TEXTUAL ANALYSIS OF OPEN ENDED QUESTIONS IN E-BOOK NATIONAL OBSERVATORY SURVEY

UCL: CIBER

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1.0 Introduction

Contained in the benchmarking user survey there were two open-ended questions where respondents could express themselves freely and given the huge response rate it was though worth analysing the answers using the software package QSR N6. Each response was coded using themes that were drawn from the answers. The first question concerned the merits of e-books as compared to their printed counterparts. The question was expressed in this form: *In your opinion, what were the biggest advantages that e-book offered, compared with a printed book? (Please volunteer up to three reasons).* This elicited 11,624 responses. The second question was more general and supplementary in tone, a catch-all if you like: *Is there anything that you want to add regarding course texts, print or electronic, or about your university library?* In total 4809 comments were received to this question. Some of these comments related to advantages and benefits of e-books. The attraction of the free text analysis is precisely that, respondents are free to express themselves and were not constrained or shoe-horned by the questioner. While the questionnaire was open to both staff and students the respondents to these two questions were almost wholly students, although the latter question did attract a few responses from librarians.

2.0 Results

2.1 Advantages of using e-books

Although the question asked for up to three reasons, the majority mentioned only one advantage. Including those who mentioned more than one advantage, the total number of advantages mentioned was 11,763. It should be mentioned that due to the nature of the answers (free-text comments) and the fact that the phrases and words used by respondents to describe the advantages could be interpreted in more than one way there is some overlap between concepts.

2.1.1 Online access

Clearly the main attraction is that e-books are more accessible than print books, meaning that users can get at them wherever they are and at whatever time they like. This reason accounts for more than 52% of the advantages mentioned, and about 55% if we include the related category, convenience (Table 1).

Table 1 E-book advantages

Advantage	No	%
Online access	6169	52.44
Seachability	1556	13.23
Cost	1266	10.76
Portability	623	5.30
Convenience	340	2.89
Eco-friendly	323	2.75
Storage	258	2.19
Easy to navigate	253	2.15
Multiple users	203	1.73
Easy to locate	152	1.29
Copy paste	123	1.05
Easy to read	87	0.74
More choices	53	0.45
Display flexibility	49	0.42
Relevance decision	47	0.40
Access to books not available in print	40	0.34
Easy to annotate/highlight	37	0.31
Easy to share	27	0.23
Micro-access	22	0.19
Up to dateness	19	0.16
Bookmarking	15	0.13
Quality graphs/colour	15	0.13
Multitasking	12	0.10
Interactive	7	0.06
Other advantages	67	0.57
Total	**11763**	**100**

The attractions of instant (and rapid) access was mentioned in about 1380 of the comments that related to the attractions of online access. A thousand of the online

access comments specifically cited the fact that e-books can be accessed from a distance and that the user does not have to travel to the library in order to use them. Indeed, many respondents actually mentioned their happiness at not needing to make a trip to the library for this purpose. Unsurprisingly, this feature was especially appreciated by distance learners. About 500 comments were related to availability - 24/7 access to e-books. A few of the many comments follow:

Can access from a remote location (North of Scotland)

E-books are convenient in that I can access them from my dormitory instead of having to go all the way to the library

I am a distance learner and could only get the book online unless I traveled

It's always available - if you have a web connection.

2.1.2 Searchability

The greater retrieval opportunities provided by e-books were the second most mentioned characteristic (13.2%). This rises to 15.4% if we include navigation (see section following). Digitisation has created numerous search pathways through books and this is appreciated. Even in the case of PDF files, the Ctrl+F feature was mentioned as a favourite feature for finding relevant content. Some illustrative comments follow:

Could search within the text using key words

Ease of finding information with search options

Easy location of phrases and words via the 'find' mechanism

2.1.3 Cost

Cost was the only other advantage to reach double figures (10.8%). All comments related to financial issues were put under this category including those that related to e-books being free and cheaper. Clearly there is confusion here in the minds of students. Some illustrative comments follow:

A lot of the e-books are free of charge

Cheaper than buying the book

Didn't have to buy it

2.1.4 Portability

Portable is not a word you would associate with e-books but quite a few (5.3%) mentioned this quality. They were said to be 'lighter' than printed books and they did not have to be carried around. Some illustrative comments follow:

Easier to carry around - on ipod

No weight

Portability - I can take a lot of books on a single computer, memory card, external hard drive.

