JOURNEYS TO OPEN
EDUCATIONAL PRACTICE:
CRITICAL FACTORS

**UKOER/SCORE** Review Final Report

A CUMULATIVE EVALUATION AND SYNTHESIS OF THE ENTIRE HEFCE FUNDED INTERVENTION IN OER



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# 3. Critical factors to support open educational **PRACTICE**

In this report we have talked about motivations for a wide range of stakeholders to become involved in OER and OEP, outlined the different models and approaches that can make this happen, and considered the benefits and impact on practice and culture of such engagement. Here we aim to highlight the critical factors that can support change, both in terms of practice change, institutional change and wider cultural change. We will do this by considering the enablers that help to overcome some of the barriers identified by individuals, communities and institutions. Evidence around these factors, and research papers and practical guides to support them have emerged from the funded OER initiatives featured in this study but are of significant value to the wider community. These outcomes and outputs can inform other individuals and institutions who want to begin or advance their own journeys into OEP.

## 3.I. THE NOTION OF IOURNEYS

When considering the journeys of individuals, communities and institutions we need to acknowledge that their paths are often complex and may not be linear or continual. Periodic critical events can often determine the direction of travel, as we have highlighted in the section on the wider contextual developments across the three year period. Critical events in individual or institutional progress could either change the SCALE of engagement or the NATURE of individuals' practice or an institutions core business. Key questions arise when a critical event leads an institution down a new pathway. For example: Are the new pathways sustainable? Do they need to be sustainable in the longer term?

There is a tension around the tendency for individuals, institutions and community to follow familiar and safe paths, perhaps preferring gradual, easier to manage change that does not challenge existing practices and processes, but it could be argued that many of the UKOER and SCORE participants were not trading familiar paths. HEFCE funding, in many ways, acted as a critical event that provided opportunities for people to try new approaches and certainly accelerated their progress by allowing development of critical factors to support practice change.

HEFCE funding for OER in the UK enabled the scaling-up of existing activities around the development, sharing and use of learning materials at several different levels and was also aligned with developing a corpus of OER in the UK. It also enabled transformation of practice for individual academics and other professionals, learners, educational institutions, other institutions outside the educational sector and subject and professional communities. This study, therefore, sought to investigate factors critical for institutional, community and individual transformational change.

A useful starting point in looking at the critical factors for change is to consider the barriers that needed to be addressed.

## 3.II. BARRIERS

Identifying barriers is seen as a step towards reducing their impact. We can consider barriers in a few different ways - in the past we often talked of barriers to sharing 1, although we discuss some of the challenges around the notion of sharing learning resources on our introductory page. When we began the UKOER Programme in 2009 we were considering barriers to OER release, which broadened to include barriers to use as the programme progressed. For the purposes of this study we are talking about barriers to adopting OEP more broadly, as it includes OER release and use but takes a more holistic view of practice and can be viewed as practice of both individuals and organisations. In our wider poll we asked participants to select both their top 3 barriers to individuals adopting OEP, and

their top three barriers for institutions using lists developed from evidence gleaned by the UKOER Programme.

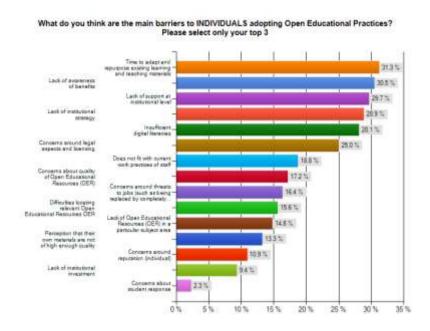


fig. 6 chart showing responses from the wider poll around barriers for individuals in adopting OEP

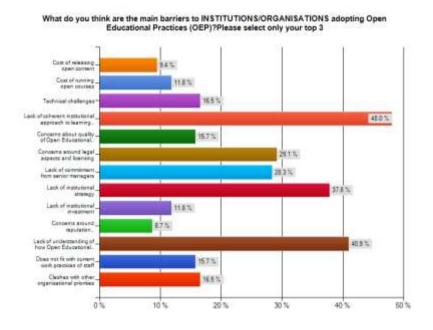


fig. 7 chart showing responses from the wider poll around barriers for institutions in adopting OEP

Similar issues dominated both individual and institutional barriers, notably lack of awareness of OER and their benefits, lack of coherent overall institutional educational strategy, and (by inference) lack of supportive workload planning. Legal concerns, although high, are not as high as might be expected and are not one of the major barriers, especially at institutional level (which may indicate a lack of institutional awareness of OER issues).

