OERs in global higher education

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University of Leicester

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OERs in global higher education
1.0. Introduction to Open Educational Resources (OERs)

Openness has become a defining quality of 21st century society driven by developments in new information and communication technologies. The term is associated with values such as freedom, participation, empowerment and collaboration (Straub, 2008). One effect of the global drive towards openness on higher education is the growing interest nationally and internationally in what is now termed “Open Educational Resource” or OER. Increased interests in OERs are driven partly by developments in open source and open access software's and also the challenges faced by many higher educational institutions in an increasingly competitive world. Protagonist of the philosophy of OERs believes that their development and availability will help nourish the kind of participatory culture of learning, creating, sharing and cooperation that a rapidly changing knowledge society needs (The Cape Town Declaration, 2007). OERs are also seen as having the potential and promise to obviate demographic, economic, and geographic educational boundaries and to promote life-long learning and personalised learning. (Yaun,, MacNie, and Kraan 2008)

One of the key visions of the University of Leicester is to become Britain’s top university for student satisfaction and teaching quality. Amongst the many strategies adopted by the university to achieve this vision is “innovation in teaching and learning through the application of e-learning” with openness seen as a key strand in the implementation strategy (University of Leicester, 2009). The University of Leicester’s commitment and desire to engage with OERs specifically is backed by the Vice-Chancellor’s Advisory Committee’s decision regarding the OTTER project, one of the seven JISC and Higher Education Academy funded institutional pilot projects on OERs.

“The outcomes of the OTTER pilot will inform the university's future policy on Open Educational Resources (OERs). BDRA, in collaboration with the Library and all participating departments, will undertake the research and development to establish evidence.” (Vice-Chancellor’s Advisory Committee’s)

As a pilot project at the University of Leicester, OTTER was an exemplar for the long-term adoption of the concept of Open Educational Resources.
2.0. Definition of Open Educational Resources

For those new to the concept of Open Educational Resource one obvious question to be asked is what is meant by the term “Open Educational Resource” and how can it be defined? Several definitions can be found in the literature and a few are provided here.

- ‘Digitised materials offered freely and openly for educators, students and self-learners to use and reuse for teaching, learning and research.’ (OECD)

- OERs are educational materials and resources offered freely and openly for anyone to use and under some licences to re-mix, improve and redistribute.’ (Wikipedia)

- Digitalized materials offered freely and openly for use and re-use in teaching, learning and research (UNESCO)

3.0. Key drivers for increased interest in OERs

Several reasons account for the increased interest and developments in OERs such as developments in open course ware and collaborative content development, availability of funding and emerging flexible copyright frameworks. Here are a few:

- Drive towards universal access to education (The Cape Town Declaration)
- Globalisation and increased competition in Higher Education (OECD)
- Growing number of free and open source software’s (UNESCO)
- Increased OER investments (Hewlett Foundation, HEFCE, Obama initiative)
- Developments in Creative Commons licence (Yaun, MacNie, and Kraan 2008).
4.0. Institutions involved in OER development around the world

There are currently over 3,000 courses available from over 300 universities. Some of the key players are:

<table>
<thead>
<tr>
<th>Country</th>
<th>OER programmes</th>
</tr>
</thead>
</table>
| UK      | • University of Leicester - [http://tiny.cc/c9v1h](http://tiny.cc/c9v1h)  
          |                | • Open University - “Open Learn” [http://openlearn.open.ac.uk/](http://openlearn.open.ac.uk/)  
          |                | • University of Nottingham - BERLin [http://unow.nottingham.ac.uk/berlin.html](http://unow.nottingham.ac.uk/berlin.html)  
          |                | • University of Oxford - OpenSpires [http://openspires.oucs.ox.ac.uk/](http://openspires.oucs.ox.ac.uk/)  |
| USA     | • MIT Open Courseware project - [http://ocw.mit.edu/index.htm](http://ocw.mit.edu/index.htm)  
          |                | • Rice University - Connexions [http://ivx.org/](http://ivx.org/)  
          |                | • Utah State University - USU OCW [http://ocw.usu.edu/](http://ocw.usu.edu/)  |
| EUROPE  | • ParisTech OCW. - [http://graduateschool.paristech.fr/?langue=EN](http://graduateschool.paristech.fr/?langue=EN)  
          |                | • MORIL. A Pan-European OERs initiative - [http://moril.eadtu.nl/](http://moril.eadtu.nl/)  |
          |                | • Japanese OCW Consortium - [http://www.jocw.jp/](http://www.jocw.jp/)  |
| OTHERS  | • OER Africa - [http://www.oerafrica.org/](http://www.oerafrica.org/)  
          |                | • WikiEducator - [http://wikieducator.org/Main_Page](http://wikieducator.org/Main_Page)  
5.0. Arguments in favour of OERs in global higher education