Portable, we do not have to carry big books from one place to another, useful for international students.

2.1.5 Other advantages

The only other advantages that attracted more than 0.5% of comments (in ranked order) were:

o **Convenience** a category which overlaps with 'online access'. Those comments (2.9%) that mentioned ease of use or included the terms convenience, convenient and so on were put under this category. Those who used the word convenience but then specified why so (for example because I don't have to leave home) were categorised under other relevant categories, like online access;

o **Eco-friendly**, which refers to the fact that they do not use paper (2.9%) *Good to the environment since less paper used;*

o **Storage.** Unlike hard copy books, e-books do not take a lot of space on the shelves or on the desk (2.2%);

o **Easy to navigate.** It is easier to navigate e-books, scan through them and browse them more quickly and easily. It is also easier to locate specific sections in the book by following hyperlinks or menu pages that aid navigation such as ToCs (2.2%). This, of course, is also related to searchability. Illustrative comments: *It's easier to find the relevant sections without having to keep flipping through pages. Ability to scan faster and with greater ease*

o **Multiple users.** Simultaneous use, meaning students do not have to wait for the hard-copies to be returned by other student or put up with short loans and the like (1.7%).

o **Easy to locate.** E-books are easier to locate and find in comparison to hard copy books for which students have to search in catalogues and then on shelves (1.3%).

o **Copy and paste.** E-books enable users to copy and paste pieces of text, and images into their own documents, something we know from past research students appreciate (1.1%).

o **Easy to read.** Some students even thought them easier to read (0.71%).

Perhaps, as interesting, are the often mentioned advantages that did not attract that much support. Thus readability obtained a very small number of mentions (0.7%); so too did wider choice (0.5%), up to dateness (0.2), better quality graphics (0.2%) and interactivity (0.2%).

2.2 Catch-all question

This question was really open-ended and gave everyone an opportunity to say anything they felt relevant to the survey. The question was: *Is there anything that you want to add regarding course texts, print or electronic, or about your university library*? Inevitably, a

considerable proportion of comments were not directly related to e-books – comments were also made in regard to libraries (16.3%) and the survey instrument itself (0.8%)

Table 2: General comments

Comments	No	%
Library practices and provision	931	19.35
General expressions in favour of e-books	634	13.2
Requests for the provision of more e-books	632	13.1
Screen-reading as a problem	366	7.60
Preference for printed books	289	6.00
Problems with access hardcopy textbooks	250	5.20
Need for better promotion and instruction	195	4.05
E-book advantages	90	1.87
Problems of access	87	1.80
Better printing feature for e-books	78	1.62
Saving and carrying e-books	73	1.52
E-book disadvantages	71	1.47
E-books as supplement not substitute for hardcopy	67	1.40
E-book technology problems	47	0.97
Comments related to survey instrument	38	0.80
Reference or factual use	37	0.77
E-book, subject-dependent	15	0.31

2.2.1 Library practice and provision

The bulk of the comments here concerned:

1. The demand for more core textbooks, there were lots of complaints about the unavailability of core textbooks.

   Books often not listed on loan are missing from the shelves for weeks or months at a time.

   If I check on the library site beforehand to see if the books I want are available, I am often told they are, only to find they are not shelved anywhere and I have to search every single shelf to find where they have been put back wrongly. In a large library such as ours this is a waste of time, and I often give up.

   Core books are never available. Libraries don't have enough of the core books in short loan.