Similarly, quality issues are not identified as a major concern either for institutions or individuals (less important than legal issues). However, the evidence from poll responses indicates that insufficient digital literacy is a major barrier for individuals, coming just below the institutional factors mentioned above. It leaps way into first place for those working in the school sector, and is also just first for those not based in the UK. Looking at USA and New Zealand (the other two countries with a significant number of respondents - 9 and 8 respectively), shows interesting differences, especially for individuals, with "does not fit with existing work practices of staff" becoming the major barrier in NZ and equaling lack of institutional support/strategy in USA. This suggests that, as might be expected, the barriers depend on the national character and practice of HE.

Perceptions of barriers, both individual and institutional, are similar among respondents who have received HEFCE funding (UKOER & SCORE) as among the overall respondents. Interestingly, perceptions of barriers among those with no engagement with OER initiatives appear similar to perceptions among the overall respondents - the same barriers in top positions, led, as might be expected, by "lack of awareness". However, for this group, technical challenges appears as an institutional barrier that is as important as a lack of strategy and institutional awareness of OER. One conclusion would be that in the UK much more work needs to be done with institutional senior managers, and on raising the digital literacy of individuals.

In our detailed survey with the direct OER community involved in UKOER & SCORE funded activities, unsurprisingly, barriers that featured highly were:

- time to adapt and re-purpose
- legal aspects and licensing, and
- OEP not fitting with current work practices of staff

A significant number highlighted difficulty locating relevant OER. Lack of digital literacies does feature highly as a barrier too, although our follow-up interviews suggested that finding/evaluating quality OER is a time issue not a skill issue and likewise many staff avoid releasing OER due to the time involved in making them sufficiently polished (reputational concern) and fully compliant (legal concerns).

There remains a view that lack of institutional support, strategy or investment is a barrier. When looking at this question in more detail, it was interesting to see that respondents involved in the pilot phase of UKOER identified the same top three barriers equally. Phase two respondents however had legal aspects and time factors as equally high, but awareness of benefits much lower. This perhaps reveals that phase two work built very much on the pilot phase work and some of the work around raising awareness of benefits had started to be successful. SCORE (fellowship, workshop and residential) respondents reflected the same top three as the overall group. UKOER phase three, on the other hand, broadened activities to other sectors and they report 'lack of awareness of benefits' as their top barrier by a significant amount. 'Time to adapt & re-purpose' was replaced in the top three by 'lack of institutional investment'. The latter may reflect increasing financial constraints beginning to impact on activities not perceived as core work.

## 3.111. STIMULATING AND SUPPORTING CHANGE IN PRACTICE

Many of the critical enablers for practice change involved efforts to overcome the barriers identified above. Some of these enablers were offered as support mechanisms by the programme, such as legal advice and tools, and advice around technical and accessibility aspects. This support model was highly effective as noted by project teams throughout the programme. SCORE was also part of this supporting mechanism in the early stages of the UKOER programme. This model of support generally enabled gradual increases in understanding around areas where project teams already had some

experience or knowledge, and the application of this to new contexts, such as moving existing understanding of IPR to incorporate and embrace open licensing.

It is interesting to consider how far the enablers identified by UKOER project teams and SCORE Fellows contributed towards more radical change to current working patterns and behaviour. What are the sustainable change models for institutional and individual OER journeys, and how do groups and networks support the interplay between these?

### ENGAGEMENT/AWARENESS RAISING

Stakeholder engagement activities have been the lynchpin of early and ongoing activities across both the UKOER Programme and SCORE activities. The range of stakeholders targeted depended to a large extent on the nature of each individual initiative. Community approaches led to a focus on existing groups and often utilised a range of existing networking mechanisms to begin engagement activities. Within educational institutions different stakeholder groups were targeted at different stages depending on the nature of projects and the existing levels of awareness. Senior management engagement was seen as crucial for ongoing sustainability and to support any required changes in policy or strategy. Academic staff were a key group for most initiatives as their input often required significant practice change. Students were also involved in engagement and awareness activities, not just as consumers or users of OER but often as active participants in OEP.

Stakeholders from outside the education sector proved to be the most resource intensive as there was a need for two way sharing and understanding of different cultures and practice to really understand how OER and OEP could be incorporated effectively.

Engagement and awareness activities often had to achieve several different, and sometimes quite complex, objectives:

- exploring existing culture and practice around learning resources
- identifying perceptions around notions of openness
- identifying levels of understanding around OER and OEP
- raising awareness of the benefits of OER and OEP within the stakeholder's own context (for example some of these are very different for senior managers than for academics)
- addressing fears and insecurities around changing practice
- identifying possible approaches with stakeholders for their involvement

Due to the diversity of stakeholders and contexts efforts to secure engagement required a range of approaches, from strategic input to sustainable support for content and curriculum development. A wealth of different approaches to engaging stakeholders were used by UKOER projects including, workshops, events, guides, FAQs and the use of champions featured strongly. Word of mouth is a key driver of change in institutions, which was a key motivator for projects wishing to ensure that they reached reached people in a wide range of institutional roles and locations. Online communication methods were important mechanisms within institutions and also to maintain relationships with external stakeholders, such as the use of twitter, blogs and other social media. Involving stakeholders in research and evaluation activities throughout the project improved engagement and provided tangible ways for partners to contribute. Taking a digital literacies focus proved to be quite effective for several projects using that as the way to engage staff with open practices.

