

# Toward a sustainable OER development model: repurposing the cognitive surplus of student-generated content

## Institution & Institutional Context

A multi-campus university in the Greater Western region of Sydney, the University of Western Sydney is made up of six campuses and one precinct, with each campus hosting their own unique array of courses, of which different units can be completed across multiple campuses.

## Keywords and OEP themes

Students co-creation.

## What is the case study about?

The aim of the study was to address part of the challenges of the OER in higher education, and advance OER initiatives by developing and evaluating a potentially sustainable OER development model that taps into student-generated content at undergraduate study level. The proposed model aims at engaging students in the development of learning resources that can be published via OER.

## What is the issue or need you are addressing?

The OER development model has been developed in real-life educational settings and consists of a set of design principles that can be reused by other higher educational institutions wish to initiate their OER projects and adopt open educational practices. The model establishes communities of practice of students and teachers to work collaboratively on generating learning resources that can be shared as OER. The research has been implemented in three study units at the school of computing, engineering and mathematics at the University of Western Sydney in the academic semesters: Spring 2012, Autumn 2013 and Spring 2013.

## How was the initiative implemented?

During the academic semesters Spring 2012, Autumn 2013, and Spring 2013 three units were invited to participate in the research. Participants were students enrolled in unit "Introduction to IT" (300134), "Foundation of statistical modelling and decision making" and "Data Mining and visualisation".

Students were asked to develop learning resources as a part of unit assessment.

Students were provided with technical scaffolding in generating the learning resources including;

1. Introductory workshop to raise awareness of value of openness in higher education and establish incentives to create and share learning resources as OER.
2. Technical workshop on utilising content authoring software tools to generating OER.
3. Learning resources card, which is a table to be completed at the beginning of the project where students provide a complete description of the learning resources they will generate.
4. Online discussion forums through the learning management system.

There were also meetings that took place with the unit coordinators to explain their role as facilitators of students work and their role in adjusting the educational accuracy of the learning content. At the end of the semesters, students' projects were evaluated based on a set of evaluation criteria (that also has been developed during the research lifetime), to assess the fitness of these project to OER. At the beginning of the academic semester an online survey has been designed and used to collect data from students to help understand students' previous experience with user-generated content (UGC) and student-generated content (SGC). The data was then used to find out if there is a correlation between the quality of students' projects and their previous experience in creating UGC or SGC. The results help to verify the readiness of undergraduate learning environment to adapt the proposed OER development model. At the end of the semester students were also asked about their experience in the research through another online survey.

## Outcomes

The outcomes represent the design principles of the OER development model that can be reused in undergraduate learning environment.

## Issues & challenges

Challenges related to the research including finding external evaluators of students' projects, the process was time consuming and took longer than expected. Challenges related to the model were concerns about the existing gap between the LMS and the teaching strategies.

## Insights and Recommendations for National and/or Institutional Development

Openness has started to take a more significant role in learning and teaching since the introduction of information and communication technologies. Openness also has many promises for social and economical impact on the future of higher education. In the context of Australian higher education, adopting openness can be a promising path for coping with the new changes to higher education in 2016, where universities will decide the tuition fees for new enrolled students. However, adopting open educational practices, such as OER, Open Textbooks and open learning require raising awareness of the value of openness in higher education, and related areas such as OER, intellectual property and open licensing and reusability of learning content.

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