International researchers and open access

Alma Swan

Key Perspectives Ltd
Study on open access publishing funded by JISC/OSI (Joint Information Systems Committee/Open Society Institute) (Feb 2004)

Study on developing a national UK model for open access archiving for JISC (July 2004)

Current study of author behaviour with respect to self-archiving

Industry developments
“The question is poorly posed. Don't you just hate trying to survey epidemiologists?!!”
“Re questions 9 and 10: Have been suffering from a faulty hip, waiting for an operation. Am now recovering from same and hoping to be much more active in future.”
“I just want to establish a relationship with you.”
“I publish so as not to perish.”
Reasons for publishing

- Communicate results to peers
- Advance career
- Gain personal prestige
- Gain funding
- Financial reward

% respondents

Key Perspectives Ltd
“I'd like my work to be more accessible, but I don't know what else I can do next to providing a copy online and announcing it in my weblog.”
Open Access journals

- 24% of authors have submitted an article to an Open Access journal
- 67% have not
- 8% don’t know!
Why publish in an OA journal?

- The principle of free access for all readers (18%)
- Perception that OA journals have a larger readership (10%)
- Perception that OA journals have faster publication times (10%)
Why they have not published in any Open Access journals

- Not familiar with any OA journals in their field (36%)
- Could not identify any OA journals to publish in (22%)

......so far....
49% are likely or very likely to publish an article in an Open Access journal in the next three years.
How many authors are self-archiving at the moment?

<table>
<thead>
<tr>
<th>Location</th>
<th>Pre-print</th>
<th>Post-print</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal web page</td>
<td>16%</td>
<td>26%</td>
</tr>
<tr>
<td>Institutional (or departmental) archive</td>
<td>15%</td>
<td>22%</td>
</tr>
<tr>
<td>Centralised (subject-based) archive</td>
<td>9%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Key Perspectives Ltd
For how long have they been doing this?

- Up to 1 year: 20%
- 2-3 years: 33%
- 3-5 years: 22%
- >5 years: 25%
“I am quite ignorant about this topic.”
78% of authors who have not self-archived are not aware of the possibility of providing open access to their work by self-archiving.
[How did you originally learn about self-archiving?]

“From you today.”
How did they learn about self-archiving?

- Followed Open Access debate
- From peers
- Information from institution or library
- Work in field with subject-based archives
- From co-authors
- From information from dept or school
“I publish a lot by accident …

… I do joint research and often don't know until after the fact that my collaborators have put my name on a publication”
Who has done the depositing?

- Author: 63%
- Library staff: 21%
- Student/assistant: 12%
- Other: 4%
“Self-archiving in the PhilSci Archive has given instant worldwide visibility to my work. As a result, I was invited to submit papers to refereed international conferences/journals and got them accepted.”
Impact

Citation rates go up (Brody et al):
- studied across many different fields, not just the sciences
- in every field there is evidence of increased citation of articles made OA
- in some fields this is as much as 3-fold
“Also your question about citation rates is not worthy of respect....

.... Mendel had zero citations for several decades. Likewise Boltzmann, etc etc ....

.... It is merely a measure of fashionable conforming and backscratching.”
**Recognition and anticipation of hand motions using a recurrent neural network**

For this eprint: [Past four weeks] [This year] [Last year] [All years]

Most viewed eprints: [Past four weeks] [This year] [Last year] [All years]

Repository-wide statistics: [by Year/month] [by Country]

### Abstract views and document downloads for past 4 weeks

<table>
<thead>
<tr>
<th>Abstracts</th>
<th>Downloads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Views</td>
<td>0</td>
</tr>
</tbody>
</table>

### Views by country (derived from IP address of query) for past 4 weeks

<table>
<thead>
<tr>
<th>Country</th>
<th>Abstracts</th>
<th>Downloads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

### History of views for this ePrint

<table>
<thead>
<tr>
<th>Period</th>
<th>Abstracts</th>
<th>Downloads</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005 Jan</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>2004 Dec</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2004 Nov</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>2004 Oct</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>
“This is a very handy way to keep all of one's work together and findable, which helps me as much as anyone else.”
So impact yes, plus …

- Secure storage (for completed work and for work-in-progress)
- A location for supporting data that are unpublished
- One-input-many outputs (CVs, publications)
It also helps institutions

- Standardised online CVs for all researchers (e.g. RAE exercise)
- Permanent record of institution’s output
- ‘Marketing’ tool for universities
- Repository for all digital output from an institution
“Time does not permit self-archiving .... No staff or other assistance to do that in our university, either.”
How easy was it to do?