Tailoring meetings and visits for specific stakeholders meant that projects had to adopt multiple approaches and imaginative methods for specific groups. The following approaches proved effective for phase 3 projects:

- Part-time tutors presented challenges due to not being able to easily attend attend face to face meetings, so utilising existing frameworks, support systems and events proved useful (SESAME, FAVOR)
- Individual visits to each partner site was a necessity for projects working with private
  companies to establish relationships, document protocols and perceptions (benchmarking)
  and to identify any specific challenges. There was a recognition that partners needed an
  opportunity to express their own needs and be given the space to do this. (REaCTOR,
  PublishOER, CORE-SET)
- Tapping into existing networks has always been an efficient strategy, with regional networks proving useful for a few projects (DEFT, ORBIT, ReACTOR, Teesside)
- Developing case studies proved effective for teachers and also provide evidence of effective engagement with different partners (DEFT, ORBIT, CORE-SET)

(UKOER Phase 3 final report, 2013)

Engaging stakeholders outside the UKOER and SCORE communities has been an important aspect of disseminating findings from projects and engaging the wider UK and global communities in conversations around OEP and the kinds of transformations that have been made possible through this funding. Engagement with UK and International activities and events has led to a high profile for the Community. Joint public communications also helped to cement relationships and - by fostering reflection - to embed practice change. Joint conference presentations, academic papers showcasing pedagogic research work, and the collaborative development of case studies have all contributed to wider sector engagement.

Evidence from SCORE final reports and case studies strongly suggests that because of the research-based nature of SCORE projects, fellows are natural 'critical ambassadors' for OER both internally and externally. The majority of SCORE fellows and many of the UKOER project teams had a **high level of dissemination activity** planned, with the intention of releasing reports, articles, resources, staff development materials and various other outputs, using available networks and special interest groups to transfer knowledge, embedding materials and tools, further collaborations, and promoting their work locally, nationally and internationally through conferences and social media. This is all currently ongoing.

SCORE Fellow Joanna Wild undertook some research<sup>2</sup> leading to the development of an "OER Engagement Ladder" conceived as a way to help participants articulate what engagement with OER reuse means to them, how it manifests itself, and how it can be fostered. The levels of engagement that she postulates reflect findings from the UKOER programme and, in particular, mirror the notion of people on a journey or pathway that we investigate within this study.

## CHALLENGING AND CHANGING PERCEPTIONS

As discussed in earlier sections teaching staff need to be **convinced of the benefits** of releasing and using OER, and of embracing OEP. **Reward and recognition** for individuals were seen as important enablers which could be achieved by offering official recognition for OEP within existing institutional performance review mechanisms. Increasing visibility through effective use of social media was noted during our interviews as a useful way to acquire academic status.

We found a number of instances where respondents enhanced their reputation across the sector through sharing their expertise or showcasing resources. There were examples of respondents being recognised and rewarded, either through promotion or through attaining leadership or almost celebrity status. (Interview analysis, 2012)

It has also been suggested that OEP should be included in institutionally led **professional teaching qualifications** and also the HE Academy teaching fellowship criteria and UKOER projects increasingly called for OEP and research to be brought together with OER being seen as a new form of **scholarly publishing**. Incorporating OEP into **continuing professional development** (CPD) mechanisms was seen as highly important for long term engagement and to support sustainable practice change

The majority of the EDOR Project team thought that engagement with OER (and the EDOR Project in particular) provided good professional development for any academic. In particular, it was considered useful in terms of own research publishing, not just for learning and teaching. It was also felt that it developed self-awareness around learning and teaching good practice in general (not just open access), such as accessibility issues and future engagement with distance learning (what makes "good" distance learning resources?). (EDOR Project Final Report, 2011)

Although **financial reward** was not highlighted generally for academic staff it did prove to be an enabler for some practitioner groups (Part-time tutors) and also for students who needed to find extra time to engage with project activities. It is important to acknowledge how far personal aspects can affect openness to sharing, such as the **'feelgood' factor of open sharing** or the impact of having a sense of security, both in relation to being secure in their own ability to produce content of a high enough quality and of having job security.

