Digital strategy at UCLouvain : openness matters

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Abstract

As is the case in many universities, the Université catholique de Louvain (UCLouvain) decided to seize the opportunities offered by the coming of age of digital technologies and their attendant capabilities by formulating a digital strategy. This strategy, validated in 2015, aims to exploit digital capabilities to enhance the creation, dissemination, and diffusion of knowledge. UCLouvain choose, however, to articulate its strategy simultaneously on three areas of openness: open education, open publication, and open source.

In this paper, we first motivate the choice for openness.

We then outline the priorities that have been set in UCLouvain's digital strategy and we highlight various axes of development by illustrating some of the results already achieved, with an emphasis on open education: the deployment of an open resources repository, the realization of MOOCs, the setting up of an open journal system, and examples of support provided to the community, for instances.

We conclude by discussing several challenges to be faced when mainstreaming openness.

Our aim is to share our experience and to open a fruitful discussion with other institutions having similar concerns.

Key Words

Openness, Politics, Strategy, Open Education, Open Access, Open Publication, Open Source

Context

UCLouvain is a comprehensive university founded in 1425. It is located in the center of Belgium and is organized around 14 faculties and schools, 30.000 students, 1.900 teachers, 3.000 researchers and 150.000 Alumni.

UCLouvain's vision of a Digital University is a university where digital promotes the creation, the dissemination and the acquisition of knowledge.

Why digital ?

Students, as well as our new teachers and colleagues are digital natives. They are almost continuously connected, most of them are apparently capable of handling multiple tasks simultaneously (talk, play, listen, watch, read, …), they extensively rely on Wikipedia, Google is their privileged partner to find information, their studies and their research rely heavily on collaborative tools (Bates, 2015; Eisner, 2005; Josiam, 2009; Tapscott, 2009). The digital evolution of society thus incites higher education institutions to rethink the way they handle their core missions. Consequently, many universities have developed and published a digital strategy (see for instance (Unige, 2017; Brown, 2017; Oxford, 2017)).

In its digital strategy (Deville, 2015), UCLouvain stretches the importance of the quality of services provided by means of technology rather than emphasizing technology itself. As stated in (OCDE, 2010), the quality of a policy lies in its capability to meet the needs of the members of the university which are not, primarily, concerns for new digital techniques per se.

Why Open ? What kind of Open ?

Digital strategies may be implemented in many different ways. UCLouvain strongly believes that openness is the way to go in each of its core missions, namely: education, research and services to society. This has resulted in a three-pronged approach: Open Education, Open Publication, and

Open Source. Other institutions have also chosen for openness, sometimes but not always simultaneously in the three areas chosen by UCLouvain. Examples are MIT (MIT, 2017), University of Edinburgh (Edinburgh, 2017) University of British Columbia (UBC, 2017), Rice University (Rice, 2017) or TU Delft (TUDelft, 2017).

UCLouvain's definition of openness is aligned, whenever possible, with the definition provided by the Open Knowledge Foundation: "Open means **anyone** can **freely access**, **use**, **modify**, and **share** for **any purpose** (subject, at most, to requirements that preserve provenance and openness)." (OpenDefinition, 2017).

Current achievements

Open Education

Openness, sharing and collaboration matter for education. UCLouvain declines this as follows: Open Educational Resources (OER), Massive Open Online Courses (MOOCs) and use of Educational Tools.

OERs*.* Starting in February 2017, UCLouvain has launched its own repository of Open Educational Resources, based on an open source solution (Version 6.2 of DSpace, 2016). Educators are encouraged to deposit their material on this platform (http://www.uclouvain.be/oer); this can be existing material, transformed existing material, or newly developed material. Grants are available following a yearly call for projects.

After the first six months of operation, the repository oer.uclouvain.be contains about 150 resources authored by 136 members of the university: open textbooks, open courseware, videos, assessment rubrics, problem-based learning material, serious games, pedagogical software, etc. The number of monthly accesses hovers around 3.000 per month, with a growing community of returning users. To increase the visibility of our OERs, they are systematically referenced in known OER portals such as OER Commons (https://www.oercommons.org/browse?f.provider=université-catholique-de-louvain) and Merlot (https://www.merlot.org/merlot/unifieds.htm?keywords=oer-uclouvain).

