

University of New England FAQs for IRs

Why is an institutional repository important?

An IR will permit UNE to make the best strategic use of its diverse range of research assets. UNE has failed to capitalize on much of the excellent research produced at the institution over the last decade. This has been for three reasons:

1 Limited distribution of the range of institutional research assets

In the past, academic staff and higher degree students at UNE have published research primarily through peer-reviewed academic journals. Much research output of UNE schools and research bodies in other forms remains invisible and uncited. The circulation of many categories of research — theses, dissertations, conference papers, presentations, research reports, working papers — is extremely limited. Little UNE material, other than journal articles, appears in international research bibliographies and citation indexes.

2 Trends in academic publishing

Even when UNE research reaches the pages of peer-reviewed journals, the impact of these publications in terms of the University's research prestige has been greatly diluted. Research output at UNE in terms of published journal articles has been static or declining since the late 1990s. This trend has occurred at a time when the number of peer-reviewed journals in the academic marketplace has risen. This increase in titles has occurred despite falling subscriptions to established journals. Rising number of journal titles and falling circulations has meant that the articles published in peer-review journals by UNE authors are reaching a diminishing share of the academic audience.

3 The impact of the internet on models of research

Another cause for concern has been the growing importance of the Internet as a research tool. Peer-reviewed journals are no longer gatekeepers to the world of research. Google — not ScienceDirect, ISI Web of Science or Medline — is the preferred search tool of most research scientists and medical clinicians. Despite this trend, most UNE research assets remain invisible to Web searchers. Either they remain in paper or are inaccessible to search engines.

An institutional repository at UNE will add value to our research and increase its impact by:

- making it more accessible

- promoting it through greater exposure
- providing a durable location
- reducing the time between authorship and consumption
- supporting collaboration
- providing the basis for improved university ranking
- encouraging innovation in, and refinement of, accessibility and quality measures.

It also has the potential to improve organisational efficiency by utilising the one mechanism to improve research accessibility, rationalise information management within UNE and provide research assessment data to the government and other funding agencies.

Are we alone?

The situation at UNE is not unique. Many other universities are in a similar position.

Institutional repositories are relatively new. The trigger for the development of institutional repositories was the launch of EPrint by Southampton University in January 2001. Another stimulus was the release of the competing DSpace package at MIT in November 2002. Both Eprint and DSpace are both available in free, open-source versions. By January 2004 there were over 45 institutional repositories world-wide. Most of these are in the United Kingdom and the United States. However, institutional repositories are now a feature of the university sector in many European countries.

Institutional repositories exist in Australian universities in growing numbers. Some of the Australian universities with institutional repositories include the Curtin University of Technology, Monash University, ANU, the University of Melbourne, the University of Queensland and the University of Tasmania.

The promise of institutional repositories has led to the creation of a number of collaborative projects. The most important of these is the Australian Digital Theses (ADT) Project, which involves the majority of Australian universities. Four Australian institutions (Monash, the NLA, the UNSW and the Swinburne University of Technology) have formed the Arrow (Australian Research Repositories Online to the World) consortium. The role of this consortium is to provide a set of protocols and procedures to facilitate the creation of institutional repositories.

There is little doubt that institutional repositories are the future. Any institution, whatever its size or financial position, can create an institutional repository. Moreover, the potential for filling these repositories has never been greater. Issues regarding self-archiving and the storage of pre- and post-prints on institutional servers are moving towards a general resolution. It seems likely that legal barriers to this practice will ease. Major academic publishers, such as Elsevier, have already given their assent to pre- and post- prints. This is likely to become the standard position.

What are the strategic implications of an institutional repository for UNE?

Some of the benefits of an institutional repository are obvious, but indirect. Institutional repositories allow universities to publicise their research and teaching by providing open access to the research of its academic staff and postgraduate students. The quality of a university's research output on display in an institutional repository provides the most effective advertisement for the institution.

Apart from these indirect benefits, institutional repositories offer measurable advantages to universities in terms of prestige and funding. Such repositories can have a dramatic effect in the impact of research at an institution, as assessed in terms of citation counts. Research has shown that increased citation counts drive changes in the perceived quality of research. This results in additional outside funding to research teams. In such circumstances, institutional repositories offer universities the chance to create a virtuous circle. Greater visibility leads to enhanced funding, which in turn leads to better research outcomes, higher prestige and further funding.

There is an additional aspect to this argument. Research funding to universities in Australia is highly competitive. The relationship between citation counts, research prestige and funding means that universities slower to create institutional repositories will be at a significant disadvantage. First-mover advantages will accrue to those universities quicker off the mark, who can hope to cement their superior position over time.

The consolidation of these different functions in a single institutional repository means significant savings in terms of IT resources. Duplication of effort will lead inevitably to poorer project outcomes, delays, higher costs and greater loads on an already overstretched IT infrastructure.

The concept of a single institutional repository offers another benefit in terms of authorization and copyright compliance. There may be some material to which UNE needs to restrict access to specified groups of users. This includes commissioned research, research in progress and teaching material under copyright.

How will the three IR options be evaluated during RUBRIC Project?

The IR solutions to be evaluated by UNE during the RUBRIC project appear to meet the following criteria, but an important part of the project is to ensure that they do:

1. technical and functional capacity to support UNE's IR sustainably and cost-effectively
2. satisfactory usability and workflow for all parties and will meet UNE's core academic needs for the foreseeable future
3. have a clear support and upgrade path, with an embedded exit mechanism
4. satisfactory interoperability with other core systems, including the research management system

As well, the solutions must or should meet a number of other specifications of particular importance to IRs.

Why can't we use an existing content management system at UNE?

At the technical layer an IR has much in common with other digital content management systems – e.g., records management, web content, assets management, teaching objects, and so on. However, there are significant differences between these systems at the functional level, and major differences at the service level. Experience elsewhere suggests that tailoring a generic content management system to meet the requirements of an IR does not minimize the total cost of ownership.

Here are some specific requirements for an IR system:

Must support:

- OAI-PMH 2.0 (for metadata harvesting)
- at a minimum, the Dublin Core Metadata Element Set
- ASRC coding
- Item export/import
- Should support or plan to support:
 - XACML for fine-grained access control in accordance with institutional policy (under development by DEST-funded FRODO projects)
 - Shibboleth single sign on under development by DEST-funded FRODO projects)
 - Workflow configuration to collect metadata in accordance with a particular set of schemas
- Automatic extraction of preservation metadata

Simon McMillan

UNE RUBRIC Project Manager