Quality was a significant issue during the pilot phase of UKOER but this became less of a focus for later projects (also evidenced during our 2012 survey), which may indicate that increased experience allays some of those concerns. Releasing OER exposes individuals and institutions in a new way and may feel threatening, with consequent worry that they will be seen as 'responsible' for all future uses of content which they originally released. This can mitigate against recognition or personal reputation as a reward, and hence against individuals' willingness to release OER. Concerns about both technical and pedagogical quality often emerged as a barrier that projects had to address. Release of OER at an institutional level provided an opportunity for existing quality measures and procedures to be reconsidered and opened up useful dialogue across the institution. Throughout the UKOER Programme issues around quality were linked to trust and this is where the community of practice approaches emerged as especially strong. These approaches built on existing trust within the community to encourage experimentation and support practice change in a safe environment. **Trust was identified as a crucial factor** in enabling and supporting open release throughout the programme.

We also noted some intermediate stages en route to OEP 'readiness' and the need to allow staff time to gain confidence in their own materials and mechanisms to share them. Several UKOER projects articulated a need for 'phased openness' to provide a less threatening way to get staff involved.

The Sesame project very much benefited from the earlier work of the UKOER programme in identifying potential benefits of open practice and using these to support our case, but we also developed a system that allowed engagement at a variety of levels which minimises the initial commitment, but made it easy to scale up. Thus, while tutors have been encouraged to release their own materials, they can also use the platform just to collate OER and other online resources for students. While evidence of this is still emerging we know from feedback this has encouraged some tutors who would not have otherwise set up a course site. (SESAME Final Report)

Despite a lessening of concerns around quality, a significant number of our survey respondents indicated that it is difficult to locate relevant OER, indicating either a potential lack of resources or issues around discoverability (due to limited meta-data, time and/or skills). This was also reported through all phases of UKOER and in the SCORE Evaluation report.

Barriers that participants in SCORE fellow projects faced in attempting to find, evaluate, and use OER were identified as "those about not being able to successfully complete the cycle of implementation or reuse of OER in their own teaching practice", including technological barriers (such as incompatibility for accessing and downloading resources), lack of appropriate quality of, or meta-data for finding, resources (and the consequent drain on academics' time to source suitable OER for reuse). VLEs were felt to "silo students into their different courses and don't encourage sharing across courses, cohorts or with the wider public". One case study was particularly insightful about the implications of barriers in terms of take up of OER:

"The barriers faced by these colleagues are not driven by lack of desire to use OERs, or indeed, as part of this project, they are not barriers to do with having support or guidance in approaching OER use in their own practice. They are legitimate concerns and documented barriers from academics who would like to use to OERs as a way of innovating in their practice. If these highly motivated participants have difficulties bringing OERs into their practice, there is the potential that such difficulties might be magnified in more mainstream academics."

This desire to use OER to innovate practice contrasts with some of our conversations with interviewees in 2012 and with evidence from the UKOER programme. While reputation enhancement might drive forward a shift in professional practice, it can limit the areas of practice change, since academics tend to prefer to produce and gain credit for resources they have created themselves. We also found evidence that academics felt re-using others' content reflected poorly on their own expertise and academic identity, which included student expectations of what constitutes academically respectable sources; student and teacher expectations that research active teachers will use their own research in teaching, and fear by teachers of potential negative judgement by their peers for putting themselves forward:

A concern was also raised that making materials openly available might open oneself up to negative judgement from colleagues because of the perception of putting oneself forward as a self-appointed expert without adequate peer review. (C-SAP collections Project Final Report, 2011)

While community trust and positive recognition are clear motivators, the lack of such trust and the fear of negative recognition - content 'not being good enough' or laying the producer open to legal scrutiny - are barriers to making open content practices sustainable. Convincing academics to change their professional practice to include re-purposing and improving resources created by others seems challenging. Few of our interview respondents provided examples of re-purposing, with some explicitly stating it was usually easier to create original material rather than re-purpose existing resources, which also mirrors conclusions from UKOER experience. This illustrates how far collective professional practice has yet to mature. In the future academics will have to change and improve OER, not only within communities of trusted colleagues, but with indefinite people across the world. Enabling them to do so remains an ongoing challenge as much of our evidence of changed practice involves sharing of practice and release of content. It is important to acknowledge though just how transformative this can be at an individual level.

"In the course of this fellowship I have fundamentally changed my practice in an open and sustainable way, and in doing so I have effected change with my colleagues beyond the usual dissemination."

SCORE Fellow, 2012

#### CHANGING PRACTICE AND ROLES

Staff perceptions, expectations and understandings around learning resources and activities present some of the most embedded and entrenched cultural and practice barriers, often maintained and supported by institutional, professional or subject discipline traditions. An **institution-wide** or **community-wide approach** to staff development and support can help to address some of these cultural barriers and encourage OER release and use, but some institutions may choose to mandate such activities to move forward. The subject consortia approach uses **established Communities of Practice** (CoPs) to encourage take up and produce resources to support others to engage with, use and develop their own resources. As previously discussed this approach can have a very positive impact on awareness, and potentially on longer term practice change, but there is also a danger that entrenched community practices may hinder transformative change<sup>3</sup>.

