Comparison of IR content policies in Australia

Arthur Sale, Professor of Computing (Research), University of Tasmania
6 December 2005, revised 23 February 2006

Seven Australian universities (of 38) have established institutional repositories (also known as IRs or eprint archives) that can be analyzed for content and which were in operation during 2004 and 2005:

- Australian National University (ACT)
- Curtin University of Technology (WA)
- The University of Melbourne (Vic)
- Monash University (Vic)
- The University of Queensland (Qld)
- Queensland University of Technology (Qld)
- University of Tasmania (Tas)

The University of Southern Queensland also has a small established repository, but was excluded from the sample because it was not harvested by the ARROW Discovery Service.¹ Several other universities have repositories in the process of establishment or recently established, and were also excluded.

Only QUT had a formal requirement for authors to deposit all research output in their IR during 2004 and 2005. All the other universities had voluntary deposit policies, and still have. Some universities in the sample have little or no interest in the self-archiving of postprints, and see their repositories as serving other functions, or are working on other activities.

Some universities are reported to have a Author Support² (AS) approach to their authors; others do not. It is difficult at this stage to disentangle AS from a requirement policy through lack of a AS metric, though it probably has a significant impact. However the AS impact is believed to be less than that of having an effective and enforced deposit policy, even if only loosely enforced, which is the justification for this analysis.

Procedure

The research output of all Australian universities, as assessed by the Australian Department of Science Education & Technology (DEST) criteria, is available in the HERDC Time Series statistics³. The statistics are only updated to 2003 at present, so this year was used as the 2004/5 target for publication output. Universities with growing research output will therefore be overstated in the figure and in reality are performing poorer.

The content of all seven universities was searched for content with a publication date of 2004 or 2005. This was done (a) via a search on all the repositories, and (b) a search on the ARROW Discovery Service, both on 3 December 2005. The highest number of documents reported from (a) and (b) was accepted; the maximum discrepancy was 2 documents. It is recognized that 2005 is not complete and self-archived 2005 documents might trickle in to the repositories until the first quarter of 2006 or later. The results are however striking.

¹ http://search.arrow.edu.au/apps/ArrowUI/
² In other words, very supportive and appropriate Library (or other repository manager) interactions with the authors.
The following figure shows the percentage of the reported DEST output in each of the repositories for 2004 and 2005 publication dates.

**Analysis**

No Australian university with a voluntary policy collects significantly more than 15% of the DEST reportable content and most much less. This is consistent with international data for which 15% is accepted as an average limit. The DEST reportable content is itself estimated at being only 50% of university research output.

QUT stands out at 4× higher than its nearest competitor (2005 data, 2.4× in 2004). Detailed analysis of QUT’s collection rates suggests that the deposit rate surged after March 2005, and that QUT can expect to have a final success deposit ratio for 2005 near 60% and a success ratio for 2006 documents nearer to 80%. The difference is attributed to the deposit policy coupled with good author support practices.

It is not easy to disentangle 2004 deposits of 2004 publications from 2005 deposits of 2004 publications, but in any case in this short timeframe even belated deposit is desirable and is indeed to be expected for publications in late 2004. The total number of deposits in either year is unreliable since it includes retrospective deposits outside this publication window.

**Conclusion**

A requirement to deposit research output into a repository coupled with effective author support policies works in Australia. Voluntary policies do not, regardless of any author support, consistent with international data.

It is well-overdue for DEST to rule that postprints of all research that Australian universities report to DEST must be deposited in an institutional repository, to take effect say for 2007. The costs to the universities are ridiculously small; the benefits from allowing Australians to access the research they fund through the public purse, and from increased global research impact are enormous.