Several reasons have been put forward by higher educational institutions involved in OERs. They divide in push and pull arguments (OECD)

a. *Push arguments i.e. threats for not sharing*
   - Traditional academic values of openness to knowledge will be marginalised by market forces such as Microsoft or Apple if higher educational institutions do not take the lead in OER development and dissemination

b. *Pull arguments i.e. gains for sharing:
   - Faster technical and scientific developments
   - Free sharing reinforces societal development and diminishes social inequalities

6.0. Benefits of OERs to academic institutions

a. *Corporate benefits*
   - Increased institutional visibility
   - A showcase for attracting new students
   - Better use of available resources leading to cost cutting of content development
   - Reach out to new groups of people without access to higher education
   - Improved quality of learning materials and stimulate internal innovation
   - Develop institutional reputation as a socially responsible

b. *Individual benefits*
   - Sharing can stimulates further innovation leading to recognition by peers
   - Individual publicity and visibility within the academic community
   - Potential for collaboration with academics in institutions around the world
   - Potential for commercialising a version of OER produced
7.0. Key and burning issues in OER development and use

A number of issues with regards to OER can be found in the literature (OECD, 2007; McGill, L., et al 2008; Yaun, MacNie, and Kraan 2008). The issues listed here are by no means exhaustive.

a. Policies: This pertains to institutional mandates and strategic actions for taking OERs forward similar to open access research mandates:
   • Institutional strategy for embedding OERs in teaching and learning
   • Access options for OERs
   • Staff support and capacity building
   • Put-up and take-down policies

b. Sustainability: This pertains to funding models to make OERs more sustainably.
   Examples of existing funding models are as follows:
   • Institutional model e.g. MIT OCW
   • Donations e.g. Wikipedia Apache Foundation
   • Contributor pay e.g. Public Library of Science (PLoS)
   • Sponsorship e.g. MIT iCampus with Microsoft
   • Governments e.g. The United Nations

c. Quality
   • Assessment of the quality enhancement of OER production
   • Keeping materials up-to-date and in multiple repositories

d. Technical
   • Interoperability issues and metadata standards
   • Tracking and assessing the value of OERs to teaching and learning

e. Legal
   • Copyright ownership of materials
   • Appropriate Creative Commons licence

f. Target audience
   • Formal or informal
   • Developing countries or global public
University of Leicester
8.0. **Open Educational Resources at the University of Leicester**

The University of Leicester’s commitment and desire to engage in OERs is backed by the Vice-Chancellor’s Advisory Committee’s decision regarding the OTTER project. OTTER was an exemplar for the long-term adoption of the concept of Open Educational Resource at the University of Leicester. The project was funded by the JISC and Higher Education Academy and ran from May 2009 to April 2010. As a pilot, OTTER enabled the evaluation of systems and processes designed to support individuals, teams and departments at the University of Leicester to release high-quality open educational resources for free access, reuse and repurposing by others under appropriate open licence. OTTER made extensive use of learning technologies and maximised the affordances of the Jorum Open platform and Plone. The project produced OERs equivalent to 360 credits through collaboration with twelve (12) academic departments and one international partner:

- Archaeology and Ancient History
- Beyond Distance Research Alliance
- Criminology
- Education
- Genetics
- Institute of Lifelong Learning
- Law
- Media and Communications
- Politics and International Relations
- Psychology
- Staff Development Centre
- Student Support and Development Service
- South African Institute of Distance Education (SAIDE)

OTTER achieved the following objectives:

- Promoted the University of Leicester and the UK higher education sector globally
- Created opportunities to transform a significant amount of digital content at UoL that can be reused and repurposed locally and globally.
- Increased student satisfaction at the University of Leicester and elsewhere, in the availability, quality and ease of use of learning materials.
- Acted as a means of capitalising on investments made at UoL in digital content development for different modes of learning using Web 2.0 applications.
9.0. OER policy and put-up and take-down guidelines

The University of Leicester understands and shares the benefits of OERs and is committed to expanding and sustaining the development and release of OERs. The University's commitment to OER is based on the following policy principles developed as part of the OTTER project.

