

# OERP Workshop; Methods & Processes

Alex Fenlon (alex@engsc.ac.uk), Rob Pearce (Rob@engsc.ac.uk)

Loughborough, University

## Abstract:

*The authors propose to run a workshop to highlight the processes involved in producing Open Educational Resources (OERs) within the engineering sector. The session will be based on the learning acquired by the authors during the Open Engineering Resources Pilot Project (OERP). There are three aims of the session; to highlight the work of the project, a practical session to highlight the variety and diversity of OERs currently available for reuse, and to actually create teaching resources from existing available OERs.*

*The workshop will task attendees with the creation of learning resources based upon available OERs aimed at teaching specific learning objectives, incorporating existing OER. The task must be completed using pre-existing OERs available as a result of the project or other similar initiatives, and several members of the OERP team will be on hand to help.*

*By going through the processes involved in the creation of learning resources attendees will be informed about all the steps involved in using and producing OERs. The workshop will provide an opportunity for attendees to discover the range, type and quality of other OERs currently available for reuse. They will come across intellectual property rights (IPR) issues, namely copyright, that they may not have previously considered when producing resources. The task will highlight issues along the use of Creative Commons licences on resources, issues of ownership, the processes involved in requesting permission from rights holders when seeking to use resources, and will provided attendees with an introduction on how these issues should be approached and dealt with in the correct manner, eliminating some of the myths surrounding them.*

*Resources created from the session will also be released in the same way that the base OERs are disseminated. This element will also focus on the issues behind releasing resources under Creative Commons or other 'open licensing' schemes.*

---

## Introduction

The OERP project has encountered some significant obstacles in the process of creating resources that are released as OERs. The project team and partner institutions have attempted to 'retrofit' IPR issues and permissions to existing learning resources which has proved difficult and time consuming. By introducing all of these issues to attendees, the workshop intends to disseminate the learning acquired during the course of the project so that attendees can avoid these barriers to producing Oer in the future.

The major learning outcomes of the workshop are:

- An appreciation of the lifecycle of OER creation, sharing, re-use and re-sharing
- To understand the potential issues when creating teaching resources that may or may not be released as OER.
- To gain an understanding of the IPR, licensing, the reuse of resources, and how such issues can be tackled.
- To produce a resource using existing OER.

However the main objective is to introduce OER to a wider audience illustrating the range of resources that are freely available whilst simultaneously demonstrating how to utilise these existing materials to create learning resources for students.

## The Task

During the workshop teams of 4 or 5 attendees will be asked to produce resources that cover specific learning outcomes for students, using existing OER. There will be two or three different task options for the attendee teams to chose from but there will be specific learning outcomes that the task resource must deliver for the students. The

session team (see below) will assist and guide each attendee team by explaining how to find and identify open resources and how to incorporate and acknowledge them correctly.

In order to attract attendees, the subject of the tasks must be universally applicable across all engineering disciplines. The task must be created so that all attendees can contribute to the creation of the resources so it is vital that attendees have some knowledge of the task subject discipline in order ascertain what is useful to fulfill the learning outcomes. It would be detrimental to the session if only some attendees were able to actively contribute to the content of the final resource, while others were passive.

One example subject that could prove useful and universally applicable is professional standards; all attendees would have some knowledge of what would be required within teaching resources covering this subject. Other subject specific tasks are to be devised after the completion of the dissemination phase of the OERP.

The alternative to a universal subject would be to create a selection of tasks and learning outcomes that cover several topics rather than one general subject. There could be 3 or 4 different topics that the attendee groups can select from depending on their area of expertise. Again this would allow attendees to have some actual knowledge of the subject for which the task is being created and therefore provide an insight in to how and what should be covered to meet the learning objectives.

The subject of the task(s) is yet to be confirmed as OERP is still underway and the majority of resources are yet to be released. When the dissemination phase of OERP, and the other OER projects currently taking place, has been completed the session team will devise and test a selection of suitable tasks that can be completed within the workshop session using the existing resources. Until more resources are available, the precise topic for the task(s) it would be difficult to determine the effectiveness of the session. It is of vital importance that the base material, those OERs already in existence, are suitable for the task set for the attendees and allow the creation of resources that meet the learning objectives.

Although the actual outputs that arise from the session are secondary, it would be beneficial if they were of a sufficient quality that they themselves could be released as OER. However the principle aim of the session is to explore how OER can be utilised and the processes involved.

The session tasks should be set to a suitable educational level to encompass the broadest cross section of attendees possible, probably undergraduate, but it would depend on the specific task designed and the existing resources available. The complexity of the resource should not be too great or too challenging as the workshop is only 90 minutes in duration and may limit the range of OER available.

Obviously the viability of such tasks will be determined by the suitability of the resources available during the 'trial run' and the task(s) may evolve as a direct result.