A key factor of UKOER and SCORE activities was the notion of **reflective practitioners**, as engagement with OER release stimulated reconsideration of existing content development practices and considerations of how learning resources might be used in different contexts. Instead of developing resources for one specific learning activity staff considered how to present materials in different ways for different contexts. **New kinds of conversation** about the learning experience took place. There has been clear evidence of change to curricula and assessment, change in learner/teacher relationships, and changes in practice as academic staff have embraced OEP. Most projects report that engagement with OER has generally allayed original fears and generated enthusiasm and champions of OEP. The **use of champions** to take the message forward within related practitioner communities provides opportunities to increase understanding of challenges and provides reassurance to colleagues. The UKOER phase 2 CASCADE projects highlighted the importance of winning over key champions at a high level, even before people in technical and professional roles and targeted course leaders as champions and conduits of information. Because the roles involved in open development and release are so diverse, different approaches are needed and different messages must be crafted.

OER and OEP involves a diverse range of expertise and this is rarely mapped to established professional roles. Both UKOER and SCORE participants highlighted the need to work across traditional boundaries and the need for multidisciplinary teams. OER expertise was developed among academics, librarians, legal advisers, knowledge transfer teams, technical developers, content management teams, quality teams, marketing departments, etc as appropriate to their roles. New professional responsibilities are emerging, demanding new kinds of expertise, and that collaboration across professional boundaries is critical if sharing and release of educational content is to become embedded into academic practice. We outlined the kind of expertise required to move towards OEP in the section on Models. Evidence from UKOER identified the kind of support required as:

- e-learning/content production: support for open design and production, reaching a global audience
- IT infrastructure: a range of background issues, e.g. 'the bandwidth, the servers'
- IT services/content management team: support for and hosting of open repository or other CMS
- marketing/communications: awareness of branding issues and corporate identity management
- expert advice on legal aspects of content use, release and re-use, not limited to open licences and third party IPR but also for example around consent for image capture
- library/content management: particularly appropriate and pragmatically applicable metadata and paradata

Whilst most of these support areas fall into existing teams within an educational institution, we have recorded a blurring of boundaries as roles become less defined and more fluid. for example, academics have had to become more knowledgeable around branding and marketing and have been reported as increasingly taking on the role as curator of learning resources.

UKOER projects found that by allocating specific roles to some stakeholder groups they managed to contain the levels of support needed and made best use of the potential input by diverse stakeholders. Managing stakeholder expectations and balancing the needs of all partners emerged as an important activity, particularly when this might impact on pedagogic approaches. Involving partners from outside the education sector brought fresh insight and ideas and did result in positive transformations to curricula, which impacted on timescales for implementation. Involving stakeholders in ongoing research and evaluation activities improved engagement and provided tangible ways for partners to contribute. Some partners offered invaluable networks for dissemination and distribution of the OER which offered immense added value. Other ways to involve partners included steering group membership or as expert consultants.

Practice change which has been instigated by programme funding can become sustainable in the longer term through appropriate institutional support, including technical infrastructure, strategies and policies, support and guidance mechanisms and most importantly time and space to be experimental as staff take first steps on their own journeys into OEP. Communities outside the institution can also support ongoing practice change and academics are quite often members of at least one external community or network. There can however be a tension if these two important sources of support clash. For example, an individual depositing OER into an institutional repository and a community repository may have to adhere to different rules and conventions around formatting, branding, metadata or licensing - adding to the burden of open release.

#### 3.IV. Critical factors for institutional change

Educational institutions involved in the UKOER programme have undergone varying degrees of change depending on their institutional readiness at the start of the funded period. In the early pilot phase few institutions were engaged with OER at an institution-wide level, apart from the University of Nottingham, which had already invested into their U-now repository. The University was involved in the Pilot phase institutional strand and provided an inspirational example of senior management buy-in and commitment. In fact all phases of UKOER support the notion that policy change and strategic buy-in is a very important stage in the institutional journey as it can be an indicator of 'OER/OEP maturity' and provides clear evidence of a commitment to changing practice, and ultimately supports sustainability.

During phase 3 the Evaluation and Synthesis Team drew together some evidence around senior management engagement which highlighted a significant amount of activity by project teams to get OER and OEP on institutional agendas through meetings and events. The resulting evidence of engagement and positive impact on strategies and policies reflects the benefits of taking this approach.

