# The Scholarly Communication Revolution

## Information Tools and Content in a Global and Institutional Setting

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# Structure

- Scholarly Communication
- The Challenge for Vendors
  - Digital Asset Management
  - E-Learning
  - The world of Open Source software and Open Access content
- Conclusions

# Scholarly Communication

❑ Scholarly Communication
  ❑ A problem of definition

❑ Scope of the term is wider than "scholarly publishing" and covers the authoring, publishing (in a broad sense), and reading of information produced by members of the academic community for teaching or research. "Information" in this context may be in a variety of formats
  ❑ (CURL/SCONUL definition)

# Scholarly Communication

❑ Stakeholders usually defined as
- ❑ Authors
- ❑ Publishers
- ❑ Librarians
- ❑ Readers

❑ Other stakeholders, such as Vendors, not usually included in the debate
- ❑ This needs to change

# New definition?

❑Scholarly Communication encompasses **everything** that users need in order to be effective

❑**New definition**

❑The authoring, publishing, dissemination, and reading of information produced for teaching, learning or research in whatever format, with the tools and systems needed to provide access to, and storage of, these materials in perpetuity

❑It is an **inclusive** definition for stakeholders, systems, content and processes

# Institutional responses

❑ Universities are seeking to assert their management of institutional resources

 ❑ UCL has promulgated two policies on IPR (Intellectual Property Rights) in staff and student work
 ❑ The academic and student as author are seen to own the IPR in their outputs
 ❑ Policies available at http://www.ucl.ac.uk/Library/scholarly-communication/index.shtml

# Institutional responses

❑Universities are setting up institutional repositories to house pre-prints/post-prints of secondary research content
   ❑SHERPA network in the UK
      ❑http://www.sherpa.ac.uk/
   ❑DARE network in the Netherlands
   ❑Innovative partnership with SURF
      ❑http://www.surf.nl/en/themas/index2.php?oid=7

# Institutional responses

- ❑ E-Theses a growing interest
  - ❑ DiVA in Sweden contains E-Theses
    - ❑ http://www.diva-portal.org/about.xsql
  - ❑ Arrow in Australia – e-prints, e-theses, electronic publishing
    - ❑ http://www.arrow.edu.au/
- ❑ International Workshops
  - ❑ To skill/inform stakeholders
  - ❑ OAI4 in Cern, 20-22 October, 2005
    - ❑ Organised under LIBER Access Division
    - ❑ http://oai4.web.cern.ch/OAI4/
    - ❑ Ex Libris is a generous sponsor of OAI4

# Institutional Challenges

❑ **Managerial**
  ❑ How to do more with less
    ❑ Resources, people, money
  ❑ How to manage change
    ❑ Universities, by their size and complexity, do not move quickly
  ❑ How to identify the right Vision
    ❑ Visioning is one of the hardest parts of strategic planning

# Institutional Challenges

- ❑ **Cultural**
  - ❑ Who leads?
    - ❑ Senior management in a university?
    - ❑ Librarians/Learning Technologists?
    - ❑ Academics?
    - ❑ Students?

# Institutional Challenges

❑ **Political**
- ❑ How do you gain support from
  - ❑ Senior University administrators?
  - ❑ Academics and researchers who publish?
  - ❑ Commercial publishers?
  - ❑ Users of library and information systems?
  - ❑ Government?

# Drivers

- UK Parliamentary enquiry into STM (Science, Technology and Medicine) publishing
  - http://www.publications.parliament.uk/pa/cm200304/cmselect/cmsctech/399/39902.htm
- Committee received evidence from all stakeholders
- Attendance at Committee's public meetings was packed
  - Chairman, Dr Ian Gibson, said in public that the issue was clearly of immense interest. The Committee wanted to know why

# Findings

❑ Funders should mandate funded researchers to self-archive their papers in repositories

❑ Need for a joined-up repository initiative, allowing single-site searching and access

❑ Need to address quality-assurance issues, perhaps with "kite-marking"

❑ Need to overcome copyright barriers

# Author Pays

❑ For Journal Publishing

❑ Early indications that an Author Pays model could work, replacing subscriptions