a. Policy principles
   i. The copyright of all materials produced by university staff, as well as by consultants paid by the university, belongs to the university.
   ii. OERs must be developed from teaching materials generated by UoL staff or by consultants paid by the university.
   iii. All authors involved in the production of materials must give permission for those materials to be released as OERs.
   iv. The latest OER put-up (release) procedure must be followed.
   v. All materials should be checked for copyright and quality before they are released.
   vi. The final version of each OER must be validated by the lead author of the original materials.
   vii. The OERs will be deposited into UoL’s repository (www.le.ac.uk/oer) and other repositories such as JorumOpen.
   viii. In the event of a challenge, request or complaint, the latest OER take-down (removal) procedure must be followed.

b. Put-up and take down guidelines

These guidelines support the teaching and learning strategy which commits to ‘providing a high-quality educational experience for all its students, and promoting excellence in learning and teaching, and further, ‘an awareness of, and involvement in, the informal curriculum. These guidelines also inform a future extension of the ‘Open Access’ mandate beyond research output to include teaching output. They are in line with existing copyright guidelines which seek to protect all content created by staff.

The university currently has a policy on ‘Open Access’ focused on research output through the Leicester Research Archive (LRA). This Open Access mandate does not cover teaching materials. The put-up and take down guidelines is to clarify current practice and approaches to the production, release and removal of OERs available through UoL’s OER repository.
The put-up take-down guidelines are based on the following principles:

- The legality of making OERs freely and openly available
- Transparency of the process of releasing and taking down OERs
- Quality assurance of the process of producing OERs
- Sustainability and usability of OERs
- Consistency between research and teaching outputs
- OERs as a tool for enhanced institutional visibility

c. **Process for releasing OERs**

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Person responsible at each stage: 1 & 3 OER Manager; 2 & 6 Author(s); 4 IPR Officer; 5 Learning Technologist
d. Process for removing OERs

Despite the OTTER OER team's efforts, there are circumstances when UoL may be obliged to remove OERs made available. For example, it is possible that the content becomes a subject of dispute, that UoL’s attention is drawn to factual inaccuracies, or that the OER is found to infringe the rights of others. The procedure to be followed to remove OERs will be as follows:

Person responsible: (1) OER Manager; (2) Author(s); (3) IPR Officer; (4) Learning Technologist; (5) external advisor(s)
10.0. The CORRE framework for transforming teaching materials into OERs

One major outcome of the OTTER project was an integrated framework called - CORRE: Content-Openness-Reuse/Repurpose-Evidence – designed to support the evaluation and transformation of existing teaching and learning materials into Open Educational Resources with indicative questions. The CORRE framework consists of four overarching stages and sub stages which potential OER materials could be assessed for their quality, accessibility, adaptability and potential usefulness. Figure 1 shows the elements of the framework.

**CORRE:** A framework for transforming teaching materials into OERs

Each of the four stages and sub-stages of CORRE together with indicative questions are explained below.
1.1. **C** stands for **Content**

The “Content” stage of the CORRE evaluation process is thus focused on the operational aspect of identifying existing materials within an institution or a department. This stage is split into two sub-stages namely gathering which is about collecting all relevant content and ensuring that there are no gaps in them and secondly, screening which is a brief appraisal of the work required in transforming the material into OERs. Table 1 explains what is involved in this process.

**Table 1: Indicative questions for “gathering” and “screening” Content**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicative questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gathering</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Collection</strong></td>
<td>a. Has the material been used in an educational context within the institution?</td>
</tr>
<tr>
<td></td>
<td>b. Are there gaps in the materials?</td>
</tr>
<tr>
<td><strong>Memorandum of understanding</strong></td>
<td>c. Has the contributing author(s) been identified?</td>
</tr>
<tr>
<td></td>
<td>d. Has the scope of materials been defined?</td>
</tr>
<tr>
<td></td>
<td>e. Has a memorandum of understanding been signed?</td>
</tr>
<tr>
<td></td>
<td>f. Has an OER file type been agreed with the author(s), e.g., e-reader, PDF, etc?</td>
</tr>
<tr>
<td></td>
<td>g. Has the metadata been submitted by the author, including all elements agreed by the</td>
</tr>
<tr>
<td></td>
<td>project stakeholders? (e.g. title, author(s), subject, keywords, description, level,</td>
</tr>
<tr>
<td></td>
<td>date, relationship to other OERs)</td>
</tr>
<tr>
<td><strong>Screening</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Learning context for which the material was designed</strong></td>
<td>a. What is the nature of the teaching material? For example:</td>
</tr>
<tr>
<td></td>
<td>- Lecture notes or slides</td>
</tr>
<tr>
<td></td>
<td>- Laboratory practical’s handout</td>
</tr>
<tr>
<td><strong>Learning design as originally intended by the contributor</strong></td>
<td>b. What is the learning design, e.g., instructional? Case-based learning? Problem-based</td>
</tr>
<tr>
<td></td>
<td>- learning or collaborative learning? etc</td>
</tr>
<tr>
<td></td>
<td>c. Are changes required to the learning goal(s), activity, etc?</td>
</tr>
<tr>
<td><strong>Media</strong></td>
<td>d. What format does the material come in e.g., print-based, podcast, video?</td>
</tr>
<tr>
<td><strong>Structure</strong></td>
<td>e. Is the material standalone or does it refer to other materials?</td>
</tr>
<tr>
<td></td>
<td>f. Does the material need ‘chunking’ into subsections for easy navigation?</td>
</tr>
<tr>
<td></td>
<td>g. Are web links embedded in the content and are they functional?</td>
</tr>
<tr>
<td><strong>Language</strong></td>
<td>h. Are there editorial issues?</td>
</tr>
<tr>
<td></td>
<td>i. Is the language offensive?</td>
</tr>
<tr>
<td><strong>Originality and ownership</strong></td>
<td>j. Are there immediate and obvious concerns about sources and third-party rights</td>
</tr>
<tr>
<td></td>
<td>within the materials received?</td>
</tr>
</tbody>
</table>
1.2. **O** stands for **Openness**

