WISH LIST FOR CROSS-INSTITUTIONAL OPEN AND ONLINE EDUCATION SERVICES

by **Kirsten Veelo** and **Janina van Hees**

Open and online education offers many opportunities to improve education and make it more flexible. Are the institutions and lecturers properly equipped to develop open and online education? What are their needs regarding cross-institutional services that can support this?

In the summer of 2015, SURFnet conducted a needs assessment. This article examines the results of this assessment. We will also examine what comparable initiatives in other European countries can teach us. Finally, we will explain the challenges facing us now students increasingly wish to determine their own educational tracks.

Structure of needs assessment

What tools and services do students, lecturers and education institutions need in order to get started with open and online education? This question is central to SURFnet's needs assessment, which was carried out by the consultancy firm Van Aetsveld. Over the course of six meetings, nearly 80 professionals from higher education and vocational education institutions shared their thoughts on this matter. A special aspect of the first series of meetings – the 'open space' sessions – was that the participants determined the meeting agendas themselves. In the second series – the workshops – the three most important needs were further elaborated.

Theme 1:

Sharing and reusing open educational resources

One of the most important needs is to be able to find and share open educational resources more easily. This ties in perfectly with the ambition presented by Minister Bussemaker in July 2015 in her Strategic Agenda For Higher Education and Research 2015-2025. She formulated her ambition for OER as follows: "By 2025 all lecturers in higher education will make their teaching materials freely available so they can use each other's digital learning materials". The Netherlands should play a leading international role in this area.

Searching for relevant material

Students and lecturers want to be able to find open educational resources quickly within a single portal by means of filtering options and smart search systems. In this regard, the harvesters (collection software) must look further than just the Dutch repositories, as interesting content can also be found on the international stage.

Good metadata and compatibility with current standards are essential in this respect. Lecturers and students also need to trust the content of the material found. For this reason, the material should preferably be checked, but this raises the issue of who will check it and according to what criteria? The opportunity for users to express appreciation or add comments to the material could be another solution.

Locked in your own digital learning environment

However, the assessment shows that making learning materials openly available is a major task for many higher education institutions. Institutions want to make the most of the opportunities that open educational resources offer, but the material is usually 'locked' in multiple systems spread across the various faculties within the institution. This makes it a difficult task to share learning materials even within the same institution, let alone with different institutions.

Lecturers share very little

In addition, lecturers do not share a lot of material. One reason for this is the fear that their material is not good enough. Another is the possibility of the material being used by a lecturer in an earlier class, which would mean the lecturer who created it cannot use it any more as the students will already be familiar with it. In addition, lecturers' digital skills are often insufficient.

Repository

For the purposes of sharing learning resources with colleagues at different institutions, Dutch universities of applied sciences already have access to HKI and SURFmarket's repository service Sharekit. Sixteen universities of applied sciences make use of this service. The files, ranging from videos to presentations, can be saved in Sharekit. These materials are unlocked via websites and portals, for example via the web portals The HBO Knowledge Base and the Wikiwijs Educational Resources Platform. These files contain metadata to support findability and they comply with international standards for the free exchange of data.

International OER developments

How do other European countries approach the sharing of educational resources? In addition to the Dutch initiatives Wikiwijs and Sharekit, infrastructures that enable sharing of open educational resources at the national level also exist in Norway (BIBSYS-DLR), the UK (Jorum) and Switzerland (Switchcollection). However, the success of these initiatives is intermittent. The main challenge seems not to be the technology, but the uptake, or in other words, how frequently the lecturers and students actually use the infrastructure.

Jorum: an enormous collection of open educational resources

Jorum, the national repository service in the UK, is a great success. Jorum offers the biggest collection of open educational resources in the UK (approx. 12,000 items). The service focuses on secondary and higher education. The providers themselves are responsible for describing the metadata. Jorum offers an API and a widget in order to integrate the collection into other online environments in a user-friendly manner. One noticeable factor is that Jorum does not provide an environment for a community. Users have indicated that they would like to interactively discuss and appraise the quality of the educational resources via the Internet. In 2016, steps will be taken to enable this.

Open Stax CNX: comment on educational resources

Open Stax CNX, developed by Rice University, is a fine example of how quality control of educational resources can be facilitated. It enables organisations and individuals to comment on and endorse educational resources. They can also indicate whether the author works for a recognised organisation. Open Stax CNX is flourishing as it enables interaction between the users.

