

Repositories are important for universities and colleges in helping to manage and capture institutional assets as a part of their information strategy. A digital repository can hold a wide range of materials for a variety of purposes and users. It can support learning, research and administrative processes.

Colleagues in the further education sector are using repositories to share and re-use learning and teaching materials. In time, the sharing of materials in this way will benefit learners and tutors around the UK. For example, the DfES e-Strategy envisages that practitioners will 'create, adapt, re-use and share resources through common access to digital resources for e-learning'. However, repository solutions are most viable and sustainable when they are built on open standards.

Repositories are important...

...for institutions

Further education institutions have to manage their educational and related assets more effectively and transparently than in the past. Ongoing activities at a national level have resulted in significant resources being made available. The National Learning Network and DfES Standards Unit have contributed to a wealth of digital content, available to meet the ever growing and diverse demands of a blended learning approach. It is important that further education institutions effectively manage this content. There may be significant and tangible benefits to those institutions that can demonstrate and exploit effective information management strategies and systems at inspection.

Further education institutions have recently begun to recognise the need to identify, organise and make available the rich and extensive intellectual assets that go beyond normal publishing regimes. These include audiovisual objects, datasets, presentations, text-based materials and research works. There is enormous scope for re-using digital content. Repositories offer a means by which institutions can break the cycle of individual silos of digital content by establishing a common store with access for all.

The primary purpose of repositories within teaching and learning has so far been to ensure availability of content to improve the quality of the learning experience and cater for different learning styles. The benefits, however, may go further than simple access to digital content. Repositories that support re-use could stimulate culture change in teaching and learning, as teachers have to review how they deliver their courses and focus on how to improve the quality of the learning experience.

Repositories help institutions to develop coherent and coordinated approaches to the capture, identification, storage and retrieval of their intellectual assets. This enhances opportunities for efficient use of existing research, increases opportunities for enhanced learning experiences and encourages collaboration within and between different disciplines and groups.

...for staff and students

Academic and teaching staff in further education have for years recognised the benefits of retaining their intellectual assets and are increasingly seeing the added value of sharing resources amongst a wider community especially within their own institutions. Many assets, once shared, are recognised to have currency right across the curriculum if presented in a way where access to re-use is made easy. Content, managed in a way that maintains digital rights as well as the integrity of the work, has a great potential to impact on learners and the quality of the learning experience.

The great advantage of institutional digital repositories is that they facilitate the free sharing of knowledge in the form of learning content, encouraging wider collaboration and communication and informing best practice. As a source of the institution's digital assets, repositories also act to stimulate use of other technologies such as virtual learning environments (VLEs).

Much of the institutional repository work to date has concentrated on research outputs, but further work is being undertaken to encourage the growth of repositories for learning materials, data and much else and, by exploiting their potential, enable the development of collaborative communities across UK education and research.

Digital Repositories

Helping universities and colleges

What is a Digital Repository?

In simplest terms, a digital repository is where digital content, assets, are stored and can be searched and retrieved for use later. A repository supports mechanisms and workflows to import, export, identify, store and retrieve digital assets.

Putting digital content into a repository enables staff and institutions to then manage and preserve it, and therefore derive maximum value from it. Digital repositories may include whole courses, e-learning objects and teaching materials, images or data.

How does a Repository differ from a Content Management System?

A repository is a type of content management system that both holds the core intellectual assets of a university or college, and enables them to be used to support a variety of business processes as defined in the college's information strategy. For example, typically a content management system holds resources for a particular course or departmental website. A repository can hold a comprehensive set of core assets that can then be used in a flexible way for different purposes, such as teaching an undergraduate course via a VLE, underpinning a website, or collating a college's curriculum assets across a particular subject area or period of time.

A range of digital repository products, commercial and open source, provide various levels of functionality from basic input and access to more powerful functionality including workflow management and support for preservation. Different systems can be used in a complementary way to provide an appropriate product to the end-user.

Is this a viable and sustainable approach?

If repositories are to support institutions, and their staff and students, in achieving their various objectives, then they must be able to interoperate with other systems (administrative systems, portals, other repositories), and they must not lock their content into systems from which it is difficult and expensive to extract. The key to this is to ensure that repositories comply with 'open standards', so that they declare publicly how the information is stored and made available. If they do this, then institutional repositories have the potential to become embedded as a core element in an institution's information management fabric, enabling institutions to both compete and collaborate more effectively.

Open Standards

Open standards are publicly available descriptions of the ways in which systems can interoperate. Being publicly available, they enable developers to link together systems in innovative ways. JISC supports the work of both UKOLN and CETIS, which are services that play active roles in the creation, maintenance and deployment of open standards.

www.cetis.ac.uk

www.ukoln.ac.uk

This briefing paper has been written by Helen Hayes, Vice Principal for Knowledge Management & University Librarian, University of Edinburgh and JISC Integrated Information Environment Committee Member.

Alternative formats of the briefing paper can be found at:

www.jisc.ac.uk/publications

Further information and resources

DfES e-strategy: Harnessing Technology – Transforming Learning and Children's Services. Available at:
www.dfes.gov.uk/publications/e-strategy/docs/e-strategy.pdf

JISC development programmes have investigated many of the issues surrounding the sharing and exchange of institutional intellectual output. The following summaries are available:

- JISC Programme: Exchange for Learning – X4L:
www.jisc.ac.uk/index.cfm?name=programme_x4l
- JISC Programme: Focus on Access to Institutional Resources – FAIR Synthesis website:
www.jisc.ac.uk/fair_synthesisintro.html