MOOCs. UCLouvain joined the EdX consortium in 2013; up to now, 24 courses have been developed (https://uclouvain.be/moocs). These MOOCs have been followed by 360.000 registered learners from 200 countries. Our aim is, of course, to extend access to our courses to a wider audience, but our strategy is to integrate UCLouvain's MOOCs into its own courses, with the aim of supplying additional resources to regular students and enhancing their learning, in a blended learning approach. MOOCs also reinforces our international strategy through our involvement in EdX's MicroMaster programs and in the European Virtual Exchange experience. Although MOOCs are freely open to anyone, they do not strictly follow the openness definition. We however encourage our teachers to also publish their MOOC videos under a Creative Common license.

Supporting technologies. UCLouvain's LMS is open source Moodle (Version 3.3 of Moodle (2017)); its solution for secure online assessments is based on open source Safe Exam Browser (Version 2.1 of Safe Exam browser (2016)); its podcasting tool is being moved to the open source EZcast (Latest Version of EZcast (2017) … In both cases, a significant effort has been expended by the university's IT team to tailor the products to its needs (for instance, Safe Exam Browser has been completed by a homemade portal, available as an open source software, which facilitates the management of the exams sessions (Dupuis, 2017)). Specific grants are available to help members of the university experiment with new open-source tools for education.

Open Publication

UCLouvain actively supports the free access to scientific knowledge and to research outputs. In Open Publication, UCLouvain developed its institutional repository http://dial.uclouvain.be ("green open access"). The objective is to increase the open access of scientific papers published by its researchers. To allow researchers to publish academic journals free from the constraints of commercial publishers, UCLouvain just deployed OJSLouvain, its own Open Access journal publishing platform based on the open source software OJS, developed by the Public Knowledge

Project (Version 2.4 and 3.0 of OJS (2016)). Today, four UCLouvain Open Access journals are hosted on OJSLouvain. Here again, grants are available to support researchers to launch or to transfer existing journals on OJSLouvain.

Open Source

In the field of software, University of Louvain wants to join the Open Source movement by promoting, yet without dogmatism, an open and collaborative approach both when choosing a new software and when disseminating an internal achievement. Different open source software, mentioned in the previous sections, were chosen to support OERs, LMS, podcasting and open publication.

Some challenges

Our experience with the introduction of openness as a guiding principle for the university digital strategy has given rise to a number of challenges.

Aiming for openness is a major paradigm shift, which requires leadership, confidence … and patience. At UCLouvain, a specially appointed advisor to the Rector (President) has undertaken to lead and pilot this digital strategy. Even though the basic principles of openness are easy to understand and to subscribe to, adopting them as a matter of course and avoiding considering openness as a temporary "fashion" takes time. One should aim for a gradual implementation with strong coordination, mixing both a top-down and a bottom-up approach. Moreover, going a step further subscribing to an "open ethos" (Weller, 2014), probably requires a large debate within the community.

In terms of Open Education, access to open resources and tools is, of course, necessary but it is not sufficient: people should be actively encouraged to exploit them. Mode of teaching has to be adapted (Blessinger, 2016); this deeply implies the Center for Teaching and Learning of UCLouvain (Louvain Learning Lab). Moreover, the impact on students learning is crucial and requires further study, which UCLouvain has undertaken (Docq, 2015; Schiffino, 2015).

Having recourse to open source software might be conflated with cost savings. Even though many off-the-shelf products are available at no or low cost, selecting an appropriate solution requires investing in pilot projects, experiments, and analyses. Furthermore, parameterizing and deploying an operational solution will also require a significant investment. At UCLouvain, a significant budget has been allocated to cover these costs.

Conclusion

There are many ways to define and deploy a digital strategy. UCLouvain considers that the quality of a digital policy can be measured by its ability to meet the needs of its members and to propose an approach centered on them (OCDE, 2010). Among those needs, once encountered the creation, the evaluation, the dissemination and the acquisition of knowledge. Openness has been a well-considered choice. We might refer here to a quote of Anton Akhmerov : "*In research we are able to do so much because we "stand on the shoulders of giants": we can reuse the work done before us and build upon it. I hope that we, as a community, learn to use the same principle also in spreading knowledge*" (Akhmerov, 2016). This leads to actions in Open Education, Open Publication and Open Source simultaneously, which pose both challenges and opportunities that were outlined in the paper.

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