E-book action research at UCL
Superbook and JISC National E-Book Observatory

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www.ucl.ac.uk/slais/research/ciber
www.publishing.ucl.ac.uk
The Virtual Scholar programme

1. Scholarly research behaviour today. T&F, 2008-
2. Evaluating usage and impact of e-journals in the UK. RIN, 2008
3. **UK National E-Books Observatory. JISC, 2008-9**
4. The Impact of Open Access Journal Publishing. OUP, 2006-
9. Authors as users: analysis of ScienceDirect. Elsevier, 2005-6;
11. MaxData. US Institute of Museum & Library Services, 2005-7
General context to research

• Knowledge of virtual scholar’s information seeking behaviour based on e-journal studies; they appeal to researchers and scientists.
• Know much less about behaviour of students, arts/humanities scholars and some social scientists – the majority academic community
• In a vacuum, work with an e-journal stereotype of information seeking and that is dangerous
• Hence CIBER interest in e-books
• We might be at a tipping point
E-books: seem to fit the bill

- Offers condensed, distilled knowledge – big demand
- Textbook access big issue with students - (see JISC study)
- Under-utilised resource because contents not digitally visible; now in consumer-friendly form, fits bouncing & power browsing behaviour of virtual scholar. More later.
- Chapters, paragraphs etc now unit of consumption - appeals to digital consumer, especially students, who prefer bite size chunks of information.
- Bait of abstract and keyword, raises to the prominence (digital visibility) enjoyed by e-journals
- Really good products out there now (OSO)
- In e-shop window, becomes part of digital consumer choice
Two UCL CIBER e-book studies

• **Superbook.** Action research project at UCL (2006 – 7). 3000+ books from Oxford Scholarship Online (OSO), Wiley InterScience and T & F and see what happened. Monographs. DLA, with supporting survey and interview data. Establish methods and forms of analysis.

• **JISC National E-Book Observatory** (2008 – 9). Rolled out to 120+ UK universities and involved 36 core reading books from Wolters Kluwer Health and MyiLibrary. Questionnaire data available; received 22,000 responses! Log analysis to come.

• Today will focus on log evaluation of **OSO**, with comparisons where appropriate with Wiley and link to & enhanced by JISC questionnaire data.
A cross-searchable library containing the full text of over 1,200 e-monographs on Economics, Philosophy, Political Science, and Religion.
OSO Usage figures

- Sessions busier than e-journal ones. Novelty, insecurity, satisfaction or audience?
- Concentration in use: top 20 titles accounted for 43% of usage.
- Reach: 36% of titles used (Wiley, 20%) within three months
- Short viewing times…
• I can update my knowledge very quickly, you see the sheer number of books is overwhelming, if I can look at them very quickly – you know within 15 minutes, I can look at 3 or 4 books – and get some very superficial knowledge of what is in them, nevertheless it improves my scholarship, because in the back of my mind, these books already exist”

• “To tell you the truth – if I have a notion that this book is going to be remotely useful, then it’s going to be print. I’m not going to spend too much time – I mean if I feel that the book has something to give me and it’s of value putting it on paper then it’s going to go on paper.”
Volatility

- Usage varied dramatically from month to month (and subject).
- Well over half of views made in March were to Politics titles; however Politics accounted for a fifth of views in January and one-third in February. Use tied to rhythms of teaching.
- Mondays greatest usage, one-fifth of weekly page views (busiest time for e-shoppers!). Sundays recorded a relatively high level of use, 14% of page views. Higher than we would expect for journals
Navigators

- Navigating towards content in very large digital spaces a major activity.
- People spend nearly half time viewing content, rest of the time they are trying to find their way to it (or out of it).
- Not having a visible and apparent model of a book could be disorienting.
Navigators

• In digital form contents more readily accessed - keyword searching, chapter level descriptions & abstracts mean can be exploited

• Knowledge in books underutilised because of the difficulties of finding content and inconvenience of having to trawl through far more information than needed.
Squirreling

- Two-thirds of usage took place on-site.
- Big differences in information seeking. Off-site users:
  - a) adopted more direct approach, with 75% of their views to full-text pages; by comparison figure for on-site users 50%;
  - b) more likely to view an e-book, with only 1 in 10 sessions not recording a view to a book as compared to 4 in 10 for on-site users.
- Squirreling, access expectations, eShopping traits?
Decay

- Less decay than for journals. Last 2 yrs accounted for 17% of views.

