Use of open educational resources at the UOC

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Abstract

The Open University of Catalonia (UOC: *Universitat Oberta de Catalunya*) is currently implementing its 2009-2014 Strategic Plan, which devotes an entire section to open educational resources. The working group on this topic is drafting a report that establishes the objectives to be met, analyses the current lay of the land and sets out the actions required to meet the objectives. This paper examines each of these three points.

Keywords

Open Educational Resources, OER, learning resources, e-learning, OpenCourseWare, OCW

Introduction

This paper addresses open educational resources (hereinafter, OERs) at the Open University of Catalonia (UOC: Universitat Oberta de Catalunya). This introduction will offer a brief overview of the UOC and its relationship to OERs.

The UOC

The UOC is an online distance university. Teaching takes place in virtual classrooms that are equipped with the necessary media for professors and students to communicate: forum, notice board, e-mail, calendar, etc. The educational resources used by students as guides and sources of knowledge are also available through the classroom. However, the main learning tool is not these resources but rather the assessable activities carried out as part of each course.

Educational resources at the UOC

Educational resources, in conjunction with the professor's guide, must allow students to carry out the educational activities for a subject. Traditionally, each subject has had its own materials, designed and drafted specifically for it, containing everything or nearly everything a student needs to know to pass.

OERs at the UOC

About three years ago, the UOC began to include a clause in its author agreements authorising it to publish these resources under a Creative Commons licence. It then set up an OpenCourseWare website and began to publish those materials subject to open agreements on it.

There was a precedent for this at the university. In keeping with its content, GNU FDL licences were arranged for the materials for the master's degree programme in free software, and, indeed, these materials are known to be widely used in the field of free software.

Recently, the university drew up a 2009-2014 Strategic Plan, which devotes an entire section to OERs. It is within the framework of this plan that the university has seriously begun to consider the position and actions it should take in relation to this topic. The report being drafted by the working group covers three main points: objectives, analysis and actions. The objectives refer to the situation the university would like to reach; the analysis describes the current lay of the land; and the actions refer to what needs to be done to achieve the desired outcome.

Objectives

The objectives with regard to the adoption of OERs are twofold. First, the university aims to make its internal content available to others. This entails a series of benefits and obligations. Second, it aims to take advantage of resources created by others. Both lines of action have considerable potential.

Cutting costs

Given the current rate of deployment, which has increased with the implementation of the new European Higher Education Area (EHEA), the creation of new material for each subject is proving to be unsustainable. This situation is further compounded when the material in question must be constantly reviewed and updated.

Using external resources created by other universities would seem to be the clearest way to cut costs in this sphere. However, these 'external' resources could just as easily be internal ones. That is, if the UOC were to change the way it makes its internal resources, the same resources could be used for multiple subjects.

Enhancing quality

OERs should be used in such a way that the quality of the materials is enhanced autonomously and independently of the university that created them. Releasing a resource, making it available to the community at large, also means giving the community the chance to improve its quality.

Brand positioning

MIT was the first to realise that opening its content to the public is an excellent marketing tool in the form of transparency. In a word, if you believe in the quality of what you do, you have nothing to fear in showing it to the world.Marketing the academic offer

The materials could also serve to publicise the university's academic offer. Many students will value the chance to see the content for a given subject before enrolling in it.

Social responsibility

Contributing to educating the society of which it forms a part is part of the university's mission. Given that these materials were partially funded with public money, making them available to the public would seem to be an ineluctable act of responsibility.

Internal analysis

Before designing a strategy, the current lay of the land must be thoroughly understood. A poor understanding of ourselves is the main obstacle to be overcome before proposing any action.

Statistics

The main challenge in assessing the current situation is the lack of reliable data and valid indicators for the analysis. It is especially important to determine, out of all the resources used, which are internal and which are external and, out of the latter group, which resources are subject to fees and which are free.

Return on investment

The funds allocated to each subject for resources are not based on the number of students. Each subject is given the same amount of funding for resources, regardless of how many students enrol.

Student attitudes

Students attach significant value to having materials that were specifically designed to help them follow the subject. Students pay for the materials made by the university, and, taken as a whole, these payments are a significant source of revenue.

Material publishing system

The system for creating materials is quite well-established. Professors must anticipate the need to create new materials one year in advance so that the necessary funding can be allocated in the budget. They must then find authors and review and submit the original texts four months prior to the start of the academic year. Finally, they must revise the published materials.

The materials are published in XML. They are available in multiple formats, which are generated automatically: website, PDF, epub, mobipocket, audio, video, and an XML file that is saved in a repository.

Subsequently, some of these materials are sold as books outside the university. In all cases, the cost of the materials is considered an investment and forms part of the university's assets.

Faculty dedication

It is easier for a professor to create a resource from scratch than to try to use an existing one. In the former case, he or she commissions the work from external authors and only needs to revise it. In the latter case, the professor him or herself must find and adapt the resources.