2. The need for more up-to-date editions of textbooks.

Many of the text books are very old, not up-to-date.

I have noticed that the majority of the engineering related text books contained in the library are very old some from 1976. I would like to see more recent editions of these books.

There were also quite a few comments regarding student happiness with the library: *I am very satisfied with my University library!!*

The rest of the comments concerned things like lack of computers, bad lighting and students hiding books to ensure they can get hold of them later.

2.2.2 General expressions in favour of e-book.

634 (13.2%) of the comments were expressions in favour of e-books and these comments should be read together with the comments given in 2.1. Users expressed their preference and enthusiasm for e-books with comments like: *Please, please, please: e-books are a lifesaver!*

2.2.3 More e-books.

About 632 (13.1%) of the people who left comments wanted more e-books to be available. Many users asked for more e-books to be available in their own subject area, where they felt there was not enough (or any) available: *Add more on mental health as this is the area I am studying. It would be extremely helpful if all books were available as electronic-books.*

There were two other communities that were vocal in asking for more e-books. First, there were those people **who tended to study remotely** and could not travel to the library easily; they were distance learners, part-time students or people who

simply preferred not to go to the campus to read material (e.g. a mother who is student). The following comment was illustrative: *My course is delivered through distance learning and would be so much harder without electronic resources.*

The second community were **disabled users** (26 responses obtained) - people who experienced visual difficulties or had problems with mobility:

> *As a student who has reading difficulties, being able to access online material has made assignments much easier to handle, as there is no worries over returning books or having short loan times.*

> *I would like to point out that e-books are a terrific resource for visually-impaired students in particular, especially bearing in mind that university libraries supply almost no Braille or large print resources and relatively few audio resources.*

However, it was pointed out that not all categories of health-impaired users benefited from e-books. **Dyslexic** users found it hard to use e-books in their current form. They require some changes to be made in the visual and graphic settings of e-books systems:

> *As I am Dyslexic I find it difficult to read from the screen and often have to 'print out'. It would be helpful if the background were not white or if it was then the text in a different colour than black e.g. Mid-Blue. Many of my friends who aren't Dyslexic have said that they also find it a 'nicer' read when the text is either blue or a different background shade is used.*

> *I prefer book as I'm dyslexic and I find electronic versions hard to read however if you could set it up to change the background colour that would help*

I have glaucoma and find prolonged reading from screen difficult. I need to print off material and it is frustrating that I cannot edit on screen and print at a suitable font size and layout or to omit pictures to save printing costs. Living in the Hebrides makes me more dependent on E-resources.

2.2.4 Screen-reading

The biggest disadvantage by far was thought to be the difficulties of reading from the screen. About 366 (7.6%) respondents complained about the difficulty of screen-reading. The following user complained about this but also proposed a solution s/he personally has applied:

The only problem with e-books is that eyes can get very exhausted reading from a screen. I finally solved it adding a filter to my normal glasses, that reduce brightness (my glasses are blue).

The problem with screen-reading is not only that leads to tired eyes; users also found it harder to concentrate and absorb the information when they read from a screen.

The predominant reason I do not use e-books, is that I often find the information harder to absorb when read from a screen. Also, reading from a screen for prolonged periods of time tends to cause migraines; therefore, longer texts (which are more or less unavailable as it is) would be inaccessible to me. As an English student, this puts e-books at a huge disadvantage.

The problem with screen-reading is also a main cause of **subject-dependability** of e-books (see below).