- **Explanation**: 1) students not so pre-occupied with the new; 2) takes time to become a recommended book; 3) lecturers poor at updating readings; 4) humanities titles (Wiley/Science data: last 2 years, 42%)

- **Subject differences**: Economics greatest use of books aged 11+ years - 23% of views of that age. Philosophy made greatest use of current books - 18% of use concerned 2006.

- **Time online**: spent more time viewing current material
Catalogue

- Catalogued books (1/3 randomly catalogued) much more likely to be used. UCL catalogued e-books attracted over twice the usage as compared to non-catalogued ones. Wiley exactly the same result.
- Clearly (currently) catalogue is where people look for books and lecturers probably unlikely to recommend readings if the books not in library catalogue.
Diversity - subject

- **Reach**: 45% of philosophy books used, (35% of available books were on philosophy); 10% or religious books used (24% of titles were on religion).

- **Use**: philosophy biggest users in terms of pages viewed, busiest in terms of number of views per session and best outcomes in terms of pages printed (47% of sessions printed at least 1 page). Best practice or best list?
Diversity - subject

- Location: 38% of philosophy and 71% of religious e-book views made from outside UCL
- Search terms: Those searching for political science and economics books employing a search engine used 4 words as compared to 3 for those looking for philosophy and religion titles
Diversity - status

• Students recorded longer online sessions (Supported by survey)
• Halls of Residence recorded a high percentage of sessions achieving an outcome (85%)
• Staff undertook more sessions with single page views (Supported by JISC survey)

From all this produce community footprints
• “Well people know that the e-books exist, but I think that very few people realise how many e-books there are and where to go. People – most people will walk over to the library and scan the shelves”

• “They evidently get quite a lot of complaints from students who are all trying to access the same reading for the same lecture so they do tend to say ‘oh well, if you can’t find a hard copy have a look on e-journals, e-books’, but they never actually point you, specifically.”
A geographical plot of IP addresses of participating universities

Taking research methods to a new high

Benchmark survey ran between 18 Jan and 1 March 2008. 22,437 responses receive from 120+ universities.
Textbook provision

- Do your students regularly report back any problems concerning library provision of textbooks? Teachers by JISC discipline ($n=641$).

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Yes</th>
<th>No</th>
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</thead>
<tbody>
<tr>
<td>Business</td>
<td>39.7</td>
<td>60.3</td>
</tr>
<tr>
<td>Engineering</td>
<td>56.6</td>
<td>43.3</td>
</tr>
<tr>
<td>Media studies</td>
<td>65.5</td>
<td>34.5</td>
</tr>
<tr>
<td>Medicine</td>
<td>43.2</td>
<td>56.8</td>
</tr>
<tr>
<td>All other</td>
<td>49.1</td>
<td>50.9</td>
</tr>
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</table>
How many e-books have you used in the past month? (n=10,947)
Viewers

- Conditioned by emailing, executive summaries & text messaging
- Spend little time on a page or session
- Go online to avoid reading?
- Examined how they ‘read’, how much and how long
How did you read the contents of e-books \((n=12,042)\)

- I read the contents from a screen: 61.8%
- A bit of both: 31.4%
- I printed the contents and read from paper: 6.3%
- I don't remember: 0.4%
How did you read the contents of e-books by age

\( (n=12.042) \)
How long do you think you spend reading an e-book from the screen in one session? (n=12,038)

