HEA/JISC Open Educational Resources case study: pedagogical development from OER practice

How institutional culture can change to adopt open practices
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The aim of this case study was to establish a process and gain an insight as to how cultural change within an institution leading to an open culture can be developed and adopted.

There’s going to be a revolution about how we deliver education, and that a part of that, a big strand of that will be around open education. (Interviewee)

There is a heritage of open education activities at De Montfort University (DMU), and the Faculty of Health and Life Sciences has received funding for several UKOER projects. In the pilot phase (2009-10) as part of the UK Bioscience Centre project, Biomedical Science staff developed an open laboratory skills resource called ‘Virtual Analytical Laboratory’ (VAL). As part of UKOER2 (2010-11), OER were released to support the teaching of sickle cell disease in ‘Sickle Cell Open, Online Topics and Educational Resources’ (SCOOTER). In the most recent project, Health and Life Science Open Educational Resources (HALSOER), OER are being embedded within a number of life science degree programmes including Midwifery, Forensic Science and Biomedical Science.

Reflecting this activity, the establishment of a ‘Centre for Open Education’ has been proposed as part of the Faculty Learning and Teaching Strategy with the aim of encouraging a healthy cycle of OER use, reuse and publication. The Centre would be the hub for cross-university activity, working with central services such as the library, computer services and the Centre for Enhancing Learning through Technology (CELT team) to champion open education within the institution.

At De Montfort, cultural change with respect to OER and open education has developed from the ground upwards, with many academic staff using and releasing OER, and students becoming familiar and involved in activities as users, producers and evaluators. There is now, however, the need to garner the support of senior management and to formulate how open education fits with the institutional vision and strategies. There needs to be institutional ownership and support for this work so as to establish processes to scale and sustain the existing activity and facilitate future developments in a sustainable fashion.

Ten interviews were conducted with senior executive and management staff so as to ascertain the level of OER awareness within the institution, what the benefits and obstacles were to our engaging with open practices, and to formulate a process for shifting culture through policy, strategy and/or other means. The discussions were guided to see how OER could be applied within the institution to deliver existing research and teaching strategies, e.g. internationalisation or supporting student transitions. The senior staff included faculty Deans, pro-vice-chancellors and Directors of Library Services, eLearning, Staff Development and Academic Quality, and other faculty leads for Internationalisation and Commercialisation.
The interviews were around 30-60 minutes long and were recorded and transcribed. Relevant and insightful passages of text were highlighted and then copied into an Excel spreadsheet for clustering into the research questions, and within that, further sorted and clustered into common themes emerging.

The semi-structured interviews comprised of the following questions, but conversations were adapted to reflect the knowledge and expertise of each individual:

1. What do you understand the term Open Educational Resources (OER) to mean?
2. What might the benefit and barriers of using and/or producing OER at DMU?
3. So with that understanding in mind, what would your vision be for DMU being involved in OER?
4. What do we need to put in place to bring this vision to life? What would our strategy look like? What would it incorporate?
5. How could we ‘scale-up’ OER operations and participation within DMU to maximise the benefits on an institutional level, and also for teachers and learners?
6. How can we sustain and grow our activity? Are there financial models to support this?
7. How do we get policy adopted and approved at DMU? What are the routes forward?

Alongside the interviews we repeated our 2009 university staff questionnaire to gauge whether attitudes and awareness of OER had changed (Rolfe, 2010).

The 2009 survey showed that, in general terms, there was some support for OER as an idea or concept and that some staff were using OER in their delivery (Rolfe, 2012). An interesting finding of this survey was that, as might be expected, staff already shared learning resources within subject teams, but there was a barrier to sharing more widely even within different faculty teams teaching similar subjects. Initial analysis of the first returns from the 2012 survey show that both awareness and use of OER has increased, but the attitude to sharing resources is fundamentally the same as in 2009. One of the barriers to a wider adoption of truly open practice might be reflected in the fact that over 50% of respondents have concerns over copyright and merely 70% wanted clarification of the copyright issue. It was also clear from the responses that if adoption of open practices was to increase then institutional policy in its widest sense needs to change with, on a more practical level, more support and incentives being given to those who develop and use OER. Some of the findings are discussed in the context of the interviews throughout the report.

