Overview
The UCT OpenContent directory is the web portal for accessing open teaching and learning content from the University of Cape Town (UCT). Produced by the Open Educational Resources project in the Centre for Educational Technology at UCT with the support of the Shuttleworth Foundation, the directory aims to showcase the teaching efforts of UCT academics and encourage the publication of open resources.

The directory acts as a referatory, not hosting the OERs, but linking to materials shared on departmental servers, within the institutional learning management system, on social media websites or anywhere else on the internet. Where the resource is actually hosted is inconsequential as long as it is online and openly available. While we discovered many such resources online as we conducted an audit of OER, the discoverability of these resources is hampered by a lack of metadata describing the resource. The OpenContent directory seeks to expose web resources by describing the materials thereby increasing discoverability.

The OpenContent directory is openly available to anyone on the web. Using Google Analytics to track visitors to the site has revealed that 60% of our visitors come from within South Africa. It is thought that many of our visitors may in fact come from our own institution. The directory is allowing our own students to discover content which may not have been previously available to them. By tracking search queries, we can also get a feel for what people are looking for in the directory. In fact, when we noticed that people were searching most frequently for ‘citation’ and ‘referencing’ we worked with our library to release a referencing guide in the OpenContent directory.

Metadata is fed to international repositories such as OER Commons and the OpenCourseWare consortium. This ensures that UCT resources are included in the global referatories which we believe serve as an important starting point for people looking to find open educational content. The metadata also allows users of the site to browse and query the resources within any vocabulary item.

Technical Infrastructure
We explored a number of open source projects in our quest for an OER repository. At the time many OER repositories found at other institutions were using the popular EduCommons platform. We tested the EduCommons system quite thoroughly and found it slightly rigid for our needs. At the time we also tested Wordpress, dSpace and ePrints finding them unsuitable for our project.

We tested Drupal and found it to be highly adaptable through the various modules which could be added on to the core package. Modules extend Drupal’s core capabilities adding new features or customizing Drupal’s behaviour and appearance. In fact we were able to find a module for nearly everything we wanted to do with Drupal, making it highly customizable.
Metadata Currently in Use
Having explored the metadata framework in use at OER Commons we decided to map our own metadata based on their requirements. The OER Commons metadata framework was based on the Dublin Core standard and included a few additional fields particular to OERs.

The metadata fields currently in use are listed below. The required (*) fields are those which were required by OER Commons. We have added three fields to the metadata profile: Teaching and Learning Context; Funded by; and OER Image.

The following fields are collected during the submission of an OER.
(* Required fields)

Title*
Give your resource a descriptive title.

Authors*
Enter the author(s)/creator(s) of the resource.

URL*
Provide the web address where your resource is stored (e.g. LMS, departmental server). Note: This page does not allow you to upload your resource. The URL you provide gives the direct link to where the resource is located.

Abstract*
Describe the content of the resource in as much detail as possible.

Teaching & Learning Context
Describe the recommended learning context or prerequisites for the appropriate use of the teaching and learning tool. This can be as simple as sharing a story of how the material has been used in your own teaching.

Funded by
In the case of a resource being an outcome of a funded project, please specify the funding institution.

OER Image
You are encouraged to attach an image which represents the resource. This may be an image from within the material, a screenshot of the cover, or a relevant graphic which represents the contents. If you do not provide an image a suitable one will be selected for you on moderation.

Creative Commons Licence*
Submitting a resource to the UCT OpenContent directory implies the desire to share your educational resource with the world. OER UCT recommends the Creative Commons licence as it protects the attribution rights of the creator while allowing others to make free use of the material.
Faculty*
Select the faculty in which the material was created or the faculty the material most cohesively represents.

Department*
Select the department in which the material was created or the department the material most cohesively represents.

Media Types*
Select the item which best describes the document type of your resource.

Material Type*
Select the item which best describes the material type of your resource:

Language*
Select the language your resource is written in.

Level*
Select the recommended student level your resource is intended for.

Tags*
Please add tags which describe your resource in more detail. For instance, if you selected the Faculty of Science and the Department of Physics, you might want to tag this resource with something like ‘Newton’s Laws’ if the material is specifically about that topic.

Benefits to current system after integrating the completed LRMI standard
We adopted the OER Commons Metadata Schema while developing our directory of OER in 2009. We worked quite closely with OER Commons with regard to appropriate metadata standards. At the time it seemed the best decision to adopt OER Commons metadata, so that we could feed our resources into the OER commons referatory. We have since had a number of challenges in getting our metadata listed in OER Commons using the OAI-PMH service. At the same time, we have easily fed our metadata to referatories such as the OpenCourseWare consortium using technologies such as RSS feeds.

Since launching our directory we have had numerous discussions about the metadata vocabulary and how it could be more useful and descriptive. We often find that it is a challenge to categorise teaching and learning (OER) resources according to the available metadata vocabularies. The issues we had in aligning with OER Commons were mostly that of terminology, for instance at UCT we refer to the Faculty of Commerce and the OER Commons metadata used the term Business. It was these nuances which we had to sort out in order to feed our metadata to OER Commons. We also had some issues with the terminology within the vocabularies not being descriptive enough or missing notable learning resource types. We are currently exploring ways to make the metadata more descriptive and useful in line with larger initiatives at our institution including our library.

We have also noted initiatives such as the Creative Commons Learning Resource Metadata Initiative which seem to be tackling the issue of finding a useful framework for describing teaching and learning resources. We see a real need for a well-considered metadata framework for learning materials. Ideally global referatories such as OER Commons, Creative Commons search, and the OpenCourseWare
consortium should allow people seeking educational content to search across repositories with similar metadata.

**Costs to current system after integrating the completed LRMI standard**

We are currently looking for ways to improve the metadata framework used at UCT. A number of institutional initiatives are emerging which may also benefit from a more comprehensive metadata profile which the institution could adopt as a whole.