❑ Government should facilitate this work – Research Councils should make funds available for authors to experiment

❑ Sticking points: "free-riders", learned societies, copyright and, in certain contexts, peer review

# Responses

- ❏ UK Government so far declines to act
- ❏ Research Councils UK to mandate deposit for funded research outputs
  - ❏ http://www.rcuk.ac.uk/access/index.asp
  - ❏ Being opposed by commercial publishers
- ❏ Wellcome Trust also mandating deposit 'within six months of publication'
  - ❏ http://www.wellcome.ac.uk/doc%5Fwtx025191.html

# Responses

- National Institutes of Health (NIH) request deposit of funded outputs within 12 months of publication
  - http://grants.nih.gov/grants/guide/notice-files/NOT-OD-05-022.html
- Overview of the issues in *The Scientist*
  - http://www.the-scientist.com/news/20050519/01

# Structure

❑ Scholarly Communication

❑ The Challenge for Vendors

# Challenges for Vendors

❑ What should Vendors be doing about the revolution in Scholarly Communication?

❑ Using three Case Studies, this paper
  ❑ Suggests issues of strategic importance to libraries and users
  ❑ Highlights areas and topics on which the community and Ex Libris should have dialogue
  ❑ Attempts to identify areas for future development
  ❑ A mechanism for progressing that work in partnership

# Structure

❑ Scholarly Communication

❑ The Challenge for Vendors

   ❑ Digital Asset Management

# Digital Assets

❑UK Ex Libris Chief Librarians worked with Ex Libris on UK Digitool Programme, using Digitool v. 2.4