Case Study

The interview transcripts were clustered into the following themes in an Excel spreadsheet:

1. Awareness and attitude toward Open Educational Resources.
2. Perceived benefits of Open Educational Resources.
3. Perceived barriers.
4. Thoughts and ideas for advancing open educational practices within the institution.
Awareness and attitude

Although two interviewees had not heard of OER, six gave a reasonable interpretation of the term OER as being resources that were shared to enhance collaboration, although only one explicitly mentioned the importance of the open licence. In their interpretations, several expanded into the concept of open education:

...open education is about demystifying academia, and making it very clear to all people from all parts of society.

One interviewee had a sophisticated interpretation in relation to open practices and open learning, beyond the concept of the resource:

...open learning actually, that’s how I visualise it I suppose, learning sounds a bit more freer and learning is from a student perspective where as education comes from an institutional and organisational perspective.

Overall there was little awareness of the extent that DMU had been involved in the national Open Educational Resources programme (UKOER) and no mention of any of the specific projects in the majority of the interviews, but this partly reflected the recent appointments of three of the more senior staff members within the last year. Others appreciated that work had begun from the ground up with early adopters and champions, and there were pockets of activity that needed to be joined up to gain critical mass and momentum. However, this highlighted a lack of communication and awareness about OER as an area within its own right at the institution, despite the volume of funding awarded to OER projects within DMU. This paucity of institutional awareness influences both decision making at the highest level and also impedes the development of a ‘community of interest’ to drive developments from the ground up.

Perceived benefits of Open Educational Resources

In relation to perceived benefits to OER, overwhelmingly the means of marketing the institution for the purposes of recruitment and commercial benefit was most commonly mentioned, alongside being a means of building reputation and showcasing skills and talents:

...a lot of the payback comes from the marketing perspective that the institution producing the resources brands them.

Interviewees overwhelmingly bought into the principle of open education, even those who were unfamiliar with the concept:

...the altruistic motivation of helping other people to improve by making our stuff accessible.

This buy-in to the OER ‘ethos’ is echoed in staff survey responses.

One individual most notably emphasised the benefits to the student experience in relation to OER enhancing accessibility to learning and flexibility to diverse groups of learners. The concept of open repositories and platforms was viewed positively as an alternative of our closed virtual learning environments such as Blackboard, with the ability to build networks in order to enrich learning. Interestingly only one comment was made regarding improving efficiencies by sharing resources:

...it would stop institutions or people within institutions having to reinvent wheels.

Although it was clear from the staff survey that colleagues being able to share resources was perceived as a benefit by the majority of respondents.

Perceived barriers of being involved in Open Educational Resources

The perceived barriers were much broader and fell into the following categories: commercial value; competition; global cultural barriers; intellectual property; individual and institutional buy-in; organisation and pedagogical construction of OER; quality and control measures; staff development; staff time; need for strategy; sustainability.

The two most commonly cited barriers to OER moving forward was how to gain buy-in by the senior executive and staff as a whole (academic and administrative), and also how to organise OER to be pedagogically effective to learners. It was generally felt there were pockets of activity but lack of awareness by staff, and also that staff priorities would be around research and not teaching. The comments reflected a lack of institutional ownership:
I’m not entirely sure that we’ve exploited them as fully as we could have done.

The comments about OER needing to be pedagogically effective assumed OER were discrete learning packages rather than a range of granularities that could be repackaged and repurposed by users. The comments referred to how to build OER that were educationally effective and also referred to how to organise OER in collections and make them discoverable. There was an interesting notion that the institution has to ensure quality of resources to reflect the way the institution needed to be seen, but a separate counter-argument was that more institutional intervention would be counter-productive to the idea of being open:

…but the problem is then that could have the effect of silo-ing each institution to prevent them from talking with each other about the development and acutance of more networked and community based setting.

The commercial aspects of open education were discussed by three individuals and how fee-paying students would perceive the use of free materials was a concern:

...if students are paying £9,000 and part of their £9,000 is receiving a set of lectures and yet that set of lectures are available completely free on the internet what does that mean?

The idea that OER could be available as free online tasters and then linked to pay-to-view products such as webinars or other ‘added value’ activities such as assessments or other teaching services was a popular suggestion, but others felt this contradicted the philosophy of openness:

...its open educational resources so ideologically these are free resources, once they’re not then they’re no longer open education resources, they’re commercial things.

...if you want accreditation then it costs you that extra, you see with me that’s no longer an open resource.

Resourcing and staff time were not aired as common concerns with only two mentions; this might reflect the level and current state of the OER debate among managers in DMU where the debate is focused on attitude towards OER and establishing a position vis-à-vis OER rather than being at the stage where resource implications and the business model associated with implementation are concerns. Comments regarding intellectual property and ownership of university resources did arise but to no great extent. This might not be surprising considering there was no mention of licensing in the opening discussions. This in many ways was at odds with the staff survey, which indicated that copyright/licensing issues were of paramount importance to the majority of users and producers of OER.

Thoughts and ideas for advancing open educational practices within the institution

Discussions were most lengthy concerning the approaches for advancing open education within the institution. Table 1 (overleaf) summarises the areas that the interviewees felt needed addressing for the institution to advance open educational practices.
Table 1: Themes and sub-themes emerging

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-theme</th>
</tr>
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<tbody>
<tr>
<td>Vision and philosophy</td>
<td>Philosophical stance</td>
</tr>
<tr>
<td>Extensive cultural change</td>
<td>OER cultural change that is managed</td>
</tr>
<tr>
<td></td>
<td>Changing traditional practices</td>
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<tr>
<td></td>
<td>New models of online delivery/new commercial models</td>
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<td></td>
<td>Market research</td>
</tr>
<tr>
<td>Support for existing strategies</td>
<td>International partnerships and recruitment</td>
</tr>
<tr>
<td></td>
<td>Transitions</td>
</tr>
<tr>
<td></td>
<td>Diversity</td>
</tr>
<tr>
<td></td>
<td>Distance learning</td>
</tr>
<tr>
<td>OER quality</td>
<td>Ensuring quality</td>
</tr>
<tr>
<td></td>
<td>Technological considerations</td>
</tr>
<tr>
<td>Resources and support</td>
<td>Resourcing</td>
</tr>
<tr>
<td></td>
<td>Staff development</td>
</tr>
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Vision and philosophy/extensive cultural change

At the highest level, several interviewees mentioned that the University’s philosophical position and values needed to be explored concerning its attitude toward learners:

... so I guess there’s a philosophical position in there that needs to be understood, both of the university and the sector as to how it sees itself and where it wants to be.

... as an institution we need to make a statement I think which says this is what we value and we’re going to put time and resource into that.

... as to how it views learners is another thing? Maybe one of the questions is, does it consider learning as something which is altruistic for instance, is it there for it’s own sake that it makes in that sort of ancient Greek model of making people better citizens and through being better citizens you have a better society.

Nearly every participant commented that organisational and cultural change was required at this point in time, not just to accommodate open education but in light of sector changes. Universities needed to be exploring innovative educational models and seek out new commercial opportunities and to become more commercially aware. It was felt that universities were poor in relation to planning and developing new programmes and responding to the changes in demand of existing programmes. For example, having to validate new programmes that do not recruit cannot be a time and financially efficient process, and more rigorous planning need to go into understanding market demand. New and existing programmes should be asked of them ‘how many ways can we deliver this’
New commercial models for education that were suggested included the use of mobile apps, and exploring the app model of offering free resources or services that can be upgraded to a paid for educational service. The commercial manager talked at length about the need for market research to understand who our learners are, and their attitudes toward online learning as a new commercial venture. Would they purchase value-added educational services? Do OER influence attitudes toward study? Who are our learners and what groups of learners do we want to attract who may want to access learning in other ways?

In relation to shifting institutional culture the following elements were mentioned: steer and sign-in from executive board; position paper to executive board with proof of concept/scenarios/commercial viability; the need for a policy and no need for a policy; working group; strategic statement; become part of Learning and Teaching Strategy.

The discussions also reflected the process underlying change management and the need to adopt a strategic champion and embed OER within existing committee and working group activities. A vision for success would be required that could then be worked back from, and thinking about what external organisations could support the vision and what internal resources would be required.

The strategy for developing the vision and influencing institutional culture was focused upon by several interviewees; in general the view was that the direction should come from the ground up with current practice influencing/informing future policy rather than an institutional strategic aim leading to a top-down approach to the adoption of OER. This view reflected precisely the initial developments at DMU as far as OER are concerned, but it is recognised that there must be a point at which the institution adopts OER and open practice as a strategic aim if the necessary support and resources are to be allocated.

Support for existing strategies

When asked how OER could be used to support existing university strategies, links were found to several areas as outlined in Table 1: international partnerships and recruitment; student transitions; supporting diversity; and distance learning. Employability was also mentioned in other contexts.

A fit for OER in supporting the international strategy was clear, but this was not just in relation to marketing and recruitment, but the use of OER to catalyse new educational partnerships that are not bounded by geography or constrained by institutional platforms:

... a genuine partnership model of sharing and contributions from both sides, and that includes open content and delivery platforms.

This view was not universally held though with some interviewees promoting what they viewed as OER primarily as a means to support the delivery of existing international partnerships. It was unclear if openness was then just an inevitable spin-off from this type of interaction or whether it would be sought as one of the key benefits of the interaction.

A strategic approach for seeking out places synergetic with our provision was advised, as well as being strategic about the academic areas that we would wish to promote, i.e. those subjects that might be more attractive to international audiences.

OER were viewed as a positive to enriching the student experience through boosting distance learning, particularly to give flexibility to learners and also support new educational models including evening, weekend and study during the holidays. A careful understanding of how enrolling for online courses would affect student number control and completion rates would need to be considered. Also the concept of paying for courses online would need to incorporate a recruitment and selection process, to fulfil the moral duty of accepting students on their ability to succeed and not their ability to pay.

Few comments were made regarding the use of OER to support student transitions or any other strategic area. However one interviewee felt OER fitted well with supporting diversity by providing learning materials that were more readily customisable to suit their learning needs, and also in providing educational opportunities for people with different life styles.
OER quality

Ensuring that OER released by the University were of high quality and that the technical aspects of OER development and delivery were also of high quality, innovative and meeting target learner needs, was an area of considerable discussion.

Existing University academic quality procedures orientate around awards and not course content, so there wouldn’t be an existing, formal (that is, administered centrally through the University QA infrastructure), quality-control mechanism for OER release, although it was appreciated that high standards of materials would need to be released and shared. Perhaps scrutiny should be owned by staff teams and could also be included under the five-yearly periodic review and validation processes, asking panels to comment on OER. Quality of individual OER was discussed in relation to how to ensure material was up to date, particularly OER containing scientific or regulatory information, and clear terms and conditions surrounding OER was emphasised.

We need to ensure our open educational practices are technologically relevant and sound. It was viewed that mobile technology was the future of education, and that the app would become the new virtual learning environment for delivering content and fostering discussion. Learners individualise their educational experience already, placing resources and networking via the ‘cloud’ rather than accessing materials only from one place on one machine. It was felt that ‘OER at DMU’ would require a single platform rather than resources being scattered across individual projects as currently is the case, and it was felt that OER meant packages and modules of materials rather than a range of granularity starting from individual assets. The technology would facilitate the learner searching and constructing their knowledge, and would also facilitate discussions with experts. Interestingly when discussing technology, one interviewee felt it important to generate a step change in the uptake and use of Blackboard to facilitate open practices just within the realms of the institution.

Resources and support

What was most surprising was that little consideration was made of resourcing and support for open working practices within the institution. One interviewee spoke of a ‘Centre for OER’, but not in detail how this might be led and supported. Clearly there would need to be support from relevant University services – the Centre for Education and Learning Technology, the Library for IPR and Central Computing (ITMS) to maintain an institutional repository, but again, no mention of how this might be led and co-ordinated. As stated earlier this situation probably reflects the current position as far as OER planning in the institution is concerned, but was another example of where the thoughts of practitioners and potential practitioners at ground level were perhaps much more developed than those of senior management within the institution necessarily reflecting the knowledge and experiences that only come with being a practitioner.

OER needed to be built into staff development, not just in relation to upskilling staff in technical, intellectual property and designing for open release, but in ongoing support to encourage staff to “have a go and then get help in making it better”. Open education was seen as a vehicle for developing staff in showcasing their expertise and developing online networks and communities. These views were echoed in the staff survey.

Learning from OER

![Figure 2: Concept for institutional shift to open education](image-url)
In our institution, OER activity at the ground level preceded senior management understanding overall, generally represents a more in-depth appreciation of the area and developed in the absence of an institutional strategy. The institution is not reaping the full benefits that open education offers in relation to enhancing reputation globally and enhancing student experience locally. Developments in OER are on an ad hoc, localised basis and do not currently influence senior decision making as far as policy and infrastructure is concerned.

Senior management buy-in is essential to support the sustainable development of OER, cultural change and ensure that resources (both physical and human) are made available. Our interviewees wholeheartedly supported the philosophy of open education in the main, but there was not a strong sense of ownership or clear idea as to what it could really do for us. However, this senior management buy-in and willingness to champion OER is crucial in informing and influencing the decision making process at the highest levels.

For all institutions with existing open education activities yet no senior management buy-in, the approach adopted by this case study is itself is a useful exercise for exploring the notion of open education with senior stakeholders and compiling a strategy for investment, adoption and growth. Attitudes and cultural values within another institution might be quite different.

What is needed is a series of ‘selling points’ to leave with managers regarding the benefits of OER being demonstrated by other ‘open’ institutions that are leading national and international change. OER offers a unique proposition for each and every institution in the UK to reflect the quality and distinctiveness of their teaching and research.

This needs to be reinforced by experiences of OER and open practice within the host institution through a bottom up approach. Managers who are sympathetic to the philosophy, or who view OER as something that will give a business advantage then have data with which to influence decision makers and are aware of the range of potential issues associated with the adoption of OER.

This bottom-up approach inevitably depends on a limited number of pioneers driving developments in OER. It is crucial that those efforts are allowed to develop and coalesce; this requires the development of a ‘community of interest’, which in turns requires efficient communication perhaps facilitated through teaching and learning committees or academic development units. This fosters a supportive, self-sustaining, grass-roots movement that can then influence more senior decision makers and crucially provide hard data and relevant experience.

It is vital that the efforts of those pioneers are recognised by line managers so limited resources can be allocated as required and that support and incentives for OER developers are put in place; this is borne out by staff survey responses. In this respect communication of the benefits and potential of OER/open practice is crucial.

The vision and brand need to be conceived, valued, owned and acted upon by all staff at all levels for change to succeed.

Conclusions

This case study has been an informative process in understanding the position of our institution with regard to open education. It has helped us formulate a strategy and gain awareness of the level of work required to initiate a change process. In support of this is the growing body of activity among staff and students.

We need to explore the tensions between exploiting new commercial opportunities and the core values of the institution.

We need to explore the tension between using OER for marketing and developing new added-value educational services and our philosophical position on being truly ‘open’.

Our next step will be to present a position paper to the executive board, and to influence existing strategies and embed open practices within existing committees and groups. Central to the growth and scaling-up of open education now will be the provision of human resource, technological support and staff development.
• OER activities have had some influence on senior management awareness, with broad support for the principles and business model for implementation of OER, but this is not universal and has not found its way into institutional policy or strategy as yet.

• This process has highlighted clear routes forward for influencing policy at the highest level, and PVC/Deans interviewed proposed to champion open education at executive board level.

References


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