



Open Access Workshop

Maximising research impact

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Bioversity Library

Building and maintaining institutional repositories: challenges and technical issues

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Overview

- **Building** the IR
 - the what and why of IR
 - softwares available
 - OAI-PMH Compliancy
 - Data provider to OA initiative and gateways
- **Maintaining** the IR
 - Concerns
 - Self archiving: Maximising research impact
- **Role of Librarian**

What is an IR?

- digital archive of the intellectual product created by the faculty, research staff, & students of an institution
- accessible to end users both within and outside of the institution, with few if any barriers to access.
- the content of an institutional repository is:
 - Institutionally defined
 - Scholarly
 - Cumulative and perpetual; and
 - Open and interoperable

IRs: what do they contain?

Authors self archive/deposit:

- Pre-prints & post-prints of papers published in research journals
- conference papers
- theses
- PPTS, posters, videos etc—any digital assest produced by the organisation



Cornell University
Library

arXiv.org

Open access to 554,389 e-prints in Physics, Mathematics, Computer Science, Quantitative Bi

Subject search and browse:

8 Apr 2009: [Added public author identifiers, Facebook interaction, myarticles widget, and per](#)

31 Mar 2009: [Quantum Gases \(cond-mat.quant-gas\) subject area added](#)

See cumulative "What's New" pages.

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Sussex Research Online

Putting Sussex's research online and accessible to all.

IRs: why are they important?

- Increasingly intellectual output of institutions is created and accessed in digital form
- Research in STM journals not accessible without subscription.
- Authors/Institutes often have to buy back the research from the publishers (that often has been publicly funded)
- Immediate and strategic response to the access problems associated with the existing scholarly publishing model
- Institutional visibility and prestige

IRs: main softwares available

- [DSpace](#)
- [Eprints](#)
- [Fedora Commons](#)
- [Digital Commons](#)

IRs: services and support

- Developers provide services and support to users:
 - Regular customised training courses
 - Hosting and maintaining your repository
 - Customising the repository to your specifications
 - Importing your legacy data
 - OAI-PMH Compliant
- Users create support communities
- Annual conferences for user groups are held

OAI-PMH Compliancy

- OAI compliant means that the article metadata (title, authors, etc.) are created in the format laid down by the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH)
- The OAI-PMH supports items with multiple formats of metadata. At a minimum, repositories **must** be able to return records with metadata expressed in the [Dublin Core](#) format.
- documents may be in different formats and locations, but if they use the same metadata tags they become "interoperable."
- metadata can be "harvested " and all the documents can then be jointly searched and retrieved as if they were all in one global collection, accessible to everyone.

OA Gateways

Registry of Open Access Repositories (ROAR)

[Home](#) | [Search](#) | [Search Content](#) | [Browse by Country](#) | [Browse by Type](#) | [Browse by Software](#) | [Register in ROARMAP](#) | [About](#)

[Login](#) | [Create Account/Add Repository](#)

Search WorldCat

OAlster
Find the pearls

Scientific Commons beta

RePEc

Openarchives.eu

OpenDOAR

Directory of Open Access Repositories

[Home](#) | [Find](#) | [Suggest](#) | [Tools](#) | [FAQ](#) | [About](#) | [Contact Us](#)

The Directory of Open Access Repositories - OpenDOAR

[Search for repositories](#) | [Search repository contents](#) | [List of repositories](#) | [Repository Statistics](#)

OpenDOAR is an authoritative directory of academic open access repositories. Each OpenDOAR repository has been visited by project staff to check the information that is recorded here. This in-depth approach does not rely on automated analysis and gives a [quality-controlled](#) list of repositories.