    ❑E-Theses

        ❑Led by UCL

    ❑Digital images

        ❑Led by Goldsmiths, University of London

    ❑Committee records

        ❑Led by University of Westminster

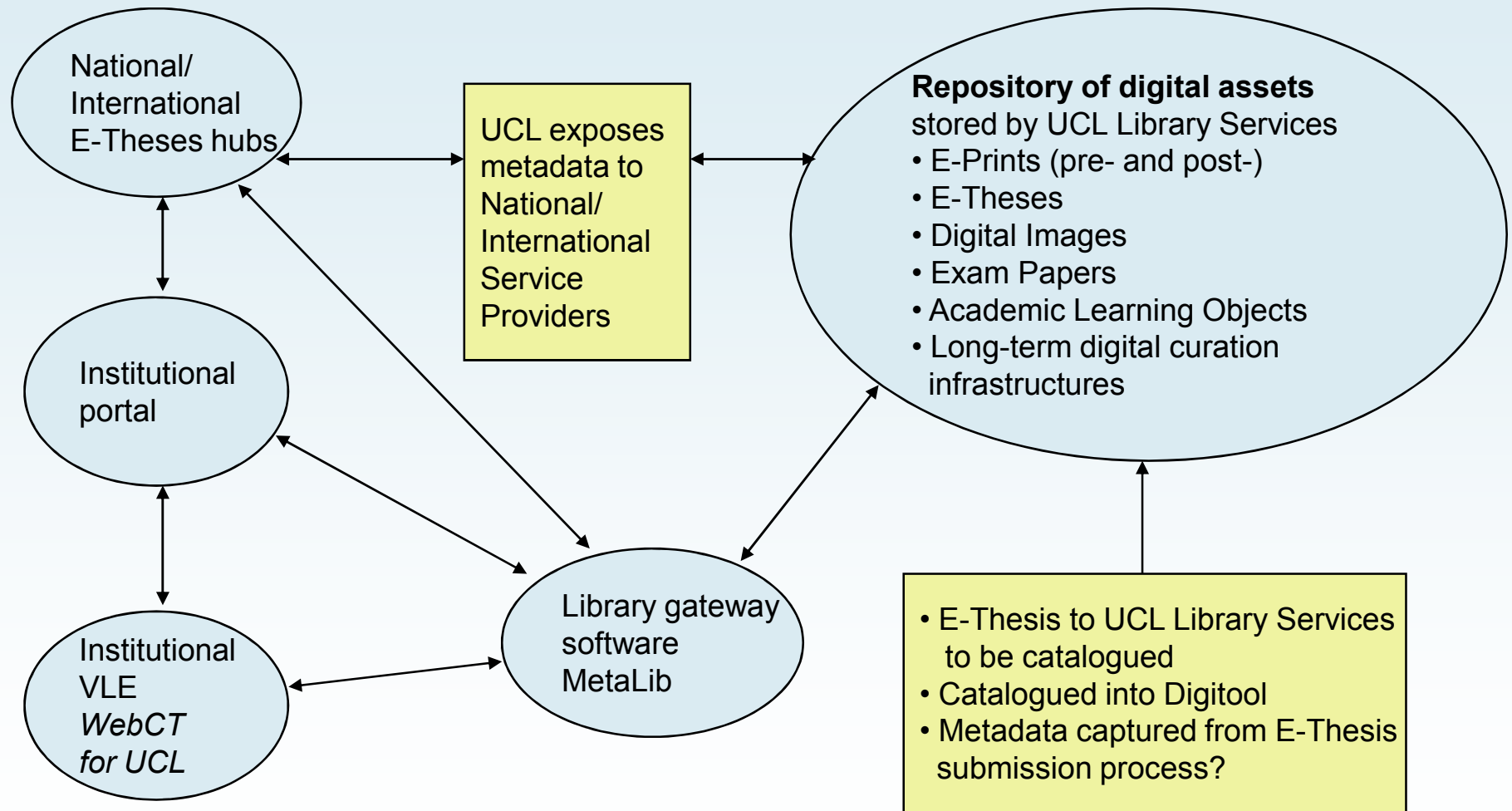    ❑Reports available on request

# Digital Assets

❑E-Theses

    ❑For Digitool v. 2.4, UCL found

    ❑Rapid/accurate indexing of full text

    ❑Configurable indexing/web screens

    ❑OpenURL support helpful

    ❑Object media types list not exhaustive

    ❑Deep linking from Virtual Learning Environment (VLE) possible only to metadata in v. 2.4