Once the “Content” stage of CORRE is signed off, the teaching material can move into the next stage of the evaluation process called “**Openness**”. Openness involves three sub-stages:

*a. Legal*

This concerns IPR clearance and ensuring that materials are legally compliant with reference to intellectual property and copyright ownership. IPR checking can be done by the institutions copyright administrator using the following indicative questions as a guide.

**Table 2: Indicative question of intellectual property**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicative questions</th>
</tr>
</thead>
</table>
| **Copyright** | a. Has the author granted permission to turn the materials into OERs?  
b. Are there elements of the material where copyright is owned by a 3rd party, i.e., content not owned by the institution?  
c. Is the 3rd party material still covered by copyright? (i.e. is it less than 50 years old?)  
d. Have the policies, terms and conditions and licences of the rights holders been checked by a university copyright administrator? |
| **Licensing** | a. Has the 3rd party material been acknowledged in the correct manner and have all licence requirements met?  
b. Have all 3rd party right holders granted written permission for the material to be used as OER?  
c. If a quote or charge has been supplied for the use of 3rd-party material, is the quote acceptable, or is it cost effective to negotiate?  
a. If there are multiple contributors (e.g. co-authors, illustrators, learning technologists, editors), have all contributors been identified and given permission to turn the materials into OERs? |
| **Attribution** | a. Has the appropriate Creative Commons licence been determined and applied to the material? |

*b. Transformation*

Transformation is about enhancing the pedagogical usability of existing teaching materials as OERs in other learning contexts. This involves:

- **Decoupling** which involves removing material linked to institutional VLEs and not accessible by others
- **Scaffolding** of aligning learning goals and learning activities
- **Meshing** of adding or replacing images, audio files or tables.
- **Sequencing** of structuring the content for easy navigation.
- **Editing** of removing inappropriate or offensive words, jargon, and acronyms.

The indicative questions for transforming teaching materials as OER are shown on Table 3.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicative questions</th>
</tr>
</thead>
</table>
| **Decoupling** | a. Is use of the content dependent on the institutional VLE?  
                   b. Should part of the content be removed or replaced?  
                   c. Is further material needed to be added to the content? |
| **Scaffolding** | a. Should the learning design be changed?  
                    b. Should the learning goal (s) be changed or amended?  
                    c. Should the learning activity (ties) be changed or amended? |
| **Meshing** | a. Should an image or audio file be added?  
                   b. Should images, audio files, tables/graphs be added, replaced or removed?  
                   c. Are all embedded web links active? |
| **Sequencing** | a. Is the teaching material going to be a standalone OER, or does it require information in the metadata explaining how it links to other OERs?  
                     b. Is the material well laid out with appropriate headings?  
                     c. Is it easy to navigate through the material? |
| **Editing** | a. Have all editorial issues been resolved?  
                    b. Are there offensive materials that need to be removed?  
                    c. Have all acronyms been explained?  
                    d. Has jargon been kept to a minimum and terms that are likely to be unfamiliar to the audience (at the level stated in the metadata) explained? |