Embedding OER release and use into institutional strategy and policy has been seen as crucial in supporting sustainability. Two approaches emerged in relation to institutional policies - those who chose to adapt existing policies and those that chose to develop new policies. The difference here lies in the nature of the policy. Adapting exisiting IPR or learning, teaching and assessment policies, can be important for gaining buy-in of interested stakeholders, and can indicate a sense of more gentle (and less threatening) change than a new policy. In contrast the development of a new special OER policy can act as a powerful signal that the institution is committed to the concept and to

providing appropriate resource to support implementation. Projects adopted both approaches based on the needs of their particular institution.

Continuing the ground work laid by the predecessor UKOER phase 1 project (OER Dutch) the project team also continued to promote the idea of Open Educational Resources on an institutional level at UCL, and advocated the introduction of a faculty- or institution-wide policy on OERs, which would complement UCL's advanced Open Access policy for research outputs well. (DHOER Project Final Report, 2011)

Bath's intellectual property policy guidance document now includes reference to OERs, as a direct result of OSTRICH. Bath also created a "Deed of Licence" which academic staff are required to sign to permit the university to release materials as OERs, and consent documents based on JISC and Web2rights templates. (OSTRICH Project Final Report, 2011)

Having institutional guidelines and policies around ownership of learning materials was highlighted across all phases of the UKOER programme as important in encouraging and enabling staff to release them openly. Licensing and copyright policies, are most likely to require alteration to promote clear licensing and awareness of copyright and open licensing requirements.

Changes to strategy, policy and processes support embedding and, ultimately, sustainability. In some senses it is easier to sustain support mechanisms (such as repositories, quality assurance processes or curriculum design practices) than maintaining and encouraging staff engagement at an institution-wide level. Staff awareness, engagement and support for ongoing staff involvement was seen by most projects as crucial and staff development and training (capacity building), reward and recognition and maintaining communities of practice emerged as important sustaining activities.

Staff development activities have been developed within each phase of UKOER and also through SCORE activities and materials have been made available to the wider community. These include legal, technical and pedagogic support to help staff engage, openly release their own content and reuse and adapt others' content. Projects tend to tailor guidance for their own context but most of these have been released openly for adaptation and re-use. These are drawn together on the OER infoKit guidance and support pages. The OER infoKit was developed by JISC Infonet alongside the UKOER Programme to support projects and to collate outcomes form the programme for the wider community and was augmented by outputs from projects and the Evaluation and Synthesis Team. By phase 3 the infoKit was well populated and one project reported that by phase 3 they referred people to the OER infoKit rather than hold introductory workshops. This resource was recently updated with phase 3 outputs and retains a national and international audience well after the funded period Google Analytics page showing audience figures from November 2009 to April 2013.pdf.

### TECHNICAL INFRASTRUCTURE FOR OER RELEASE

Several projects highlighted institution-wide initiatives that could be used to drive OER activities forwards, such as implementing institutional repositories or content management systems. Linking project activities to **institutional priorities** also emerged as useful, especially challenging agendas such as flexible curricula and non-traditional students. Tying in with institution wide initiatives did sometimes present challenges due to delays, management changes and as the sector responded to economic conditions. Closure of HE Academy Subject Centres, in particular, had significant impact as they often provided the vision and infrastructure to support community endeavours, and the impending loss of both expertise and hosting mechanisms is likely to have long term implications for OER collections and ongoing community approaches to development, release and use.

Technical hosting solutions were divided between tools provided and supported by universities and social media tools. There was some evidence of tensions between these two areas – one example is that some academics who were expected to use enterprise solutions preferred to use open social media sites – however by phase 3 both areas appeared to co-exist offering different options to academics. This remains a tension, however for FE institutions who may restrict access to some social media sites in the interests of e-safety for their students.

As described earlier in the report, by phase 2 UKOER projects began to release OER in a range of different levels of granularity and host them across a range of different kinds of platforms to enhance discoverability. There were pockets of change in technical solutions and policy in some universities, but this can happen slowly. One of the tensions around using **institutional technologies** to host OER is that they are often designed around principles of closed access but they do offer opportunities for version control and effective management of OER, so many projects adopted institutional systems to store their OER and deposited links elsewhere. The use of open source VLEs also emerged as an opportunity to move institutions away from a close system mentality for learning and teaching content. <u>Jorum</u> offers projects a national stage on which to host their OER and provides a platform for institutions to showcase their materials, either through deposit of OER or links to OER hosted elsewhere. By phase 3 several projects were reporting **using Jorum as a first stop** when looking for OER to support their teaching.