        ❑Not possible directly to the object

# Digitool v. 3

- Digitool v. 3 - not tested by UK Digitool Programme
    - Provides full repository functionality
    - E-reserves
    - Collections of Learning Objects
    - Licensed e-collections
    - Special, cultural collections
    - Conforms to OAIS (Open Archival Information System) for digital curation
    - Separate JISC-funded project on digital curation with UCL, British Library and Ex Libris reports in January 2006
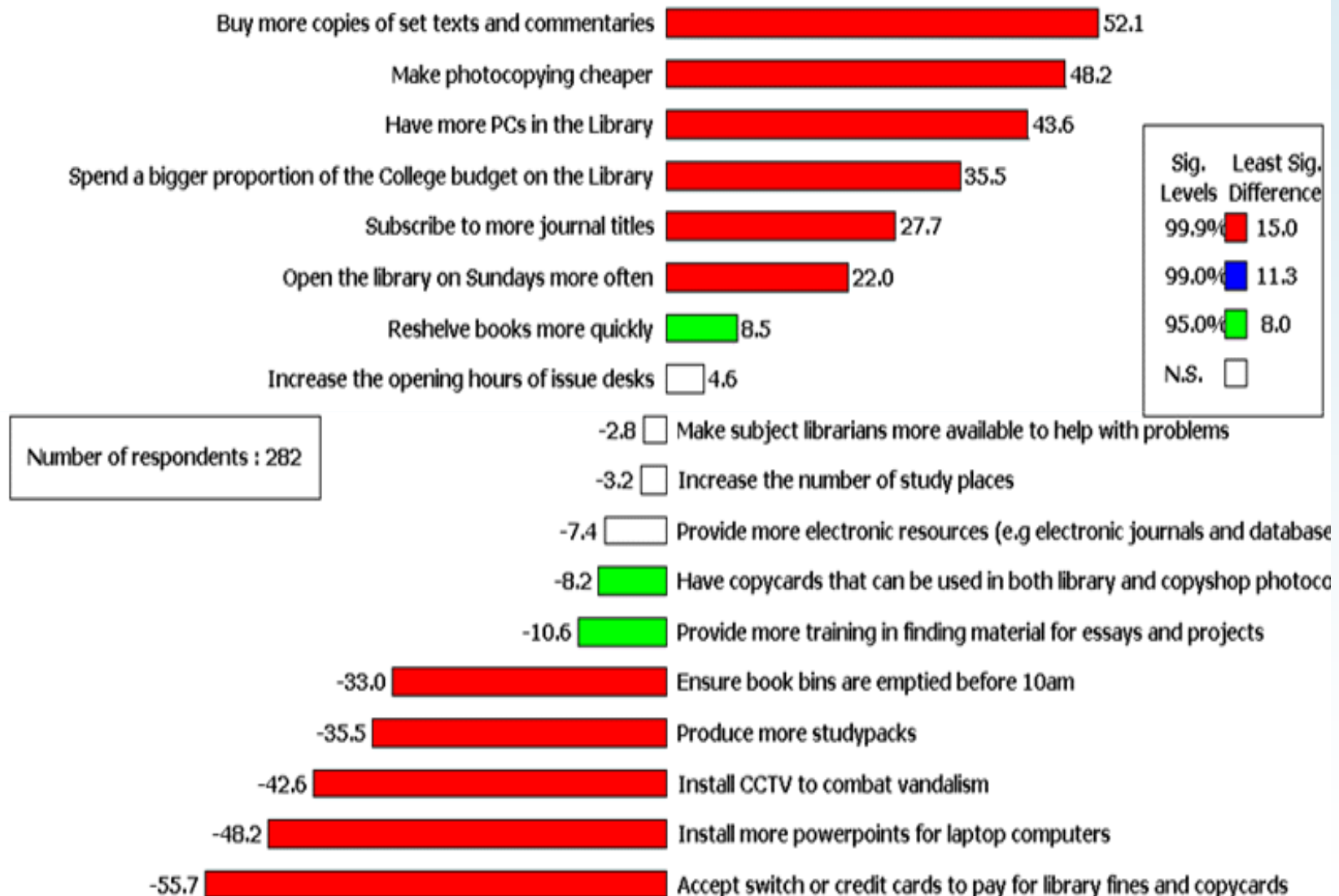        - http://www.ucl.ac.uk/ls/lifeproject/

**E-Theses@UCL: The Future?**

# Structure

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❑Digital Asset Management

❑E-Learning

**Survey Results digram (full size)** — Back to Article

| Recommendation | Value |
|---|---|
| Buy more copies of set texts and commentaries | 52.1 |
| Make photocopying cheaper | 48.2 |
| Have more PCs in the Library | 43.6 |
| Spend a bigger proportion of the College budget on the Library | 35.5 |
| Subscribe to more journal titles | 27.7 |
| Open the library on Sundays more often | 22.0 |
| Reshelve books more quickly | 8.5 |
| Increase the opening hours of issue desks | 4.6 |
| Make subject librarians more available to help with problems | -2.8 |
| Increase the number of study places | -3.2 |
| Provide more electronic resources (e.g electronic journals and databases) | -7.4 |
| Have copycards that can be used in both library and copyshop photoco... | -8.2 |
| Provide more training in finding material for essays and projects | -10.6 |
| Ensure book bins are emptied before 10am | -33.0 |
| Produce more studypacks | -35.5 |
| Install CCTV to combat vandalism | -42.6 |
| Install more powerpoints for laptop computers | -48.2 |
| Accept switch or credit cards to pay for library fines and copycards | -55.7 |

Number of respondents : 282

| Sig. Levels | Least Sig. Difference |
|---|---|
| 99.9% | 15.0 |
| 99.0% | 11.3 |
| 95.0% | 8.0 |
| N.S. | |