**c. Formatting and standardisation**

Formatting and standardisation relates to the technical formats of the OERs and whether they are re-usable or re-adaptable in other learning context. Formatting is also about metadata and compatible with open resource repositories. The following indicative questions can serve as a guide on formatting and standardization teaching materials as OER.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicative questions</th>
</tr>
</thead>
</table>
| **Formatting** | a. Is the material available in the agreed formats as per the memorandum of understanding?  
                           b. Is the material standalone, and if not, are the related OERs specified in the metadata?  
                           c. Are special tools or software required by end user to use the material? If so, are they stated?  
                           d. Does the end user require special technical help to use the material? If so, is this stated? |
| **Interoperability** | a. Is the material available on agreed delivery platforms?  
                          b. Is the file size of the material suitable for the repository?  
                          c. Is the material compatible with other repositories? e.g. JorumOpen  
                          d. Have metadata tags been added to the learning material e.g. authors, subject area, keywords, grade level (undergraduate or postgraduate)? |
1.3. **RR stands for Reuse/Repurpose**

Re-use and Re-purpose is the third stage of the CORRE evaluation process. It is about reality checking based on gathering of views and opinions from stakeholder regarding the OERs. This can be done in two ways:

- Internal with the institutions OER team, academic partners and students
- External with other stakeholders outside the institution

Indicative questions for assessing the reuse/repurposing of the OERs are provided in table 5 below.

**Table 5 Indicative questions for assessing the reuse/repurposing of the OERs**

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicative questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>OER team</td>
<td>a. Has the OER been IPR cleared?</td>
</tr>
<tr>
<td></td>
<td>b. Has a suitable Creative Commons licence been assigned to the OER?</td>
</tr>
<tr>
<td></td>
<td>c. Is the OER properly formatted for use?</td>
</tr>
<tr>
<td></td>
<td>d. Is anything else required before the OER is released?</td>
</tr>
<tr>
<td>Academic staff</td>
<td>a. Is the content of the OER accurate?</td>
</tr>
<tr>
<td></td>
<td>b. Is the title suitable?</td>
</tr>
<tr>
<td></td>
<td>c. Are the media appropriate?</td>
</tr>
<tr>
<td></td>
<td>d. Is the structure and layout clear for user navigation?</td>
</tr>
<tr>
<td></td>
<td>e. Is the assigned Creative Commons licence acceptable?</td>
</tr>
<tr>
<td></td>
<td>f. What else is required before release of the OER into a public repository?</td>
</tr>
<tr>
<td>Students</td>
<td>a. Is the learning goal clear?</td>
</tr>
<tr>
<td></td>
<td>b. Is the learning activity or presentation engaging?</td>
</tr>
<tr>
<td></td>
<td>c. Is it easy to navigate through the OER?</td>
</tr>
<tr>
<td></td>
<td>d. On a scale of 1 to 5, where 1 = very low and 5 = very high, how would you rate the quality of this OER?</td>
</tr>
<tr>
<td></td>
<td>e. Are further improvements required to the OER?</td>
</tr>
<tr>
<td>Other external stakeholders</td>
<td>f. Is the learning goal clear?</td>
</tr>
<tr>
<td></td>
<td>g. Is the learning activity or presentation engaging?</td>
</tr>
<tr>
<td></td>
<td>a. Is it easy to navigate through the OER?</td>
</tr>
<tr>
<td></td>
<td>b. Are further improvements required to the OER?</td>
</tr>
</tbody>
</table>

1.4. **E stands for Evidence**

The final stage of the CORRE evaluation process is “Evidence” concerned with assessing the value and usefulness of OERs released through a process of tracking and gathering end-user feedback. This can be done using Google analytics and/or an end user survey. Indicative questions for an end user survey on the OER are provided in table 6.
Table 6 Indicative questions for tracking use of the OER

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Indicative questions</th>
</tr>
</thead>
</table>
| Tracking   | a. What is the title of the resource you used?  
|            | b. From which geographical region of the world are you using this resource?  
|            | c. Are you a: student, lecturer, tutor, researcher, course designer, other? (Please tick one. If 'other' please tell us what your role is.)  
|            | d. Did you modify, change or adapt the resource? If Yes in what way?  
|            | e. Did you have any difficulties using the resource? If "Yes", can you tell us about these difficulties?  
|            | f. How useful was the resource for learning about this subject/topic?  
|            | g. How would you rate the quality of resource?  
|            | h. Would you recommend the resource to others?  
|            | i. Are there any other comments you would like to make about the resource? |

11.0. OERs and copyright

Opinions are divided on whether traditional copyright laws are harmonious with the philosophy of open educational resources. To some, current laws are too restrictive and make it virtually impossible to waive copyright towards OER development. Copyright is automatically bestowed on creators. The question to be asked is what if people want their work to be used by others without the hassle of coming each time to obtain their permission? What if they want their work to be reused, shared and built upon by the rest of the world? In a world where collaboration, participation and teamwork are considered important for innovation and creativity, traditional copyright laws are no longer deemed adequate. Thankfully, Creative Commons (CC) licensing has emerged as an extension of existing copyright laws. Founded in 2001, CC licences make it easier for people to share and build upon the work of others, consistent with the rules of copyright. CC licences provide the legal tools to mark creative work with the freedom a creator wants it to carry, so others can share, remix, use commercially, or any combination they like. The full legal rights of original copyright holders are unaffected by CC licence. CC licence is currently in use, in over 50 international jurisdictions around the world. ccLearn, a division of CC licence is dedicated to support open learning and open educational resources. Science Commons another division within CC licence supports web-enabled scientific research.

a. CC licence conditions

CC licence has four set conditions as follows:

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Symbols</th>
<th>Explanation</th>
</tr>
</thead>
</table>
b. Licences

There are six main CC licences based on a combination of the above four conditions. They range from the most accommodating to the most restrictive. Each licence is described below. ([http://creativecommons.org/about/licenses/](http://creativecommons.org/about/licenses/))

<table>
<thead>
<tr>
<th>Licences</th>
<th>Symbols</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribution</td>
<td><img src="https://creativecommons.org/images/livesymbols/bysmall.png" alt="CC BY" /></td>
<td>You let others copy, distribute, display, and perform your copyrighted work - and derivative works based upon it – but only if they give credit the way you request it.</td>
</tr>
<tr>
<td>Share Alike</td>
<td><img src="https://creativecommons.org/images/livesymbols/bysasmall.png" alt="CC BY SA" /></td>
<td>You allow others to distribute derivative works only under a licence identical to the licence that governs your work.</td>
</tr>
<tr>
<td>Non-Commercial</td>
<td><img src="https://creativecommons.org/images/livesymbols/bynsmall.png" alt="CC BY NC" /></td>
<td>You let others copy, distribute and perform your work – and derivative works based upon it – but for non commercial purposes only.</td>
</tr>
<tr>
<td>No Derivative Works</td>
<td><img src="https://creativecommons.org/images/livesymbols/bynsmall.png" alt="CC BY ND" /></td>
<td>You let others copy, distribute and perform only verbatim copies of your work, not derivative works based upon it.</td>
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<thead>
<tr>
<th>Licences</th>
<th>Symbols</th>
<th>Explanation</th>
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<tr>
<td>Attribution</td>
<td><img src="https://creativecommons.org/images/livesymbols/bysmall.png" alt="CC BY" /></td>
<td>This licence lets others distribute, remix, tweak, and build upon your work, even commercially, as long as they credit you for the original creation. This is the most accommodating of licences offered, in terms of what others can do with your works licensed under Attribution.</td>
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<td>Attribution Share Alike</td>
<td><img src="https://creativecommons.org/images/livesymbols/bysasmall.png" alt="CC BY SA" /></td>
<td>This licence lets others remix, tweak, and build upon your work even for commercial reasons, as long as they credit you and licence their new creations under the identical terms. This licence is often compared to open source software licences. All new works based on yours will carry the same licence, so any derivatives will also allow commercial use.</td>
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<tr>
<td>Attribution Non-Derivatives</td>
<td><img src="https://creativecommons.org/images/livesymbols/bynsmall.png" alt="CC BY ND" /></td>
<td>This licence allows for redistribution, commercial and non-commercial, as long as it is passed along unchanged and in whole, with credit to you</td>
</tr>
<tr>
<td>Attribution Non-Commercial</td>
<td><img src="https://creativecommons.org/images/livesymbols/bynsmall.png" alt="CC BY NC" /></td>
<td>This licence lets others remix, tweak, and build upon your work non-commercially, and although their new works must also acknowledge you and be non-commercial, they don't have to license their derivative works on the same terms.</td>
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<tr>
<td>Attribution Non-Commercial</td>
<td><img src="https://creativecommons.org/images/livesymbols/bynsmall.png" alt="CC BY NC" /></td>
<td>This licence lets others remix, tweak, and build upon your work non-commercially, as long as they credit you and license their new creations under the identical terms. Others can download and</td>
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20
**Share Alike**

| CC BY NC SA | redistribute your work just like the by-nc-nd licence, but they can also translate, make remixes, and produce new stories based on your work. All new work based on yours will carry the same licence, so any derivatives will also be non-commercial in nature |

**Attribution Non-Commercial No Derivatives**

| cc by-nc-nd | This licence is the most restrictive of our six main licences, allowing redistribution. This licence is often called the “free advertising” licence because it allows others to download your works and share them with others as long as they mention you and link back to you, but they can't change them in any way or use them commercially. |

c. **Who uses CC Licences**

CC licences are now used by organisations, individuals and institutions from around the world. The most notable ones include the following.

- Flickr - [http://www.flickr.com/](http://www.flickr.com/)
- Google enabled CC licence searches - [http://www.google.co.uk/advanced_search?hl=en](http://www.google.co.uk/advanced_search?hl=en)
- The White House - [http://www.whitehouse.gov/](http://www.whitehouse.gov/)
- Public Library of Science: Open access journals - [http://www.plos.org/](http://www.plos.org/)
- MIT OpenCourseWare - [http://ocw.mit.edu/index.htm](http://ocw.mit.edu/index.htm)
- Al Jazeera - [http://english.aljazeera.net/](http://english.aljazeera.net/)

d. **Copyright and OERs: Do’s and don’ts**

<table>
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<tr>
<th>DO use:</th>
<th>DON'T use:</th>
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<tbody>
<tr>
<td>a. Creative Commons resources with a compatible licence</td>
<td>a. YouTube resources which include infringing material</td>
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<tr>
<td>b. Limited extracts from your own work</td>
<td>b. Logos/Trademarks without permission</td>
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<tr>
<td>c. Your own photographs of everyday objects</td>
<td>c. Photographs taken within restricted environments (i.e. archives, galleries, exhibitions) without permission</td>
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<td>d. Sources where the licence terms explicitly permit your type of re-use</td>
<td>d. Extensive extracts from your own published work without checking your contract</td>
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<td>e. Items out of copyright</td>
<td>e. Items from unknown sources or where</td>
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<td>f.</td>
<td>Short quotes from published work as long as they are properly referenced</td>
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<td>f.</td>
<td>Screenshots which contain identifiable pictures or other personal information</td>
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<td>g.</td>
<td>Organisations providing advice and guidance:</td>
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<td>h.</td>
<td>JISC - JISClegal, Web2Rights project, JISCdigitalmedia, Eduserv - Copyright Toolkit (in conjunction with Copy-Right Consultants Limited)</td>
</tr>
<tr>
<td>g.</td>
<td>And finally, don’t assume if it’s on the web it’s fine to use – check the terms and conditions/copyright notice or contact the site owner</td>
</tr>
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</table>

You can learn more about creative common’s licence by going to http://creativecommons.org/about/.

12.0. **Research evidence on OERs at the University of Leicester**

As part of the OTTER project, data was gathered from staff, students and senior managers at the University of Leicester and students from the University College of Falmouth, as well as Librarians in the East Midlands on their views on Open Educational Resources (OERs). The data gathering exercise took place between December 2009 and April 2010 utilising an online survey delivered to students and face to face interviews with staff and senior managers across different departments of the university. Also a workshop was organized for Librarians from across the East Midlands to find out their views on Open Educational Resources. The full report of the study can be found at: [http://tiny.cc/9m2zy](http://tiny.cc/9m2zy). Below is a summary of key findings.

**Key findings from staff (including senior managers)**

i. In general, staff support the open sharing of educational resources and see OERs as helping to position UK HE and UoL in the world HE market. However more evidence is needed to make a convincing case about the value/impact of OERs.

ii. Most senior managers would like to see a mandate in the form of a policy and strategic action in order to take the OER agenda forward.

iii. Staff are happy and very keen to use OERs released through OTTER, as well as other OERs in the public domain ‘as is’ or modified, depending on the context.

iv. OERs are seen as potentially beneficial to teaching, learning and also as additional information resources for students.

v. Staff are happy to make selected materials available as OERs based on conditions of ownership, copyright, quality and support in ‘designing for openness’.
vi. A team effort, working with all stakeholders, is seen as the appropriate way forward for OER development and use.

vii. Sustainability in terms of funding, staff capacity and support are seen as issues which need to be resolved.

viii. Reward and recognition of academic staff are seen as key factors in successfully promoting the generation of OERs. However, non-financial reward is preferred.

ix. More awareness of Creative Commons licensing is needed.

x. For the future, a developmental approach around a pilot focused on generic materials within individual colleges is preferred by some senior managers.

Key findings from students

i. Students support the open sharing of teaching and learning resources and see their potential in enhancing the quality of the learner experience.

ii. Students find it very easy to navigate through current OERs on Plone.

iii. 96% of students rated the quality of the OTTER OERs as ‘good’ to ‘extremely good’. The 4% who were unhappy attributed this to links in the zipped files in the Plone site that appeared to be broken. This has been rectified.

iv. Students appear to have adequate knowledge of Creative Commons licensing, but express concerns about the implications for the institution’s reputation in the event that the materials are misused by third parties.

v. The preferred options for access to OERs are the institutional virtual learning environment (VLE) and OER repositories.

vi. Students are happy with the quality of OERs produced through OTTER, based on the concise nature of information provided as well as the structure and layout. However, they express concern about quality and sustainability of future OERs.

vii. A third of students say they would not be willing to turn their own materials (e.g. lecture notes) into OERs and share them with other students.

viii. Students would like to see future policies address the issue of easy access to OERs in different formats.

Key findings from Librarians
i. Librarians see OERs benefitting UK Higher Education in terms of institutional prestige, shared good practice, cost reduction and showcasing teaching materials.

ii. The main issues of concern to Librarians are 3rd party copyright; currency and quality of materials and funding of OERs

iii. Librarians would like to see policies that reflect management support; take up and put down of OERs and metadata requirements.

iv. Librarians see themselves playing the roles of managers of OER repositories; developers of generic OERs e.g. study skill materials; indexers and cataloguers of OERs and liaison and promotion of OERs.

13.0. The future of OERs at the University of Leicester

OSTRICH which stands for OER Sustainability through Teaching & Research Innovation: Cascading across HEIs (OSTRICH) is a continuation of the OTTER project. The OSTRICH project is part of the HEA and JISC OER Phase 2 programme led by the Beyond Distance Research Alliance at the University of Leicester with project partners at the University of Bath and the University of Derby

Aims

OSTRICH will transfer and cascade the key outcomes of the OTTER project and will enable the universities of Bath and Derby to:

- contextualise key OER lessons learnt;
- test and transfer OER models;
- devise a sustainable approach to OER development and release

Expected output

- Sustainable OER development processes.
- An improved CORRE quality and evaluation framework for OERs.
- 100 credits’ worth of materials that will be deposited into the project repository and JorumOpen.
- A cascade model with associated guidance to enable partners to sustain the production and release of OERs beyond the duration of OSTRICH.
• Opportunities for the dissemination of the OERs and associated findings within and beyond the partnership.
• Further collaboration opportunities on OER issues across the sector

Key dates
OSTRICH begins on the 31st August 2010 and ends on the 30th August 2011. Further information on OSTRICH can be found at www.le.ac.uk/ostrich

14.0. Important resources

a. OTTER website [http://www2.le.ac.uk/departments/beyond-distance-research-alliance/projects/otter]

b. OTTER OERs [http://www2.le.ac.uk/departments/beyond-distance-research-alliance/projects/otter/the-oers]

c. OTTER OER blog [http://projectotter.wordpress.com/]

d. OTTER project final report [http://www2.le.ac.uk/departments/beyond-distance-research-alliance/projects/otter/documentation/projectfinalreport.pdf]

e. CORRE framework [http://www2.le.ac.uk/departments/beyond-distance-research-alliance/projects/otter/about-oers/Corre-web.pdf]

f. Put-up take down policy. [http://www2.le.ac.uk/departments/beyond-distance-research-alliance/projects/otter/documentation/putuptakedown.pdf]

g. Sample partnership agreement [http://www2.le.ac.uk/departments/beyond-distance-research-alliance/projects/otter/documentation/samplepartneragreement.pdf]

15.0. References

1. Cape Town Open Education Declaration: Unlocking the promise of open educational resources. Found at: http://www.capetowndeclaration.org/read-the-declaration] accessed 17-09-09


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B: Policy issues regarding Open Educational Resources (OER)


C: OERs and Copyright


25. Open Knowledge Foundation. Open Knowledge Definition. Found at: v1.0 (http://opendefinition.org/1.0/


27. Questioning copyright [Found at: http://questioncopyright.org/minute_memes/all_creative_work_is_derivative


D: Sustainability of OERs


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E: Design and evaluation of OERs


47. Carey, T., and Hanley, G., (2008). Extending the Impact of Open Educational Resources through alignment with Pedagogical Content Knowledge (PCK) and institutional strategy: lesson learned from the MERLOT Community experience. In Iiyoshi, T. & Vijay Kumar, M.S., Opening of Education: The collective advancement of education through Open technology, open content and open knowledge.


51. IMS Learning design Best Practice and Implementation Guide (Found at: http://www.imsglobal.org/learningdesign/dv1p0/imsld_bestv1p0.html#1501762


62. TLRP’s evidence-informed principles for effective pedagogies  

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http://www.getty.edu/research/institute/standards/intrometadata  
71. Spronk, B., Editorial: Technology, Policy, and the Right to Education. International Review of Research in Open and Distance Learning Volume 9, Number 1.