

# JorumOpen – customising DSpace for a national repository of Open Educational Resources

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**Abstract:** Jorum, a JISC-funded service in development begun in 2002, has been committed to collecting and sharing learning and teaching materials within the UK Further and Higher Education community. With the growing interest in and increase in “open” content, Jorum released a new option in January 2010 - JorumOpen, which provides a focus to find nationally hosted learning materials developed by the UK Further and Higher Education sector. JorumOpen allows any user, from any country, free and unrestricted access to learning materials licensed under a Creative Commons licence. The central component of JorumOpen is an open source digital repository based on a modified version of DSpace 1.5.2.

## DSpace User Group Presentation Proposal

Open Educational Resource (OER) creation in the UK has gained significant momentum recently, thanks to projects such as the JISC OER pilot programme. With the possibility of an increase in such resources - how can teachers and learners deposit or register, and find open content which is useful to them? Jorum, a JISC-funded service in development begun in 2002, is hosted at the UK JISC-designated national datacentres, EDINA and Mimas, and has been committed to collecting and sharing learning and teaching materials within the UK Further and Higher Education community. With the growing interest in and increase in “open” content, Jorum released a new option in January 2010 - JorumOpen, which provides a focus to find nationally hosted learning materials developed by the UK Further and Higher Education sector. JorumOpen allows any user, from any country, free and unrestricted access to learning materials licensed under a Creative Commons licence. The central component of JorumOpen is an open source digital repository based on a modified version of DSpace 1.5.2.

To facilitate an open access digital learning resource repository, the Jorum team has made significant modifications to the DSpace software, which include:

- Support for learning resource standards such as IMS Content Packaging and SCORM Content Packaging
- Support for remote resources hosted on an external site
- Implicit registration process linked with the UK's Access Management Federation (which uses the Shibboleth framework) and is only required for those depositing content
- Support for metadata standards such as IEEE LOM, IMSMD and Dublin Core in content packages

The presentation will showcase JorumOpen in detail, highlighting the technical changes made to the underlying repository platform:

- Concise metadata entry step matching JorumOpen's minimum metadata requirements

- Initial support for content package previews which allows a user to see the files of a content package in a user-friendly way, and allows viewing of individual elements within the web browser, e.g. movies, images, pdf documents.
- Integration of the free Javascript library JQuery to provide enhanced user interface features such as:
  - Collapsible treeviews for lists, e.g. the taxonomies
  - Loading spinners to indicate the repository is performing a task between screen refreshes, e.g. when depositing an item
  - Lightbox functionality for viewing licences of items (the licence text is displayed in a new layer hovering above the item information page)
- Integration of the Statistics plugin developed by Minho University.
- Sitemaps listing every item in JorumOpen are automatically created every night to enable integration with major search engines such as Google.
- Experimental support for RSS feed ingest that allows a JorumOpen administrator to deposit a web link to an external RSS v2.0 feed, which is then processed by DSpace.

It will also cover the various ways in which resources can be found in Jorum:

- Machine to machine (M2M) interfaces
- Major search engine integration
- Future searching technology in the Jorum roadmap

#### **References/URL:**

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