? Please add any comments.

5. What do you think may be the biggest reasons for patrons *not* having used e-books from your university library? Please select up to five reasons from the list below.

- They don't know their university library stocks e-books and so have never looked for them.
- When searching for information in the library, e-books have never come up in the search results.
- The information that they need is never available in e-book format.
- They don't know where to find e-books.
- They don't know how to use e-books.
- They want training before they start using e-books.
- They don't have access to a suitable reading device (computer, tablet, e-reader, cellphone) all the time.
- They don't have access to the internet all the time.
- They don't like the page layout/design on which they have to read e-books.
- They don't like the scrolling and navigating involved in reading an e-book.
- E-books are confusing to use.
- They like to share books with their friends and can't share e-books.
- They are used to reading print books and don't want to change.
- They simply prefer to read a print book.

Your comments:

Electronic books (E-books) survey

6. Do you think the e-book collection at your library is currently sufficient for user requirements?

- Yes
- No

Your comments:

7. Of those e-books used from your library, are they used more for leisure reading or study purposes (or both equally)?

- Study or work
- Leisure
- Both

Your comments:

8. For what purposes do you think e-books are being used for work or studies? Rank the list below in order of popularity, with "1" being the most popular.

<input type="text"/>	Recommended course readings
<input type="text"/>	Studying for exams
<input type="text"/>	Research
<input type="text"/>	Teaching

9. How do you think users are making use of e-books for studying? Rank the methods of use below, with "1" being the most popular.

<input type="text"/>	For fact-finding: looking up the piece of information needed
<input type="text"/>	For relevant content only: reading a few paragraphs or pages here and there, looking for important information
<input type="text"/>	Selective reading: usually reading a whole chapter at a time.
<input type="text"/>	Extended reading: often reading the whole (or most) of the e-book

Electronic books (E-books) survey

10. Please indicate the top five channels through which you think users are finding e-books in your library, with "1" being the most popular.

<input type="text"/>	The university library catalogue or discovery tool (Primo, ALEPH, etc.)	<input type="checkbox"/> N/A
<input type="text"/>	Via databases (EBSCOHost, ProQuest, Sabinet, SciVerse, etc.)	<input type="checkbox"/> N/A
<input type="text"/>	Links from the university library website	<input type="checkbox"/> N/A
<input type="text"/>	Links from course reading lists	<input type="checkbox"/> N/A
<input type="text"/>	Links from the university Virtual Learning Environment (VULA, Blackboard, KEWL, Webstudies etc.)	<input type="checkbox"/> N/A
<input type="text"/>	Links sent from friends	<input type="checkbox"/> N/A
<input type="text"/>	Book reviews	<input type="checkbox"/> N/A
<input type="text"/>	Online bookshops (Amazon, Kalahari, etc.)	<input type="checkbox"/> N/A
<input type="text"/>	Google	<input type="checkbox"/> N/A

University of Cape Town

Electronic books (E-books) survey

11. What level of importance do you think these e-book features have for your library users?

	Essential	Important, but not essential	Not that important, but nice to have	Not important at all
Borrowing e-books from the university library	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Borrowing short loan books as e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Borrowing inter-library loan (ILL) books as e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Borrowing course textbooks as e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Borrowing e-readers (Kindle, Sony Reader, etc.) from the library	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Downloading e-books onto hard drives or flash drives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Downloading e-books onto cellphones	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Downloading e-books onto dedicated e-readers (Kindle, Sony Reader, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Downloading e-books for use on any/all devices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sharing e-books with friends via email	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Printing out chapters from e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Copying and pasting text from e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Highlighting text in e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Making notes in e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Searching the full text of e-books	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customising e-books to make them easier to use (changing font size, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accessing e-books anytime of the day or night	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accessing e-books from any internet connection, not only on campus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Requesting access to any e-book, not only those that the library already owns	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reading e-books as PDFs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Electronic books (E-books) survey

Read e-books in ePub format

Reading e-books as web pages

Read e-books in any/all available format/s

Your comments:

12. For what length of time do you think your users want access to an e-book from the university library?

- Three days
- One week
- Two to four weeks
- More than a month
- Unrestricted

Your comments:

13. Please include any additional comments you would like to make: