

BEYOND THE PIONEERING PHASE: MOVING TOWARDS THE ADOPTION OF OPEN EDUCATION

by **Robert Schuwer** and **Ulrike Wild**

MIT launched the global Open Educational Resources (OER) movement in 2001. The movement gained a major impetus in 2012 following the emergence of MOOCs: free online courses, often offered by leading research universities. Having taken their lead from the Open University of the Netherlands, Delft University of Technology and Leiden University, other higher education institutions in the Netherlands are now also taking steps to offer more open forms of education (Janssen, Jelgerhuis & Schuwer, 2014). We now have access to a wealth of research, experiences and best practices from around the world: the pioneering phase has come to an end.

This contribution explores the various concrete steps to be implemented by Dutch higher education institutions in order to facilitate the broad roll-out of open education, partly within the framework of the vision for the future defined by Minister Bussemaker in her 2015-2025 strategic agenda for higher education. We will outline the key impediments to large-scale adoption of open education and define the measures needed to realise our vision for the future

The framework: 2015-2025 strategic agenda for higher education

Minister Bussemaker's 2015-2025 strategic agenda for higher education outlines her vision on the characteristics of qualitative higher education in 2025 (Ministry of Education, Culture and Science, 2015). The document identifies the following key aspects:

- the existence of small-scale learning communities;
- a rich learning environment for students;
- differentiated education;
- a tailored approach (students' personal play lists).

In our view, this vision should be based around the principle of small groups of higher education students jointly acquiring knowledge on specific subjects in a small-scale group-based setting. Some of these groups will be supervised by lecturers who structure their teaching activities along traditional lines, while others will learn on an on-demand basis or receive supervision from a lecturer that acts as a coach throughout the learning process. Lecturers should have an overview of the various learning materials available for their specific field of knowledge, and act as curators to ensure access to the best possible resources. They should apply both open and traditional materials, and know how to create a learning arrangement that is suited to the learning process and based on optimally aligned learning materials and teaching methods.

Over the course of their learning process, students will make up part of both online and offline learning communities that reflect their individual level and pace. All students are linked to a specific 'parent institution', from which they shape their individual learning pathways. These pathways can then be supplemented with elements from other knowledge institutions at home and abroad if the form of education provided by these institutions is more suited to the student's individual preferences or the student's own institution is not offering the desired knowledge.

The 2015-2025 strategic agenda for higher education outlines two clearly-defined ambitions in the area of open education. "I aim to ensure that all Dutch higher education institutions have made their teaching materials available in open format by 2025 (Open Access to Higher Education), propelling the Netherlands to a leading global position." A subsequent section of the document goes on to state: "As a part of this process, we must also ensure that the various Dutch higher education institutions recognise each other's MOOCs and Open Educational Resources." These clearly defined ambitions in the area of open and online education are not an end in themselves, and should be regarded as a precondition for the realisation of the aforementioned vision. The sharing of learning materials will help increase the amount of available high-quality materials, thus facilitating the realisation of a rich learning environment and increasing opportunities for customised education. Open education can also contribute to the realisation of other policy goals formulated in the strategic agenda, such as the further internationalisation of education. *The Small Private Online Course 'Sharia in the West'* offered by Leiden University is a good case in point. Open education can also contribute to the further professionalisation of lecturers, through participation in both open courses on educational subjects and *communities of practice* arising from the sharing of learning materials. This process is described in schematic form in figure 1. The large-scale adoption of open education is thus a precondition for realisation of the ambitions outlined in the strategic agenda.

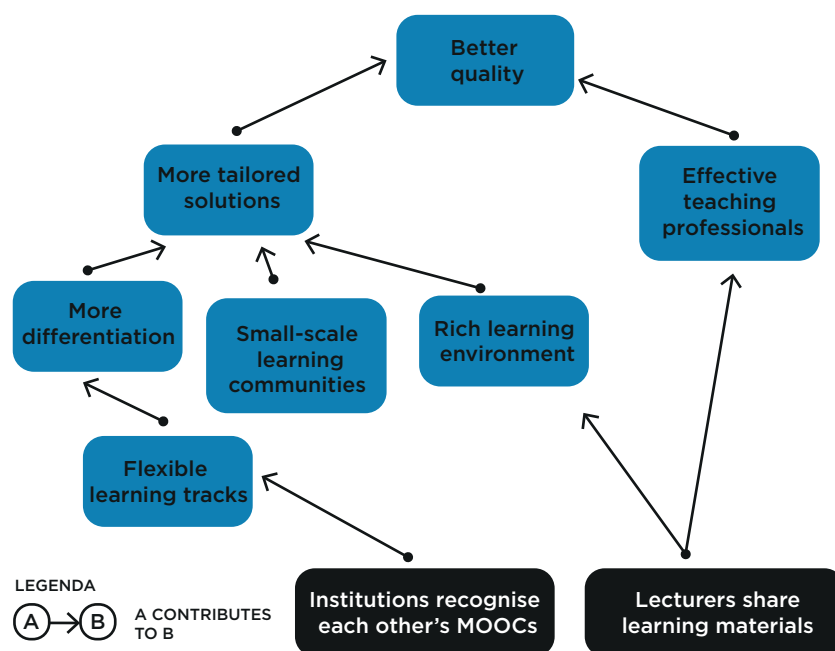


Figure 1. The influence of open education ambitions on the quality of education.

Impediments to the adoption of open education

Unfortunately, the large-scale adoption of open education is also being hampered by various impediments. According to various studies (McGill et al., 2013; Richter et al., 2014; Hodgkinson-Williams, 2010), the institutions' efforts to stimulate adoption are being thwarted by various causes at strategic, tactical and operational level.

- At strategic level:
 - o issues surrounding business models;
 - o issues surrounding awareness of the potential of various open education formats;
 - o insufficient strategic vision on education, resulting in a lack of support from the institution, too little time to adjust OER to the individual context and a lack of synergy with existing working methods.
- At tactical and operational level:
 - o issues surrounding copyright and open licences;
 - o a lack of digital skills amongst lecturers and staff members.
- At operational level:
 - o the findability of OER;
 - o the quality of OER (especially in terms of determining suitability for the institutional context and identify the measures needed in order to adjust OER to reflect relevant requirements);
 - o human factors, such as reluctance to share, a lack of faith in the quality of own learning materials, *not invented here*, unclear incentives and a lack of awareness of the possibilities and advantages of OER amongst lecturers.

The various strategic workshops on open education organised by SURF in 2013 and 2014 on behalf of Dutch higher education institutions confirm these research results. Janssen et al., 2014 also listed the following factors:

- Higher education institutions fear that the ongoing trend towards globalisation as a result of OER and MOOCs will result in a loss of regional identity.
- Open education's impact on the accreditation process is still a great unknown: should the successful completion of a MOOC result in the award of credits? How should institutions calculate the number of contact hours for open education courses, especially with regard to the online component?

Many Dutch education institutions seeking to publish open courses (in either standard or massive format) do not have access to the larger-scale international platforms. This represents an impediment, partly because the MOOCs have played an especially important role in communicating the pros and cons of open education to higher education institutions over the past few years. On the other hand, it remains to be seen whether this will significantly disadvantage higher professional education institutions in practice. Due to their specific characteristics, (a regional focus, practice-driven Dutch-language education) the majority of higher professional education institutions will generally emphasise the reuse of open education rather than focusing on in-house publication (Duisterwinkel et al., 2014).

Action plan for the promotion of open education adoption

The international open education movement is currently assessing various strategies towards the large-scale adoption of OER and other solutions. For a clear analysis of the current state of affairs and proposals for future measures, see Allen et al. (2015). The movement recognises that the large-scale adoption of OER hinges upon three specific elements: user awareness of and motivation to use OER; an infrastructure providing the content and tools needed to find, use

and adjust this content; the communities and systematic support needed in order to ensure the sustainability of OER.

As regards the situation in the Dutch landscape of higher education, we believe the following steps will be required in order to alleviate the aforementioned impediments.

1. Formulate an open policy at both national and institutional level

UNESCO's Paris OER Declaration previously described the importance of national open policies on the adoption of OER. As recent developments have shown, such policies can help stimulate the adoption process. Examples include Slovenia, Poland and Scotland. The Dutch government's 2015-2025 strategic agenda for higher education offers an initial impetus for the development of open policies. This impetus can be further elaborated to describe concrete measures for the resolution of legal impediments (such as the contact hours principle and efforts to increase access to joint degrees).

However, institutions will also have to formulate individual strategies that outline their motivation for offering more open education and describe their strategies to this end in greater detail. The number of Dutch institutions – especially in the higher professional education sector – to have elaborated and communicated detailed strategies in this area is currently still limited. Efforts to formulate an open policy will help to address any impediments at policy level, contribute to the mutual recognition of open education performance through the award of credits and help raise awareness of open education amongst lecturers. In our view, institutions will have to appoint visible figureheads in order to effectively communicate these open policies.