2.2.5 Preference for printed books

There are many users who would prefer hard copies to e-books. About six percent of the respondents stated that they preferred hard copy books in normal situations. The following comment is an example of a print advocate:

In spite of the invaluable speed and convenience of research and access to material via the web and through e-books, there is nothing more contemplative and absorbing than to sit down with a physical book - to flick through the pages; to instantly refer back and forth; to wander across and down the page without distraction and in the comfort of your favorite places, whether at home, at work, in the park or on the beach - and they are "oh, so slim-line, compact, portable, restful and very, very cheap!" ...OK - so the manufacture of paper is damaging to trees, but the computer is more responsible for global warming and is probably not the safest way long term way in which to store and convey the sum total of human knowledge for the benefit of future generations. But whilst not advocating a return to the durable technology and methodology of the "Rosetta Stone" at this present moment in time, I would encourage everyone to consider seriously the merits of paperback and hardback books continuing to be available and vigorously promoted alongside the virtues of web and e-book technology.

2.2.6 Solution to hard-copy supply problems

Although many respondents were enthusiastic about e-books *per se*, they also had very pragmatic reasons for welcoming e-books. Some students for example considered e-books as a solution to some of the problems they faced, especially in regard to (problematic) access to hard-copy titles. About 250 of the comments (5.2%) were related to printed books. The majority of these comments were related to textbooks or the books that lecturers recommended. Students complained about the lack of hard-copies of textbooks, short borrowing time, difficulties

accessing the recommended texts and so on. In this kind of situation, it is natural that some students (about 70, 1.5%) see e-books as the solution to all these problems.

> *Would be good to have core subject texts as e-books as there is no way libraries can supply the books in the number students would require. Also students find books too expensive.*

2.2.7 Promotion

According to the responses there seems to be a lack of activities for promoting e-books on the librarians' side. About 195 (4.05%) comments indicated the need for better promotion of e-books among students and lecturers.

> *Better communication between course leaders and library staff, better flagging of e-resources, both on library sites and in course handouts needed in order that their use is maximised.*

> *Well I wish they would make it more obvious which e-books are available.*

> *I don't really know anything about electronic sources, so it would be better if the librarians were more forthcoming in telling the students about them*

> *I wasn't aware before this survey that there were e-books; this would be very useful for me*

The lack of awareness about the availability of e-books was accompanied by confusion about what an e-book actually is.

I am not sure whether e-journals count as e-books. If e-journals are included then I am a very regular user of e-books. However, I do not read textbooks online.

I do access electronic journals SFX but not sure if you categorise this as the same as electronic books - if this term does inc journals then please change my relevant answers from 'I'm not sure' to 'yes'!

There was also a lack of knowledge about how to access and use e-books and e-resources and this highlights the need for instructions and the improvement of information literacy programmes at universities.

I could do with a course on how to access these things as I am not very technically minded I don't know how to access the e-books

I don't think that there is enough emphasis on lecturers and tutors explaining to students HOW to use all the various applications in the library. I had to teach myself about these, a seminar for all those interested might be of help.

2.2.8 Advantages of E-books

About 90 (1.9%) respondents highlighted the advantages for e-books. These are ones not previously mentioned in Section 2.1:

- *Do not require limited access time (don't have to be returned to the library)*
- *Solve the lack of space in libraries*
- *Are good for snippets of information, reference use and 'how-to' manuals*
- *Are good for research and systematic review as well as teaching*
- *Can be used anywhere, out of campus by distance learners, disabled, and part-timers*

2.2.9 Problems of access

Around about 1.8 percent (87) of respondents reported difficulties in accessing e-books. Although some of these problems might be related to specific libraries there is still an issue that librarians and e-book publishers need to investigate and resolve. A significant proportion of access problems were related to failed attempts to access e-books off campus.

Better access to e-books online. It fails very often when accessing from home.

Athens is a well-established means for accessing electronic resources out of campus and some respondents appreciated it (e.g. *The Athens system is very useful for e-books and journals from e.g. JSTOR*). However about 31 (0.6%) of respondents expressed that they were unhappy with Athens or that they had problem using it.

Athens is a cumbersome system and I wish it could be simplified

Getting access to e-material has so far been a nightmare, especially through Athens. So I have not used e-books as much as I might n the future if access is easier for the User.