Specific factors relating to release of OER require decisions to be made as appropriate to different contexts but can be summarised as follows:

- approaches to materials development
  - o participatory development using open platforms
  - o development by central support teams and/or academic departments
  - o involving students as co-producers (raises ownership issues)
  - o granularity small assets and/or packaged
  - o added context pedagogic wrappers and metadata
  - o multiple formats (e.g. mobile formats)
  - licencing choice
- approaches to hosting and managing OER
  - institutional or community systems
  - o open web approaches
  - o tracking and paradata
  - o multiple platforms

For an overview and detailed discussion of technical issues raised by the three year programme see the publication Into the wild: Technology for Open Educational Resources - Edited by Amber Thomas, Lorna M. Campbell, Phil Barker and Martin Hawksey, November 2012

### PARTNERSHIP APPROACHES

Alongside a strategic 'top-down' vision is the notion of institutional readiness at 'ground level'. UKOER projects described open educational practices emerging at an individual or departmental level, or being embedded into professional activities in a low-key way. Focusing OER activities within one faculty or department can often be easier to manage because there may be at least some agreement of accepted pedagogic approaches and intentions, and a chance that a culture of sharing may also exist to some extent. In the absence of strategic institutional drivers achieving change is more difficult but not impossible; it becomes more focused on the individual rather than the institution. This can also be supported by subject or professional communities and networks. Evidence of **open sharing cultures** are emerging across institutions and communities, with project activities providing the impetus and sustaining activities to support these. **Cultural change** around sharing was

recognised as important for embedding OER related practices (either release or use). OER help to make public the sharing philosophy, encouraging engagement elsewhere within the institution or with external stakeholders, and encouraging sharing of practice as well as OER.

Cultural change of institutions was encouraged through examination and review of existing practice and models and in particular encouraging collaboration and partnership approaches (ACTOR Project final report, 2011)

UKOER projects were often able to facilitate new conversations and ongoing partnerships across different roles and departments within their institutions as a way of extending the reach, for example to finance, human resources, and the research/knowledge transfer office. Collaborative practice within departments and institutions, across the institution, and with external partners and communities emerged as one of the most important enablers for the UKOER Programme and was also a fundamental feature of SCORE activities. Engaging with partners outside the education sector is challenging but has encouraged new partnerships, trust and levels of understanding. Several projects commented that working across boundaries to develop project outcomes (business/community/academy, staff/consultants, students/teachers) was one of the most radical aspects of their experience and has the potential to change practice more widely. Cross sectoral partnerships can encourage the alignment of curricula and practice with needs of external partners (such as industry or sector skills councils).

Establishing open partnerships across institutions, particularly with partners from other sectors is challenging and time consuming but reaps substantial reward. However, whilst partners may become convinced of the potential benefits of open practice to support learning, their own organisational infrastructure, cultures and practices may be difficult to alter and entrenched in traditional practices. In terms of long term cultural change across different organisations projects were generally pragmatic about what they could achieve within project timescales, but many have established excellent partnerships to facilitate and encourage future cultural change to support the use and development of OER. Establishing a culture of open sharing amongst partner institutions was seen as a potential lever for ongoing engagement.

It has been asserted by participants that the O4B's strategy of ensuring a 'culture of sharing' amongst the partner consortium had been most effective. This had:

- made public the philosophy, ground work, the current state of play, and plans for the future, from each contributing HEI;
- promoted input from across the Project Teams, highlighting common areas;
- encouraged participant response: sharing similar experiences, asking questions for clarification, providing valuable insights;
- highlighted approaches and potential users for feedback and testing of OERs.

(O4B Project final report, 2011)

Involving a diverse range of stakeholders provided opportunities to explore attitudes to sharing, releasing and using open content across institutions and highlights particular strengths or barriers affecting some stakeholder groups. New Communities of Practice have emerged inside and across existing communities, drawn together by a genuine desire to change learning and teaching practice through the opening of materials. Without doubt one of the most important enablers for the UKOER programme was the emergence of a **UKOER community** bound together by a mixture of social networking and programme support mechanisms. Whilst many people and groups within this

community had worked in the area of learning resources and activities for many years, the UKOER programme appeared to enhance these existing networks. The UKOER community grew as project teams developed expertise through programme activities and has become an incredibly strong network that continues to connect and meet well after the funded period.

**Students** as partners were a significant feature of the UKOER programme, not only as co-producers or consumers of OER but as members of project teams gaining valuable insight into OEP, evaluation activities and authentic work experience. Involving students was seen by many projects as a reflection of the changing relationship between teachers/learners. We discussed the impact of UKOER activities on students in section 2.iii Impact of OER initiatives.

#### SUSTAINABILITY

Embedding open thinking into curriculum design processes is seen by many to be a significant factor in ensuring long term sustainability of practice change. We have highlighted above a range of approaches to help achieve this shift in practice and have provided evidence of significant transformation achieved through HEFCE funding. These shifts need to be embedded into core work practices within institutions and become accepted practices within different communities.