- >20 minutes: 38.6%
- 11-20 minutes: 39.0%
- 6-10 minutes: 20.6%
- 3-5 minutes: 10.2%
- <3 minutes: 3.8%
- Can't remember: 1.5%
Flickers

- A kind of channel hopping, checking form of behaviour
- Power browsing
How much of last e-book you viewed did you read online? (n=12,014).
How much of that e-book did you read online? Student v teacher

\((n=10,966)\)

<table>
<thead>
<tr>
<th></th>
<th>Students</th>
<th>Teachers</th>
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<tbody>
<tr>
<td>I read the whole book</td>
<td>5.7</td>
<td>3.9</td>
</tr>
<tr>
<td>I read several chapters</td>
<td>19.8</td>
<td>13.5</td>
</tr>
<tr>
<td>I read one whole chapter</td>
<td>8.4</td>
<td>6.8</td>
</tr>
<tr>
<td>I dipped in and out of several chapters</td>
<td>54.3</td>
<td>60.0</td>
</tr>
<tr>
<td>I just looked at it very briefly</td>
<td>11.1</td>
<td>15.2</td>
</tr>
<tr>
<td>I don’t remember</td>
<td>0.9</td>
<td>0.7</td>
</tr>
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</table>
How much of that e-book did you read online? By gender
\((n=11,871)\).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Female</th>
<th>Male</th>
</tr>
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<tbody>
<tr>
<td>I read the whole book</td>
<td>4.3</td>
<td>8.1</td>
</tr>
<tr>
<td>I read several chapters</td>
<td>17.4</td>
<td>21.0</td>
</tr>
<tr>
<td>I read one whole chapter</td>
<td>8.3</td>
<td>7.4</td>
</tr>
<tr>
<td>I dipped in and out of several chapters</td>
<td>56.9</td>
<td>51.3</td>
</tr>
<tr>
<td>I just looked at it very briefly</td>
<td>12.4</td>
<td>11.1</td>
</tr>
<tr>
<td>I don’t remember</td>
<td>0.7</td>
<td>1.0</td>
</tr>
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</table>
Digital Information Footprints

Activity Metrics
1. Number of pages viewed
2. Number of full-text downloads
3. Number of sessions conducted
4. Site penetration
5. Time spent viewing a page
6. Time spent on a session
7. Number of searches undertaken in a session
8. Number of repeat visits made
9. Number of journals used
10. Number of views per journal

Information Seeking Characteristics
A. Type of content viewed
   1. Number of journals used in a session
   2. Names of journals used
   3. Subject of e-journal used
   4. Age of journal used
   5. Type of material viewed
   6. Type of full-text view
   7. Size of article used
   8. Publication status of article

B. Searching style
   1. Search approach adopted
   2. Number of searches conducted in a session
   3. Number of search terms used in search
   4. Form of navigation

User Characteristics
1. Subject/discipline
2. Academic status
3. Geographical location
4. Institution
5. Type of organization used to access the service
6. User demographics

28 Key Features
Round-up

- Seen enough already to know going to prove very popular. Everything we have learnt about the Virtual Scholar tells us that. And for once we are researching as it happens. Looking for best practice to feed back to the community.
- Information seeking different from e-journals – busier sessions, older content viewed, more use at weekends, lower use of search facility. Not surprising, different content and people
- Could have an interesting knock-on on e-journal usage
- Implications of biggest user group not having to visit library – even more remote from their users? Also literacy concerns here.
Round-up 2

- Publishers getting closer to users?
- Publishers the new librarians, and librarians the new publishers? OUP walled-yard approach.
- Volatility associated with any digital roll-out need to monitor closely.
- Watch out – preoccupied Facebook. Real challenge will come in own backyard – books
- But don’t worry the whole community on the job! The JISC observatory is a huge step forward in LIS/Publishing research.
CIBER (Centre for Information Behaviour and the Evaluation of Research)

- 8 years of CIBER researching the digital transition. Moving over to e-books.
- CIBER researchers are....