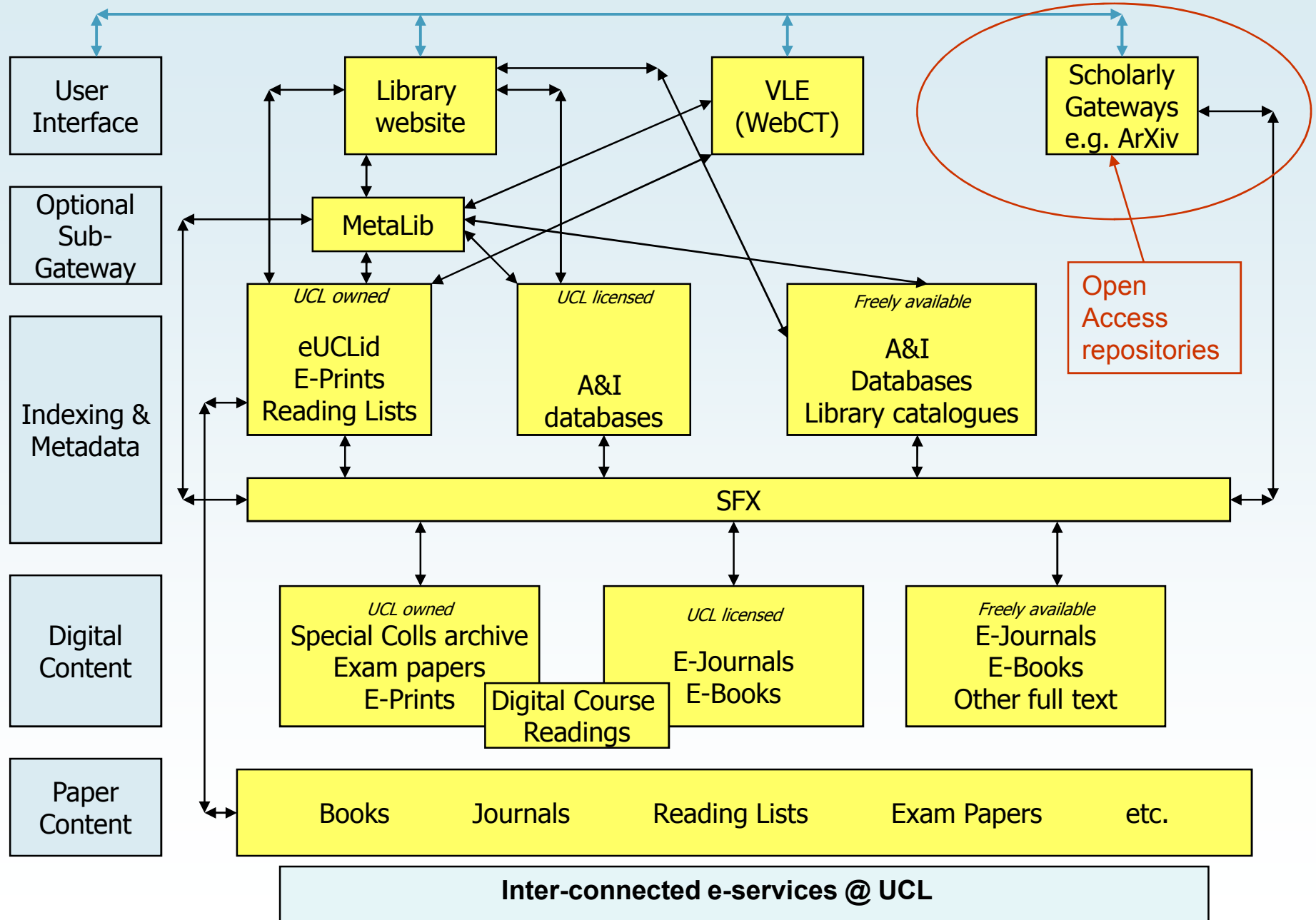**UCL Taught Student Survey 2000**

UCL

# Snapshot

❑ Questionnaires sent to a random sample of taught students

❑ Results

  ❑ Buy more set texts

  ❑ Spend more on the Library

  ❑ No-one wanted more e-resources

❑ E-Learning does not figure in this survey

# Ex Libris provision?

❑ No UK Library uses Ex Libris Course Reserves system
  ❑ Pre-supposes every item on the Reading List is held physically in the Library
❑ Reading List system in use by Loughborough, UCL, Newcastle, Nottingham, Royal Holloway, interacting with Aleph via Z39.50, and X-server?
❑ New E-Learning agenda is an opportunity for
  ❑ Dialogue with the Ex Libris community
  ❑ New development work to produce a workable system for core readings in digital format
  ❑ Work for a separate Reading List module or for Digitool?
  ❑ Is there not now a Business Case for further development?