Another type of access problem was related to simultaneous access by more than one user. Some e-books systems do not allow this or have restrictions as to how many users can read an e-book at the same time.

The availability of e-books is sporadic and just like going into a standard library, if two users are trying to access the same book at the same time on a network, it doesn't allow access to the book for one of them, which is bad.

2.2.10 Printing problems

Students wanted to be able to print part of the e-books they read, whether to read them at their convenience or highlight and annotate them. About 60 (1.3%) respondents complained (a

relatively small number it has to be said) about problems with printing, either they did not allow this or there were restrictions. Also about 18 (0.37%) respondents expressed that they wanted to be able to print sections of e-books easily.

> *E-books are useful. My main gripe with them is the way in which you print them off. I have tried to print out whole chapters and cannot do this, I do not know why. Instead I have had to print out groups of pages and then put them together to form the chapter. This is annoying and makes accessing e books more tedious and time consuming that it otherwise might be. However, on the whole I think they are a useful addition to hard copy books.*

2.2.11 Saving and carrying problems

73 (1.5%) of students said they wanted to be able to save e-books and keep them or carry them on their digital devices (laptop, ipod…).

> *An e-book is not very helpful if you cannot download it on a USB stick or similar.*

> *E-books I have looked at through university catalogue were not downloadable or printable, so were pretty useless compared to real books.*

> *HTML based e-books are less easy to use than PDF format. The copyright notices on e-services such as Oxford Scholarship are off putting and make materials difficult to study!*

> *PDF versions of the books are much easier to read than HTML versions. I would prefer to see more and more books in PDF format.*

There could be a number of reasons for this preference. First, they want to be able to read an e-book without the need of being connected to the internet and **being online**. Besides the problems users might have with getting constant internet connection, being

online as a student mentioned is a source of distraction. While online, a user is more likely to get distracted from his or her reading because of emails and web surfing.

The other reason (and another disadvantage) is the confusion about the **pagination** of html-based e-books. A few respondents mentioned that they were confused about the page numbers and pagination structure when they read e-books. This obviously is not a problem in the case of PDF files.

2.2.12 E-book, disadvantages

Besides the disadvantages mentioned already, like screen-reading, printing, saving and so on, there were other disadvantages mentioned by about 71 (1.47%) the respondents, of which a selection are presented below.

- *Could be deleted accidentally [assumed that they can be saved]*
- *Are difficult to browse or skim read [might be specific to some platforms]*
- *Are overpriced*
- *Can 'be tedious if the internet connection is not fast'*
- *'Play havoc with an author's royalties'*
- *Lack serendipity, they remove the ability to accidentally stumble across something on the shelf, which is often more influential than what was originally being looked for*
- *Make students over-relied on computer and reluctant to use library and do active research*
- *Are not easy to concentrate on while reading them and it is hard to absorb their information (computer and internet could be source of distraction)*
- *Reduce the control on plagiarism and increase the concern over copyright*
- *Makes I hard to annotate and highlight and so on*

2.2.13 A supplement not a substitute

About 67 (1.4%) comments were in some way related to the fact that e-books and printed books should co-exist. Users found different and supplementary applications for e-books and hard copy and wanted to benefit from both.

E-books are not a full substitute for, paper books. They are difficult to browse and with e-books there are restrictions on printing pages for future reference which there are not on paper books. Yet it is not possible - or probably desirable (eyes, posture) - to read whole books online. E-books are a useful adjunct but not a complete substitute for paper books.

E-books do a quite different job from printed books and manuals and the one should not be assumed to be a replacement for the other. Printed books are still better for random access if you know what you are looking for - search facilities are not the same thing. Casual browsing will also always be easier. It's actually much harder to read and speed read from a screen and the actual learning process is different - some methods will suit some people and not others. E-books and printed materials must complement and not compete with one another for the richest possible learning experience that is accessible and helpful for the greatest number of people.