Sustainability was always a key objective for funded initiatives and embedding project activities into existing institutional processes was a further means of ensuring sustainability. Many of the factors discussed here are critically linked to sustainability and enable the kind of embedding that might support long term transformation.

Our detailed survey with HEFCE funded initiatives offered a list of factors to support sustainability of their initiatives and asked them to identify which had helped them. Nearly 70% identified **staff enthusiasm** as having helped, perhaps indicating just how far the sector is relying on individuals or champions to move things forward and maintain engagement. It is heartening to see that commitment from senior and operational management has had such a positive impact.

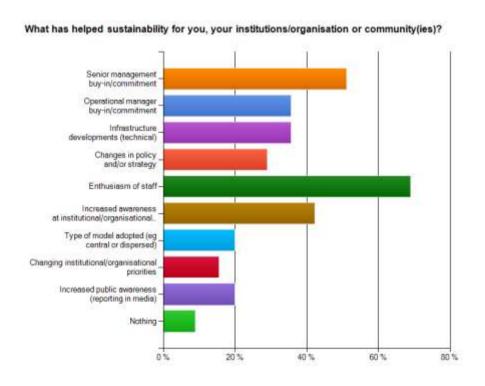


fig. 8 chart showing responses from the detailed survey around sustainability

## 3.v. Summary/discussion

Different contexts require different approaches to enable institutional transformation and individual practice change. Engaging in OEP has been identified by UKOER projects as a generally positive change for staff, students, institutions and their partners. Clearly one of the most critical factors enabling this kind of change is the passion and enthusiasm of individuals who have either led the UKOER and SCORE initiatives or those who have become involved as a result of their activities. New champions and communities have emerged through this work and understanding of the benefits of OER and OEP have become much more widely appreciated. Despite all the barriers around time, Copyright and open licencing we have seen collaborative approaches and collective action offering new strategies to support OEP. Academics have responded positively to increasing collections of OER in their subject area and this has an important impact on OEP. Cross-sectoral partnerships required significant commitment and support but have provided mutual benefits that have impacted on the OER, on curriculum development and on existing culture and practice of different organisations.

The following lists aim to summarise different **critical enablers** for different stakeholders:

## individuals (range of institutional staff in different roles, students, people outside the education sector, members of communities)

- skills development- enhancing digital and open literacies
- time set aside to engage and experiment
- guidance and support
- formal reward and recognition systems for sharing quality content
- linking OER to research outcomes; linking the scholarship of open research and open teaching
- availability of exemplar OER from peers
- private and secure space to engage in frank discussions about concerns
- progressive release/staged openness, allowing originators to choose who to share with and restrict sharing to 'those they know' in the first instance
- for individuals the 'feelgood factor' continues to feature as an important enabler

### institutions

- strategic vision
- OEP and open licenses being recognised in Institutional policies
- senior management commitment
- institutional readiness
- appropriate technical infrastructure
- individual champions
- appropriate institutional approach to licencing (knowing where expertise and responsibility around copyright and licensing sits)
- cross-institutional conversations
- external partnerships including cross sectoral partnerships encouraging alignment of curricula and practice with needs of external partners (maybe industry, maybe skills sectors, ect..)

#### communities

- existing support mechanisms
- existing sharing mechanisms

- focus on practices
- common vision and practices
- exemplar OER from peers
- progressive release/staged openness, allowing originators to choose who to share with and restrict sharing to 'those they know' in the first instance
- collaborative approaches and collective action offer successful strategies to support open education practices
- collections of existing OER in their subject area

#### Footnotes

- 1. McGill, L and Currier, S and Duncan, C and Douglas, P (2008) .Good intentions: improving the evidence base in support of sharing learning materials Project Report http://ierepository.jisc.ac.uk/265/
- 2. Wild, J. (2012) OER Engagement Study: promoting OER reuse among academics. Research report from the SCORE funded project.
  - http://www.open.ac.uk/score/files/score/file/OER%20Engagement%20Study%20Joanna%20Wild \_full%20research%20report.pdf
- 3. (forthcoming) Littlejohn, A., Falconer. I., McGill, L. and Beetham, H. Open networks and bounded communities: tensions inherent in releasing Open Educational Resources in Re-using open Resources Book, Routledge, 2013.

ON THE WIKI: <a href="http://bit.ly/HEFCE-Review-Critical-Factors">http://bit.ly/HEFCE-Review-Critical-Factors</a>

BACK TO: IMPACT

FORWARD TO: TENSIONS AND CHALLENGES

The UKOER/SCORE Review report is available on the UKOER Evaluation and Synthesis wiki, supported by supplementary pages containing evidence and detailed analysis.