2. Create a platform for the sharing and reuse of open educational resources

The provision of tailored (differentiated) education and a rich learning environment can be facilitated by ensuring a diverse range of learning materials which can then be supplemented with additional services by the individual institutions. This could include additional working groups, study coaches, assessments and project activities organised by the institutions on the basis of existing learning materials (in both open and traditional format).

The establishment of a platform for the sharing and reuse of open educational resources would help improve findability, while offering greater certainty in terms of quality and usability. Minister Bussemaker makes the following reference to this activity in the 2015-2025 strategic agenda for higher education: "As a part of this effort, I will be working to assess how a national or international platform for the sharing, modification and use of teaching materials could contribute to the realisation of this ambition" (Ministry of Education, Culture and Science, 2015). The term 'this ambition' refers to the effort to stimulate widespread sharing of learning materials.

The need for such a platform was repeatedly highlighted by representatives of both higher professional education institutions and research universities during the user needs study on cross-institutional services conducted at the behest of SURFnet in the spring of 2015 (Van Aetsveld, 2015). According to a recent study on the requirements for such a platform commissioned by SURFnet, the aspect of user-friendliness is crucial to lecturers (Schuwer, 2015a). Furthermore, the platform should offer clear added value over solutions such as Google. Finally, the success of any such platform will depend on the existence of a user community: the improved efficiency yielded by a community working to maintain and update learning materials will make it easier to share these materials in a sustainable manner; furthermore, a user community will help to stimulate the adoption of open educational resources and further improve their quality (Downes, 2007; Schreurs et al., 2014; De los Arcos et al., 2014).

Education institutions will have to make a number of crucial choices in this regard: It can be helpful to distinguish between two types of learning materials:

1. Cross-institutional open online learning materials and basic knowledge courses (especially broad, basic first-year subjects), which can be studied either independently or within a group setting. These materials will help to free up the time and manpower needed to offer tailored services. The incentive scheme launched by the Ministry of Education, Culture and Science could focus on this aspect in order to achieve this goal over the coming years.
2. Research universities and universities of applied sciences can then emphasise their areas of specialisation in the subjects offered during subsequent phases. Institutions can accentuate their individual profiles by developing and providing courses (either in the form of finished or semi-finished products) in their leading areas of specialisation. Demand for Dutch-language learning materials may be higher amongst higher professional education institutions, while research universities may wish to present themselves on a more international level through use of English-language materials.

Dutch institutions already meet the technical requirements for a cross-institutional service platform. The Netherlands has already introduced a standard for metadata for learning materials (NL-LOM), and a *harvester* for metadata (Edurep). Any future national platform should be based on these standards in order to ensure optimal efficiency by building on existing structures, and should lend added value to international platforms such as [Ariadne](#) and [Globe](#) through use of the underlying open standards.

3. Build sustainable support structures for lecturers

Effective support can serve to resolve a great deal of the impediments experienced by lecturers seeking to share or reuse open educational resources ('alleviating the lecturer's workload') (Schuwer, 2015b; Conole, 2012). In this case, the term 'effective' should be taken to mean *just-in-time* and *just-enough*. This could include the realisation of an easily accessible knowledge database, or services related to the sharing and reuse of open educational resources. These activities can be organised at both local level (such as the creation of metadata from learning materials published by a library) and cross-institutional level (such as a national *clearing house* offering advice on *copyright clearing* for reusable sources).

The aforementioned user needs survey conducted by SURFnet also identified demand for the establishment of and support from learning communities designed to share knowledge, information and experiences on open and online education. Efforts must also be made to expand lecturers' existing knowledge of open education. This can be achieved through both specific awareness campaigns organised within and between institutions, and the development of professionalisation activities (within the context of university teaching qualification programmes, for example). Any such efforts should also emphasise the reuse of open educational resources rather than exclusively focusing on their publication.

4. Ensure sustainable collaboration between institutions

In our view, the effective implementation of the aforementioned three action points will require intensive collaboration between institutions at both national and international level. This collaboration should yield mutual agreements on the recognition of open education; these agreements should define which party will be responsible for developing which learning materials (action point 2); the procedures for implementing other institutions' open education in one's own curricula;

and the procedures by which students can create their own cross-institutional learning pathways. The VSNU, the Netherlands Federation of University Medical Centres and the Netherlands Association of Universities of Applied Sciences should play a leading role in this effort in order to ensure the involvement and commitment of all institutions. In our view, such a joint approach can be implemented regardless of the existing differences between higher professional education institutions and research universities (regional versus global focus and emphasis on Dutch-language education within the higher professional education institutions). After all, these differences will only affect the content of activities at the various institutions, rather than the actual approach.



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