Dominant position of the provider

Authors are the university's main content provider. Professors commission the content and ensure the quality thereof, but in most cases it is actually written by external authors. These external authors sometimes hold a dominant position vis-à-vis the university and can thus impose their own conditions. For example, they may refuse to allow their content to be openly published.

Additional source of income

The creation of new materials, and the revision and updating thereof, is an additional source of income for faculty members and their circle of collaborators, which gives rise to a situation of mutual dependence.

Materials as a value-added feature

The resources created by the university itself are regarded by the institution, as well as, most likely, by students, as a value-added feature that sets the university apart from other similar institutions.

Customised materials

The materials created at the university are tailored to the relevant teaching plan. Consequently, students can often pass a subject using only these materials. The materials are moreover translated into the teaching language (Catalan or Spanish).

OpenCourseWare website

Three years ago, the UOC set up an OpenCourseWare website, where it publishes its open materials grouped by field of knowledge and subject. The UOC belongs to the OpenCourseWare Consortium (OCWC) and attends its meetings.

Government grants

Most of the resources currently classified as open are subsidised by the Spanish Ministry of Culture under the e-Alquimia programme. This seems to be a recurring feature at educational institutions; however, it is necessary to determine what business model should be used for open content beyond government funding.

External resources

Most of the external resources used in the classrooms are fee-based. In other words, a fee is paid to a publisher entitling the UOC to use these resources, usually articles or book chapters, for a given period of time and with a given number of students.
The UOC is scrupulous on this point and ensures that classrooms do not use resources without paying for the copyrights.

Actions

This section sets out the strategies to be followed in order to meet the objectives. It also attempts to address some of the potential obstacles and reservations that may hinder the achievement thereof.

Creation of a general policy

The university must have a general policy with regard to content, as opposed to a policy of exceptions and special treatments, which gives rise to a host of particularities that are difficult to manage and regulate.

Modular content

Content must be modular: it must address specific topics and do so in the most decontextualised way possible with regard to the subject at hand. This will make it easier to use in other contexts.
To this end, a way must be found to deal with the increase in processing entailed by such modularisation, as the number of 'products', or independent resources, will grow fivefold. This will, for instance, make the production, storage and dispatch of printed materials substantially more complicated. How resources are organised in the classroom will also need to be rethought.

Increase the use of external resources

This is a two-pronged strategy. First, the number of internal resources that may be produced for each subject must be limited. This limit must be linked to the projected return on investment (ROI), such that a subject with many students would receive more funding than one with just a few.

Second, external resources must be used to cover the gaps that will be left by the internal ones. To facilitate this use, faculty members should be trained in the use of existing OER repositories, a system for commissioning the selection of resources from an external expert should be put into place, and a support group should be created to help faculty members choose resources.

Indeed, ideally internal material should only be used to hold a set of external resources together, as an extension of the teaching plan. Internal resources with content should only be created for those aspects of the subject that truly are not covered by quality external resources.

Self-editable content

Updating a resource, regardless of how minor the modification, requires launching an entire editing process: fixing the XML, correcting the galley proofs, generating the formats, printing and re-dispatching hard copies... The creation of self-editable content by faculty members would stave off the need for many of the minor re-editions that are made.

It is thus necessary, first, to determine which system is best suited for making self-editable resources and, second, to find a system that logs all the modifications made to a resource.

Multi-campus

The collaborative creation of resources by multiple universities can help to optimise the creation costs. It is necessary to determine how this collaboration will be carried out.

Collaboration agreements

In keeping with the previous point, agreements can be signed with companies, foundations and other types of organisations with expertise to offer in their respective fields, whereby the partner institution authors content in exchange for training or the publication of the resources and vice versa.

Calls for providers

Under the sole provider system currently used by the university, prices are unlikely to match actual market needs. Calls for providers could make it easier to bring prices into line with actual market

demand, taking into account, as noted above, that different quality products could be offered depending on the projected ROI.

Marketing plan

It is not enough to open content to the public and post it in the institutional repository. It must be publicised, as it is part of the university's brand and serves as an advertisement for its training offer. A specific marketing plan must thus be crafted for OERs that contemplates strategies for the dissemination thereof.

Students

It is important to anticipate potential student reactions to the new paradigm. UOC students attach significant value to the materials specifically designed for each subject. How will they react if these materials disappear only to be replaced by a heterogeneous set of resources? The fact that students will not want to pay for resources that are freely available online must also be taken into account.

Conclusion

It seems inevitable that universities will end up making all or part of their content open to the public; however, this must be done in a planned, useful and sustainable way. Isolated initiatives at the university itself can begin to forge a path forward; however, they often lead to a dead end.

The creation of a general open content policy at the university would allow it to close the loop and take advantage of these resources, both for its own benefit and for that of the educational community at large.

Releasing resources without regarding their release as anything more than a marketing strategy is not sustainable. The way these resources are created, and how they are used in classrooms, must be changed.

As a result of this paradigm shift, we must move away from materials that contain everything a student needs to know to pass a given subject and towards sets of resources that must be interpreted in order to extract the necessary knowledge. This is not an isolated change affecting only the resources, but rather one that will affect the learning process itself.

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