

Open Educational Resources: an international infrastructure?

Malcolm Read, Executive Secretary, JISC



- 132 institutions in England (88 universities; 44 specialist institutions & general colleges)
- 143 directly funded English FE colleges providing HE courses
- Total HEFCE funding: £7.1 billion
- 992,000* full time students (1 in 7 from overseas)
- Overseas student fee income: £1.3 billion
- England the favourite destination of international students after the US university system **
- UK HE sector a substantial industry (£45.1bn total output 2003/04)
- Income (earned revenue) of UK HEIs is £16.87 billion (2003/04)
- Average annual turnover of individual universities is £100 million
- Research productivity: UK academics produce 16 citations per US dollar (compared with 10 in US, and 4 in Japan)***
- Open University: 161,000 part-time distance learners

* Full-time equivalent HEFCE-funded home and EC students 2007/08.

** Student Pulse: i-graduate, Jan 08

*** Science & Innovation Investment Framework 2004-2014 Progress against indicators, Jul 06

- Young people demonstrate an ease and familiarity with computers BUT they rely on the most basic search tools and do not possess the critical and analytical skills to assess the information that they find on the web.

Information Behaviour of the Researcher
of the Future (Jan 08), CIBER Research Team,
University College London (for JISC)

Committee of Inquiry into Changing Learner Experience

To consider the impact of the newest technologies on the behaviour and attitudes of students coming up to and just entered higher education and the issues this poses for universities and colleges.

- Chair: Sir David Melville
- Recommendations (<http://www.clex.org.uk/ourfindings.php>):
 - Treat information literacies (for learners and staff) as a priority
 - Offer advice and guidance on the legal and regulatory considerations of Web 2.0
 - Develop new business models that exploit Web 2.0
 - Maintain investment in physical infrastructure
 - Embed close working relationships between the schools, colleges and university sectors.

- Internationalisation and greater mobility of students e.g. Bologna
- Changing student experience (more HE learning in workplace, at home, in further education colleges, etc.)
- Fairness (Government's 50% participation target)
- Research, innovation and wealth creation
- Sustainability



More flexibility :

- Joined up administrative systems (incl. VLEs)
- Changing architectures
- Greater openness of resources
- Integrated information strategies
- Green computing

- Web 2.0: provides greater flexibility and access to information.
- Students adding value in their own right.
- Embedding software systems – especially closed systems – is no help!
- Change of culture required by institutions to use externally hosted software or external storage of content due to ‘control’, ‘audit’, ‘compliance’ and ‘rights’ issues.

*"My organisation has been very encouraging but we are on the brink of making decisions about proprietary software and there is always a tension around 'openness' and 'closed' (secure) ways of operating in the online environment."**

*A review of current and developing international practice in the use of social networking (Web 2.0) in higher education, Armstrong/Franklin, 2008.

■ Rationale

- Encourage the sharing of content between institutions, between academics and within communities of practice
- Encourage development and uptake of new generation tools that will enhance both productivity and relevance by being customisable and adaptable by both academics and students
- Marketing tool where students can view content produced by an institution prior to applying to study there and gain an insight into HE academic experience
- Recognise and reward good teaching

- 1998 - Open Content Initiative
- 2000 - UNESCO conference
- 2001 - Wikipedia
- 2002 - MIT OpenCourseWare
- 2002 - Creative Commons
- 2006 - OU OpenLearn
- 2007 - Cape Town Open Educational Declaration
- 2009 - JISC/HEFCE/Academy Open Educational Resources Programme