I don't want to see an exclusivity of formats: e-texts are useful and convenient, but the ability to use and handle ink-on-dead-trees is also important.

There was also concern that some university libraries considered e-books a good alternative or substitute and therefore replaced printed books with e-books.

I am concerned that e-book purchasing will encourage university libraries to cut back on the number of physical books that they actually buy.

I am greatly concerned by the present very clear agenda to reduce the number of books in libraries, thus removing one of the most important planks of learning, self-directed study.

2.2.14 E-book, technology-related problems

About 47 (0.1%) comments were about technology-related problems. Seventeen respondents were unhappy about use of DRM in e-books for different reasons for example some are incompatible with Linux or Apple computers.

My main concern and I think the single most important issue in the future of electronic books is the problem of DRM (digital restrictions management).

Aggressive DRM is one of the very few reasons that prevents me from using some e-books.

There were a range of other specific problems with the technology that e-books use that were mentioned in the comments. A list of some of them is presented below:

- *Ebrary requires specific browser and plug in and not friendly to Linux and Firefox, Ebrary is too tied to Microsoft technology.*
- *e-books need fast computers and high speed internet connection*
- *ebrary reader is not flexible so it is hard to resize it to maximise the size of the window. I also find it hard to read from as the screen moves to the next double page rather than*

to the second of the pages being viewed which makes it disorientating and fiddly to read from

- *E-book interfaces are not very suitable; too much space is taken up by menus. An example is MyiLibrary interface - so much of the screen is taken up with browser bars, status bars, controls on the left etc. that the book is a teeny thing in the middle of the right hand side.*

- *reading e-books on screen takes time but the interfaces log the users out of the system every 15 minutes or so for security reasons*

- *some e-books not compatible with Mac or Linux*

- *MyiLibrary doesn't like skim reading of more than about 15 pages - it thinks you are trying to print more than copyright allows and threatens to boot you out*

- *pagination is not always obvious*

- *there are too many platforms and too many access modes and this causes confusion*

- *There is a disconcerting trend towards proprietary e-book formats, as used for example by ebrary and British Library that are undocumented and unsupported on many platforms. There is need for standardisation. Using standardised open formats that can be read by a variety of pieces of software or a variety of platforms is important. Using well-known, open standards is more likely to also enable computers to index and search the e-books*

- *A lot of e-books are not compatible with reading software on device other than PC. for example, a Palm handheld*

2.2.15 Reference use

The difficulty of screen-reading, together with the advantages of digital media in regard to ease of searching and locating specific keywords or phrases, make e-books **suitable for reference use** or suitable for the fields where users need only small pieces of

information rather than doing large amount of reading. About 37 (0.77%) respondents mentioned that e-books are good for dipping in, or for looking for specific information or reference use.

> *I feel electronic texts would be a valuable resource for reference only.*

Another property of e-books that makes them subject-dependent is the assumption that they are or can be more up-to-date than printed books, hence more suitable for the fields that deal with cutting edge science and technologies.

> *I read mainly leading edge technology publications, hence online only.*

2.2.16 E-book, subject-dependent

As mentioned before a few properties of e-books make their attraction subject-dependent. For example screen-reading makes them unsuitable for the subjects that require a great deal of reading, such as those in the humanities.

A few respondents from English Literature pointed this out:

> *Studying English Lit. at degree level involves a great amount of reading which just can't be done with e-books, it is just too uncomfortable on the eyes and posture to read off screen for any great length of time.*

> *I am a part time student studying English Literature, but I also use the library for my work as a business analyst - and in this area I am more likely to use e-texts.*

Unlike English literature, people from the fields of law and computing seem to be in favour of e-resources.

> *I study law thus we, law students, are heavily dependent on online materials as there is so much one has to read.*

> *Generally they're good for Computing, which is what I teach. I think that's a combination of the subject - students often want to look up factoids, rather than read a whole essay. They're also used to using screens on a day to day basis.*