First article

- Easy
- Difficult
- Few minutes
- Less than 1 hour
- More than 1 hour

Subsequent articles
“I wouldn’t have had reservations about open access if I weren’t an editor. There are benefits to the scientific community of societies making money.”
In 2003, 116,723 physics articles were published in 421 journals.
arXiv receives 3,500 postings per month (i.e. 42,000 per annum):
  - High energy physics: 800 per month (flat)
  - Condensed matter: 800 per month (growing)
  - Astrophysics: 600-700 per month (flat)
Learned societies who publish physics research

- American Physical Society
- Institute of Physics Publishing Ltd
Journals in the areas covered by arXiv

**APS:**
- Physical Review D
- Physical Review C
- Nuclear Physics

**IOPP:**
- Classical & Quantum Gravity
- Journal of High Energy Physics
- Journal of Physics G
- J. Cosmology & Astroparticle Physics

Key Perspectives Ltd
“How many subscriptions have you lost as a result of arXiv?”

- APS: “None”
- IOPP: “None”
“How have subscriptions to the titles most affected been going over the last decade?”

- APS: “We have had an overall decline of an average of about 3% a year (less lately) across all our journals since the 1960s.”

- IOPP: “The general attrition slope has not changed.”
“What do the download figures show?”

**APS:** “*Physical Review D* and *Physical Review C* are a bit below the average for our other journals.”

**IOPP:** “Download figures [for those journals] are not as high as average, because people are downloading from arXiv.”
APS:
“We don't consider it [arXiv] a threat.

We expect to continue to have a symbiotic relationship with arXiv. As long as peer review is valued by the community (and it seems to be), we will be doing peer review.”

Key Perspectives Ltd
What about the download patterns?

- Libraries using the measure of price per download
- Authors self-archiving a final-version
- Users downloading the archived version
- Downloads are not showing up in publisher usage statistics
- Libraries putting journals on candidates-for-cancellation list
Publisher incentives

- Authors add a link to the publisher’s e-journal URL
- Archive usage statistics provided to publishers
“It is a requirement of my job.”

“I publish because it is a professional responsibility, and demanded by my employment contract.”

....they need to be TOLD to do it
If your employer or research funder REQUIRED you to deposit copies of your articles in an open archive....

– 79% would comply WILLINGLY
– 17% would comply reluctantly
– 4% would not comply
Authors need to be told to self-archive...

Who can tell them?

- Funders
- Institutional employers
“Like Einstein, Darwin, etc, etc, I have no funders, assistants.”
How much influence can funders exert?

City University on behalf of the Wellcome Trust:
- half a million papers in biomedicine
- 7 out of 8 carry a proper acknowledgment
- 35% had no financial acknowledgment

Physics:
- 873 papers
- 93% carried an acknowledgment
- 31% had no financial acknowledgment
UK National E-prints service: Centralised model

Author 1: Metadata plus associated object

Author 2: Metadata plus associated object

Author 3: Metadata plus associated object

Central archive

SERVICE PROVIDERS

Users / Other services
UK National E-prints service: Harvesting model

- Institutional repositories
- Open access journals
- Subject-based repositories

Central archive

SERVICE PROVIDERS

Users / Other services
Action points

- Tell authors how to deposit: Do it for them if necessary or adopt a simple-solution strategy
- Tell authors the advantages: Advocate
- Tell authors the consequences are not diabolical! Reassure
- Tell authors to do it: Mandate

Key Perspectives Ltd
www.keyperspectives.co.uk/OpenAccessArchive/Eprints_LP_paper.pdf

Delivery, management and access model for E-prints and open access journals within further and higher education. 2004 (Report of a JISC study). pp 1-121.
www.jisc.ac.uk/uploaded_documents/ACF1E88.pdf

Authors and open access publishing. *Learned Publishing*, 2004, **17** (3), 219-224.
www.keyperspectives.co.uk/OpenAccessArchive/Authors_and_open_access_publishing.pdf

Report of the JISC/OSI journal authors survey. pp 1-76.
www.jisc.ac.uk/uploaded_documents/JISCOAreport1.pdf