**OpenDOAR has
over 1650 listings!**

Maintaining the IR

Self archiving: concerns

- “Quality” of self-archived articles
- Issue of copyright
 - [SHERPA/Romeo website](#)
- Effects on the present scholarly publishing model
- Costs that self archiving might impose to an institution

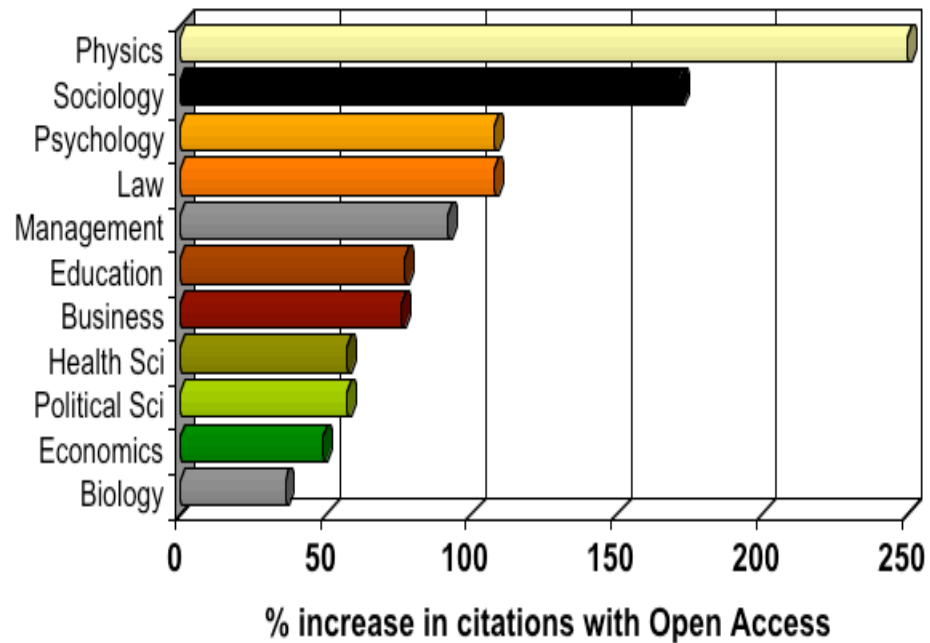
Swan & Brown (2005)

“All IRs projects so far have observed that the effort and organizational costs required to address repository policy, content management and faculty marketing issues dwarf the technical implementation effort”

- Deciding what metadata to store and present*
- Crafting author permissions & licensing agreements to disseminate work indefinitely*
- Developing document creation & input guidelines*
- Training staff and authors in using the software to submit content*
- Marketing the repository*

Self archiving: benefits

- Increase citations and uptake of research
- Studies have shown that final drafts over the web are downloaded and cited twice as much across all scientific, biological, social sciences and humanities disciplines .
 - Lawrence (2001)
 - Brody & Harnard (2004)
 - Hajjem (2005)



Average log OA/non-OA ratios of citation counts for articles in the same journal/year that were (OA) and were not (non-OA) self-archive . Across all fields tested, OA articles had more citations in all fields tested (Brody & Harnad 2004; Hajjem et al 2005).

Submissions to IRs

- Only 15% of the 2.5 million articles published annually are spontaneously self archived worldwide today
- Author's motivation/concerns/time constraints in contributing to IRs is one of the biggest obstacles
- Surveys show that 95% of authors will comply with self-archiving mandate, if employer required it.
 - 81% willingly - 14% reluctantly - 5% wouldn't comply

Maximise research impact

- Harnad et al (2009) states:

“All research institutions should maximise their own research impact and set an example by adopting a self archiving mandate....

Research funders (both govt. and private) should reinforce this by mandating that the research they fund must be self archived in the fundee’s IR as a condition of the grant.....

there is no need for any penalties for non-compliance with the mandate; the mandate (and its own rewards: enhanced research access and impact) will take care of itself”

Role of library/information unit

- IR leader and champion
 - Guidelines and procedures
 - Focal point for copyright issues
 - Training
 - Marketing repository
- Advocacy role
 - Active in management meetings, provide insight and advice
 - Participate in developing OA policies for the organisation

Main sources cited



- *Crow, R. (2002) The case for institutional repositories: a SPARC position paper. <http://bit.ly/bnN7SB>*
- *Harnad, S. (2009) Maximizing and measuring research impact through university and research funder open access self archiving mandates <http://bit.ly/aVeliL>*
- *Swan, A. (2005) Open access self archiving: an author study. Key Perspectives Ltd. <http://bit.ly/apr8JS>*

Thank you