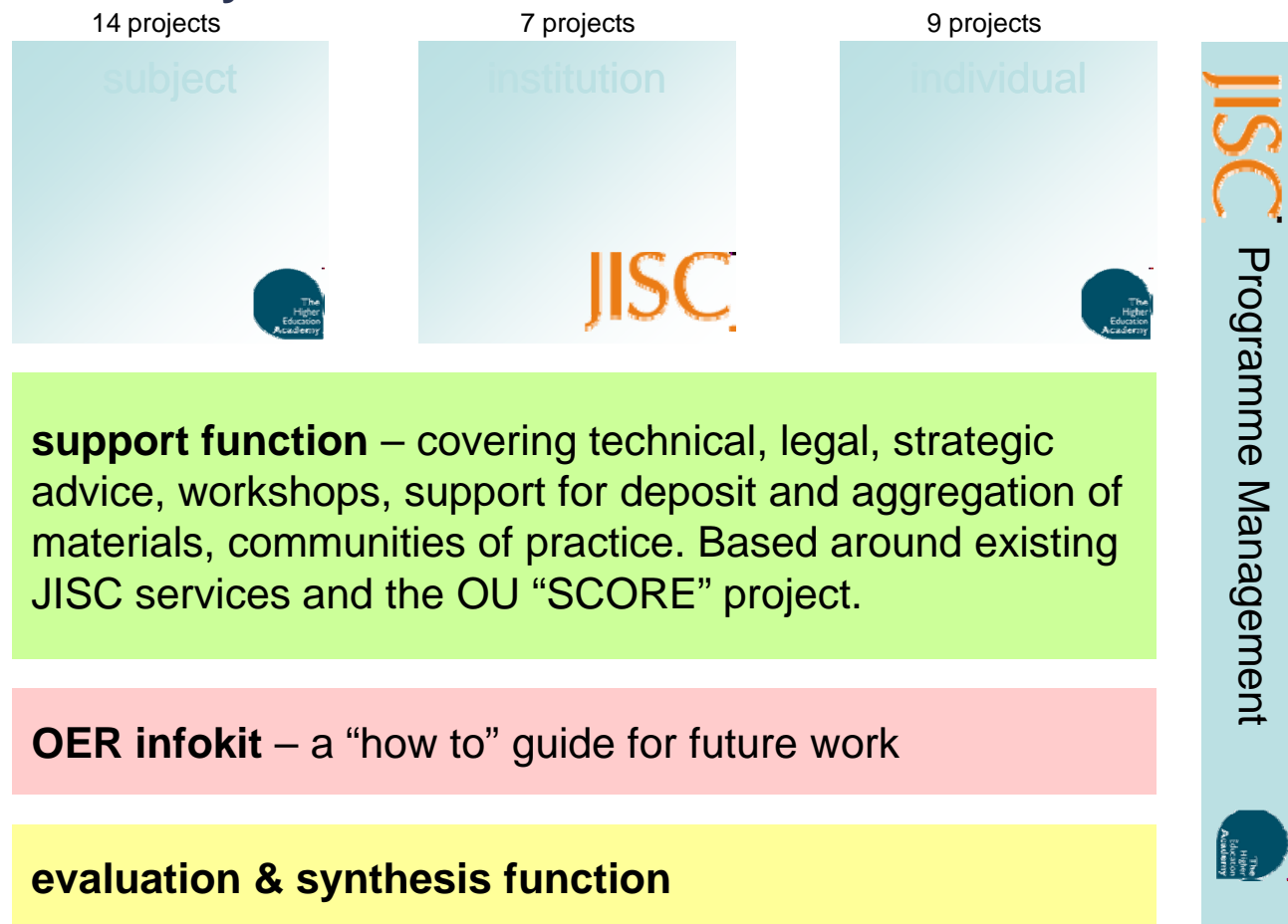
MITOPENCOURSEWARE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY



(Adapted from Yuan et al (2008), <http://jisc.cetis.ac.uk/oerbriefing>)

The OER Pilot Programme

- HEFCE funded one year programme – run by JISC with the Higher Education Academy



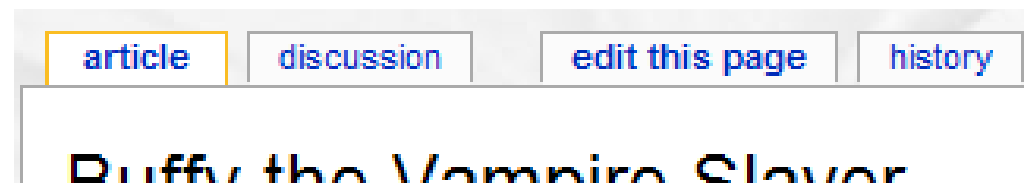
- release learning resources into Jorum Open and publishing them in local and subject repositories.
- be active in changing and clarifying institutional policies regarding learning resources.
- feed their experiences back into the programme.
- offer value for money to the UK HE sector.
- have a very high profile, (worldwide).
- contribute to a worldwide “layer” of academic and scholarly resources

- As far as we know this is the first time that:
 - Widespread OER release has been tried on a **national** scale supported entirely by public funds
 - **Multiple** processes and configurations have been tried simultaneously
 - A truly **diverse** range of institutions, staff and subject areas have been involved in one programme.
- This has meant we need to be **innovative** in terms of standards, technology and metadata.

- Projects are expected to:
 - deposit materials into JORUM open
 - (or use related services).
 - AND publish materials in other ways, eg:
 - Open institutional repositories
 - Web 2.0 services
 - Institutional websites
 - (all must have an exposed RSS feed).



- The growth of participative (web 2.0) technologies have changed irrevocably the way that educators and learners work with content online.



- OER “collections” can be targeted at specific student audiences
- Is the “traditional” education technology ecosystem ready to meet these users where they are?
- Interoperability between various monolithic VLEs and other systems and with open resources is a significant problem
- Simple mandated metadata and standards required

- Standards – as is usual with JISC we want to see appropriate standards used where appropriate, eg:
 - IMS Content Packaging
 - IMS Common Cartridge
 - Common standards like RSS, Atom.
- ... but we do not want their use to be a barrier to the release of resources. Standards should be used where they aid useful release.
- We would rather have more materials than mandate standards at this stage.

- JISC has always supported the use of accepted standards and metadata – enabling interoperability and wider reuse.
- But in promoting a groundswell of content release, these requirements can also be perceived a barrier to ensuring widespread release and reuse.
- UKOER will help us to learn more about what forms of resource description are appropriate / useful in different contexts.



- What challenges does this mean for IMS in developing appropriate standards to support and promote the use of such an infrastructure?
- How will IMS meet the demand-side?
- Does UK IMS share UK HEIs vision?
- Should the IMS remit extend beyond e-learning? LMS (VLE) are an integral part of HE business systems.
- What principles are guiding IMS in giving voice to members?