



Universities UK

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Universities UK



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The role of repositories in supporting research, teaching and learning in UK universities

An OECD Council Recommendation of December 2006 states that member states should

‘take into consideration the Principles and Guidelines on Access to Research Data from Public Funding...as appropriate for each Member country, [and] develop policies and good practices related to the accessibility, use and management of research data.’



Supporting universities' agendas

- **Repositories increase an institution's visibility and prestige by bringing together the full range and extent of its research interests.**
- **Universities need to present their work effectively to develop and maintain a strong brand presence, emphasising quality education and research. It is therefore important that their work (in the form of research papers, etc.) is managed in a way that makes it possible.**



Supporting universities' agendas

- **Repositories are an important component in the carrying out of research and its publication and dissemination, acting as a valuable source of information and support to researchers – important for both individual researchers, institutions as a whole and the wider research community.**
- **Repositories offer a means to exploit the marketing potential of the web, while retaining control of the context in which an institution's outputs are presented.**
- **They also offer navigation routes from particular research papers to researchers, departments, and thereby to prospectuses and so on.**



Supporting universities' agendas: improving efficiency

- **Repositories enable Universities to manage their digital materials according to declared policies, especially where these repositories are embedded into institutional systems and processes, so that audit trails can be built up, enabling valid output measures to be developed for university work.**
- **Repositories can also play an important role in the quality and standards of data, establishing and driving up quality standards and incorporating peer review mechanisms to ensure confidence in content, as well as testifying to the quality of an institution's research.**

Supporting universities' agendas: data-driven science

- **The nature of science is changing: greater interdisciplinary research, more collaboration, more data, large and small datasets are being shared, etc.**
- **There is a need for an infrastructure to support this range of activity, seamlessly, enabling:**
 - (i) experimental and other research workflows to be designed and implemented;**
 - (ii) relevant data, metadata and administrative information to be captured as it is produced and re-used;**
 - (iii) appropriate access controls and management of IPR, etc.**

Supporting universities' agendas: data-driven science

- **Repositories are a key part of this infrastructure – e.g. laboratory repositories managing raw experimental and sensor data from instruments, subject-based data archives (and perhaps some institutional or departmental repositories) holding processed data, with analytic software and other information necessary to re-use the data, and institutional / subject repositories holding the resulting research papers. The advantage of repositories is that users will be able to navigate seamlessly between these (assuming they have the rights to do so).**
- **Repositories can accommodate increased volume of research data and can be used to store and provide access to scientific data and other related digital files, meaning that a published scientific paper could sit alongside the data upon which it is based.**



Supporting universities' agendas: lifelong learning

- **Both teachers and learners have increasing needs to manage and share materials under controlled conditions. Institutions may want to be able to re-use the learning materials between courses or between cohorts of the same course.**
- **Teachers may want to share assessment items to increase the reliability and robustness of assessment practice.**
- **Students may want to share some (but not all) of the work they do during their education, as evidence for employers etc.**



Supporting universities' agendas: lifelong learning

- **Networked repositories offer a means whereby these ambitions can be fulfilled, providing the basic building blocks of content over which educational applications such as e-portfolios can be run.**
- **Open access repositories provide access to the world's research and increase the democratisation of knowledge, and suggest that repositories can also contribute in terms of the larger impact of research – the 'social good'. There are clear benefits to society and to the taxpayers that indirectly fund a large proportion of scholarly research.**



Supporting universities' agendas: preservation

- **Appropriate arrangements for long-term preservation of data (both printed and digital) are crucial for the UK to develop and maintain a world-class infrastructure in curation and preservation of research outputs**
- **This responsibility looms large in the digital world, where file formats and media rapidly become obsolete, and where the definitions of what should be retained, for whom, for how long, become much less clear than they once were.**
- **There is therefore a heavy burden of responsibility, and a great opportunity, for universities to work with partners to ensure that the digital materials that are their lifeblood and principal outputs are preserved in the long term.**



Supporting universities' agendas: preservation

- **Institutional repositories can be a key instrument in this work, offering the tools for universities to plan, execute and review policies to ensure long-term access, and enabling the range of necessary tasks to be shared between the institution and other partners, via a network of preservation services.**
- **There is, however, a need for clarification of the roles of universities and their repositories, and subject-based repositories in long-term preservation, especially with regards to data and other non-published outputs.**