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  ❑ The world of Open Source software and Open Access content

**UCL**

| | |
|---|---|
| **User Interface** | Library website — VLE (WebCT) — Scholarly Gateways e.g. ArXiv |
| **Optional Sub-Gateway** | MetaLib |
| **Indexing & Metadata** | *UCL owned* eUCLid E-Prints Reading Lists — *UCL licensed* A&I databases — *Freely available* A&I Databases Library catalogues — Open Access repositories — SFX |
| **Digital Content** | *UCL owned* Special Colls archive Exam papers E-Prints — Digital Course Readings — *UCL licensed* E-Journals E-Books — *Freely available* E-Journals E-Books Other full text |
| **Paper Content** | Books  Journals  Reading Lists  Exam Papers  etc. |

**Inter-connected e-services @ UCL**

# Open Source and Open Access

❑How does Ex Libris software interact with Open Source software and Open Access content?
- ❑UCL E-prints repository in MetaLib – 'search and link' resource
    - ❑No Boolean searching possible
    - ❑Either Title/Abstract/Keyword **or** Author searching allowed
    - ❑MetaLib can only display results from UCL Eprints repository in native E-Prints interface
    - ❑To solve these problems requires local software development
- ❑Ex Libris will supply add-on MetaIndex, at a cost
    - ❑Allows full harvesting & indexing of metadata
    - ❑But, of content that is itself free at point of use…

# The wider world of Open Access

❑Repositories such as CogPrints and arXiv are not directly searchable via MetaLib
- ❑Metadata can be harvested by Elsevier Scirus, and MetaLib searches this
- ❑But full metadata not available in Scirus…

❑REPEC and the Directory of Open Access Journals
- ❑Available only as 'Search and Link' resources
- ❑Results not brought direct into MetaLib
- ❑Local software development would need to be undertaken to achieve this

# The wider world

❑Ex Libris says

"It is possible for customers to configure MetaLib to cross search eprints and DSpace (and other OAI-PMH compliant repositories, including those using DigiTool) using the KnowledgeBase tools already available, but Ex Libris believes that more satisfactory results can be achieved by harvesting OAI-PMH metadata and loading it into MetaLib itself.  The tool for doing this (MetaIndex) is available as a MetaLib add-on."

# The wider world

❑In terms of SFX

❑Not possible to link from a citation to an OAI repository record using **bibliographic** metadata such as journal title, ISSN etc.

❑Linking requires an **OAI record id**

❑Since few SFX "sources" (citations in whatever database) contain OAI record ids, UCL has not implemented this linking so far

# The next steps?

❑ Is this the best approach in an Open Source and Open Access environment?
  ❑ Each customer is invited to do a lot of work locally to configure searching of OAI repositories via Ex Libris tools
  ❑ It is not a joined-up approach to the emerging landscape of Open Access content
  ❑ If Open Access is a major player on the Information Landscape…
  ❑ Does not the whole architecture of search and retrieval in a global Open Access environment need to be looked at again in an Ex Libris context?

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❑ Conclusions

# Conclusions

❑ Scholarly Communication is in the throes of a revolution

    ❑ A new definition, which encompasses all stakeholders and processes, has been suggested

❑ Case Studies

    ❑ Digital Asset Management is of growing importance

    ❑ E-Learning is a major driver for change

    ❑ Scholarly Communication presents challenges for the use of technologies and development of tools

❑ Room for development by Ex Libris in these areas

# Conclusions

❑ Is there a need for a Group of international Ex Libris user institutions
  - ❑ To chart trends in the Scholarly Communication
  - ❑ To map these changes against Ex Libris's suite of products
  - ❑ To identify areas for development

❑ Libraries and Ex Libris need to work in partnership to
  - ❑ Deliver on new agendas
  - ❑ Add value

# And finally…

❑ Thanks for listening

❑ Happy to hear questions

❑ And maybe identify some answers