## Task Structure

The session will be split into three main sections.

### 1. Introduction 15 mins.

The subject and the ethos of the task will be explained to the attendees. They will be asked to split into groups of 4 or 5 (depending on the number of attendees) and then asked to select a topic for their task (if a more general task is selected, this step will reflect the amendment). Each team will also be assigned a mentor from the OERP team for the task. All members of the session team were involved with the OERP and therefore have expertise in the creation and release of resources.

The session team will consist of:

Rob Pearce (Engineering Subject Centre)

Alex Fenlon (Engineering Subject Centre)

Anthony Rossiter (University of Sheffield)

Mark Russell (Blended Learning Unit, University of Hertfordshire)

Manish Malik (University of Portsmouth)

(Rob and Alex may not be assigned teams but perform a roaming role providing advice and guidance to all teams).

### 2. Task activity- 45 minutes.

The teams will be given 45 minutes to source resources that fulfill the learning objectives set with the task incorporating existing OER into their teaching session, and to present their efforts to the workshop. The teams will be provided with a guidance document that will list selected websites where resources can be found, and other hints and tips. Further support, advice and guidance will be available from the session team so that all the issues encountered during the task will be fully explained.

It has yet to be decided whether or not to restrict the search for resources to websites listed on the guidance document in order to ensure the task is completed within the time available. The viability of this will be determined when the session tasks are formulated.

The resource created during the task will not be limited in terms of length or approach, however it must fulfill the specific learning objectives stated by the task utilising existing OER. The secondary aim of the task is that materials created are subsequently released as OER in the same manner as the base resources. Accordingly if the resources were flexible, granular and attractive to re-users it would be beneficial.

The focus of the session will be on identifying, sourcing and reusing resources. This will include IPR issues and the concept of open licensing, which is one area that partners on the OERP were generally unfamiliar with, and therefore it was a major issue when preparing resources for the project. The inclusion of attribution and identification of sources materials is another related area that will require additional guidance in parallel to IPR matters.

### 3. Presentation & Feedback- 30 minutes.

When the task has been completed the teams will be asked to present their resource to the workshop. They will be asked about their experiences of the processes involved in the creation of the resource, the standard of the existing resources, how difficult it was to use existing resources and how those resources suited their needs. A discussion of the task, IPR, licensing and all other issues will follow. At this point the OERP team will share their experiences of the project with the session, detail how the project tackled those same issues, and highlight the OER released by the project.

#### **Equipment required.**

As the task will rely on the ability to search the Internet for resources, IT equipment is vital for the operation of this workshop. 5 - 6 work stations with Internet access are required along with electronic presentation equipment if possible.

## **Outcomes**

It is envisaged that the attendees will be introduced to OER as a way of utilising/ producing learning resources without having to start from scratch. The session will explain how OER can be incorporated into existing materials and what impact OER can have on the learning experience. Sourcing replacement content, licensing, acknowledgements and all the issues associated with the use and creation of OER will be covered by the session. As a secondary aim, the session output will also contribute to the pool of resources available as they will also be released as OER.

By undertaking this exercise some of the myths and demons of IPR and especially copyright law will be dealt with. IPR is one area where care must be taken. Although Institutions have a firm understanding of IPR often the academics themselves do not, which causes problems when academics volunteer to release resources as OER. The session aims to provide a brief explanation of the key issues to look for when dealing with IPR and will also challenge attendees to discover the IPR policies at their institution and to find out who the correct contact is for them at their own institution.

The session will provide an opportunity for the OERP team to illustrate the progress of the project and the challenges it faced. The exercise will allow the attendees to actually experience the steps involved in the project for themselves in a tactile and hands on environment which it is anticipated will have a deeper more long lasting impact than a paper or presentation. Attendees will see the obstacles they face in completing the session task were mirrored by the those experienced in the OERP.

This task, it is hoped, will encourage attendees to become empowered to seek and actively utilise OER within their own teaching and learning. Attendees should be encouraged to continue the exercise after the session and feel confident that what they are doing will enable the free reuse of their resources for future generations. It will help to spread the concept and ethos of OER to a wider audience by giving attendees some basic knowledge and skills to be able to apply the knowledge acquired from the session task to the production of resources for the next semester.

The project has shown that trying to retro fit resources into an OER format can be very difficult. Resources that have proven pedagogic quality can be rendered useless after they have been through the necessary IPR checks required by OER process. In considering OER and the related issues at the point of resource creation, academics will be contributing to the facilitation of faster, effective and more efficient preparation of resources for release as OER, leaving more time for them to focus on the core task of education. If issues such as IPR and accessibility can be held in mind when the resources are created, the release as OER is far less time consuming, complicated and expensive.