Open Stax CNX answers the demand from lecturers for high-quality educational resources. The initiative also shows the role reserved for social media, via the online assessment of courses by students. The expectation is that in the future, students will increasingly give reviews on aspects such as the workload of online courses. Open Stax CNX is an interesting experiment, and will be especially interesting if it is rolled out on a larger scale.

No national MOOC platform

The needs assessment also identified themes for which the demand for support was smaller than expected. Some higher education institutions indicated earlier that SURF could possibly develop a national platform for connection of Dutch MOOCs, but SURFnet's assessment indicated that this was not widely viewed as important. MOOC platforms are learning platforms for open and online education that facilitate the entire learning process or a large proportion of it. Examples of countries offering a national MOOC platform include France, Norway, China and Brazil. National MOOC platforms seem to be particularly useful in countries that wish to increase the visibility of national courses in their native language, e.g. for the protection of their own language and culture and due to ownership of data and copyrights.

Theme 2:

Learning Communities

The discussions during the open space sessions also showed that professionals consider mutual exchange of knowledge to be extremely important. Lecturers view communities as a valuable way to get a grip on relevant online developments in education. The participants also indicated that they would like more international collaboration with regard to improvement of open and online education.

Learning communities are not new to the Netherlands. For example, SURF's special interest groups are working hard on themes such as open education, digital testing or the use of audiovisual media. Employees of various education institutions are sharing their knowledge and experience in this area. The special interest groups are supported by the online community platform SURFspace.nl, on which all employees of education institutions can share knowledge.

We can conclude from the assessment that the importance of this cross-institutional collaboration will only increase in future. The needs assessment identified two new approaches for the expansion of this knowledge sharing:

- the desire to collaborate with more local learning communities for open and online education, one example of which is the collaborative environment EMERGE in the regions of Leiden/Delft/The Hague.
- the desire for domain or subject-oriented communities, such as those that exist in the medical profession or in green education.

Theme 3:

Flexibility in education

A third need identified by the assessment is support for flexibility in offering and attending courses. The expectation is that students will have more and more control over their own learning process, and may wish to take various course units at different institutions. An example of this kind of flexibility is the existing collaborative environment 'Kies op Maat' (Compile your own programme). Within 'Kies op Maat', students can easily take minors at different research universities and universities of applied sciences participating in the collaborative environment. There is a wide range of minors for students to choose from in accordance with their interests. The participating institutions have made agreements regarding many issues, such as the recognition of credits.

Digital student files

However, to make a success of personalized education, this idea must be scaled up. For this reason, this assessment examined the subject of digital student portfolios in greater detail. The participants indicated that digital student portfolios should give a clear overview of the student's learning process at all institutions where he/she has taken a course. For example, it could display the number of credits earned by the student. In addition to the student's marks, the file can also include competences and learning styles, creating a portfolio that is even better suited to the labour market. By making this file accessible via an account that is independent of the institutions, students can get a clear overview of their learning process regardless of which institution they are studying at.

Modular structure of EMMA

One example of a flexible learning pathway at the European level is EMMA. The European Multiple MOOC Aggregator hosts MOOCs from 12 European research universities (including the Open University of the Netherlands) on its own platform. The online courses are made available in a variety of languages by means of translation software and subtitling. In this way, European languages and cultures are made accessible to a wide audience. EMMA has a modular structure. Students can compile their own course and learning pathway. EMMA is a pilot project running until July 2016, funded by the EU.

Conclusion

Cornerstones of open and online education

Open Stax CNX, Jorum and EMMA show that user-friendliness, quality, personalised education via modules, social media for reviews and an online community are important cornerstones of successful open and online education. These initiatives show that ultimately, the institution does not necessarily have to be the central player in education, and that students themselves can determine their own educational tracks.

Culture change: dare to share

When various academic parties develop a collective vision of open and online education and collaborate, it is possible to successfully boost the flexibility of education. This goes beyond just a technical implementation: it is a change of culture.

Open and online education requires institutions to open their doors wider than ever before. This requires user-friendly design and a desire to contribute to an online community, as well as the courage to share your own educational resources with the world via the Internet.

Kirsten Veelo
(kirsten.veelo@surfnet.nl) is a community manager at SURFnet. She has supervised research into opportunities to offer national services in the area of open and online education.

Janina van Hees
(janina.vanhees@surfnet.nl) is the project manager for Open and Online Education at SURFnet. The needs assessment was conducted within the scope of this project.

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