IESR: promoting use of academic e-resources in the UK

What is IESR?

Many valuable collections of academic e-resources are under-utilized simply because potential users are unaware of their existence. The JISC-funded IESR1 based at Mimas2, The University of Manchester, aims to address this by providing a 'Yellow Pages' for the academic internet. Its purpose is to capture essential metadata about online publications, resources and research collections in order to encourage greater awareness and use. IESR is a freely accessible source of structured, curated and standardized data about e-resources. It aims to deliver a convenient, central source of information, providing easy access to high-quality learning resources. Data in IESR can be contributed, discovered, accessed and re-used in flexible ways by humans or by machines via its machine-readable interfaces.

Who is IESR intended for?

IESR is intended to assist publishers, librarians and other content or service providers working with e-resources. It aggregates and promotes collections of resources, resulting in benefits for teachers and researchers in discovering collections, content managers in accessing a convenient source of information about methods of accessing content, and content providers in improving awareness of and access to their resources. Publishers can quickly and easily submit information about their content, which is checked and enhanced by IESR’s cataloguers before being uploaded to the registry. Librarians and application developers can harvest content from the registry to populate their OPACs, electronic resource management systems and other tools that help catalogue and provide access to institutionally-licensed resources.

What resources does IESR describe?

IESR includes content funded, licensed and negotiated by JISC; collections created and developed by academic institutions; and those developed by publishers and commercial organizations for the higher and further education (HE and FE) sectors. It contains significant coverage of most major UK collections and describes content such as open access repositories, digital library collections, image collections, library catalogues, datasets, e-journals and e-learning collections. Wide ranging subject areas include arts and humanities, social sciences, health, science and technology. In reflecting
this broad range of content, IESR includes a mixture of both freely available and restricted access materials requiring registration or subscription. Resources are described as collections rather than at item level to provide a signpost to relevant content. Each collection record includes descriptive information about the collection, details of the collection owner or administrator and details of the technical services relating to the collection to illustrate various methods of accessing content. (This could include a web page, OAI-PMH interface, newsfeeds, etc.) Data is generally supplied by resource providers then enhanced and quality assured by IESR’s cataloguers. IESR metadata is standards-based to ensure interoperability and encourage data sharing and re-use.

**How is IESR used?**

The data in IESR can be discovered, accessed and re-used in flexible ways by humans or by machines, using standard protocols. Individuals can discover information about collections through searching or browsing using features that enable serendipitous discovery of related content. Web search plug-ins can be added to a browser, website, portal, repository or virtual learning environment (VLE) to enable integration with institutional systems and provide access to wider sources of information about collections. Customized RSS feeds alert users to new content and updates. IESR also has machine-readable interfaces to enable access to, sharing and re-use of research collections and resources in different contexts. The machine interfaces use standard protocols such as the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH), Z39.50, SRU/W or OpenURL to enable retrieval of IESR records and maintenance of the retrieved data. These machine interfaces enable content to be used to populate a subject-based repository, an institutional portal or VLE. It can also enable users to create automated updates to populate catalogue records with the latest metadata about collections or datasets, or harvest IESR content to enhance existing services.

**What benefits does IESR offer?**

IESR offers a number of benefits for librarians, developers of information systems and publishers. A collections registry provides a time-efficient solution for discovering and exploiting information resources to assist teaching, learning and research. For libraries, it provides a central source of information about availability of e-resources and a cost-effective method of populating portals and catalogues. IESR makes it easier to discover resources available through machine-readable services such as Z39.50 and OAI-PMH as well as those available through web pages. This enables developers of information systems and portals to integrate collections information into their own interfaces using their own search tools. For publishers, IESR is a marketing tool that occupies a uniquely central space in their customer community and amplifies the impact of other marketing activities.

It discovers and provides information about ‘invisible web’ resources that search engines are unable to include in their indexing. IESR uniquely incorporates data about all kinds of published content, from e-journals and e-books to information in repositories and public sector websites such as galleries and museums. Metadata records are exposed to search engines, OAI-PMH harvesters and other applications through IESR’s own interfaces. Including your resources in IESR will result in more people discovering and using those resources as the descriptions are continually harvested and re-used in other applications and in different contexts, both within the UK and globally.

It is also part of the Global Registries Initiative (GRI), a collaboration that currently involves IESR, the Australian National Data Service (ANDS) and the OCKHAM Initiative in the USA. The GRI aims to improve global discovery of and access to academic resources and research data. Work is ongoing to develop better global, cross-disciplinary discovery services and demonstrate the value of a registry in promoting academic collections to a global audience.

**How do I register my resources?**

Any organization, such as an academic institution, publisher or relevant contributor, can add descriptions providing the resources are appropriate for an academic audience. If you would like to include your resources in IESR, please get in touch (iesr@mimas.ac.uk).
Resource descriptions are added to IESR and updated using a variety of methods. Resource owners can create catalogue descriptions manually using a web form on the site or simply suggest inclusions using the ‘Suggest a Resource’ form. Resources providing an OAI-PMH interface to content enable regular content updates using an automated process. IESR also accepts content in a variety of standard metadata formats and encourages contributions that complement standard metadata distribution workflows. IESR endorses the KBART recommendations and both accepts KBART-compliant metadata for inclusion in the registry and incorporates the appropriate data fields. Resource descriptions in IESR are licensed under a Creative Commons licence which allows re-use of descriptions.

Future plans

Current work is focused on identifying new sources of content and extending coverage of collections in the registry. IESR has largely focused on collections relevant to an HE audience but the scope is being broadened to include more diverse content relevant to the FE sector and National Health Service (NHS). The IESR team continue to seek input from the community in order to develop appropriate content, to encourage more content providers to register their resources and to demonstrate the benefits of IESR in helping contributors to raise awareness and increase use of their resources.

IESR allows contributors to describe their e-resources in a standardized and easily shared way for greater discoverability. Working closely with content providers ensures that contributor processes are time efficient and form part of their regular workflow. IESR continues to encourage more content consumers to query and use the content and aims to develop the registry in response to user feedback and evaluation.

The aim is for IESR to become the first port of call for people seeking information about academic resources without knowing where to start. As more collections are added to IESR, it will appeal to more diverse users. More content equals more usage; more usage equals more content. Ultimately, IESR aims to become a comprehensive and authoritative registry that includes all academic e-resources.

More information about IESR is available at http://iesr.ac.uk/ or by e-mailing iesr@mimas.ac.uk

References

1. IESR:
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2. Mimas:
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3. The Global Registries Initiative (GRI):
4. Australian National Data Service (ANDS):
5. OCKHAM Initiative:
6. IESR Collections Policy:
   http://iesr.ac.uk/collectionspolicy/ (accessed 7 June 2010).
7. IESR contributor form:
   http://iesr.ac.uk/contribute/submit/ (accessed 7 June 2010).
9. Creative Commons:
   http://creativecommons.org/ (accessed 7 June 2010).

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