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Executive Summary

About the project

- Opening Educational Practices in Scotland (OEPS) was a three-year project funded by the Scottish Funding Council (SFC) and led by the Open University in Scotland. The project began in summer 2014 and ended on July 31st 2017.
- The project’s remit was to develop, identify and share good practice in the use of open resources from a widening participation perspective.

Context

- The availability of free, openly licensed online courses and the ubiquity of digital technology is relevant to learners in the formal and informal learning sectors in Scotland.
- Openly licensed educational resources are regarded by some educationalists as having the potential to open up new pathways into higher education; however, currently their use is heavily skewed towards existing graduates.
- Developments in open education have tended to focus on technology. To ensure effective use there is a strong case for reorienting effort on practice, pedagogy and new models of student support.
- Open licensing and digital platforms open new possibilities for knowledge dissemination and exchange.
- Digital technology and open licenses open new and innovative possibilities for curriculum development. These include greater use of collaborative development and the provision of short courses and micro-credentials that provide flexible pathways for lifelong learning and support transitions into formal education, between further and higher education, between education and employment and in the workplace.
- Free, openly licensed, online courses are now part of the educational mainstream. However, the educational practices, organisational and business models to make best use of these resources are not fully developed.

Project outputs

- The project worked with 68 organisations across Scotland, including universities, colleges, schools, third sector organisations, unions and businesses. It held 79 workshops, gave 44 presentations, organised four one-day open forums and one seminar and co-organised a two day symposium. The project website\(^1\) hosts an archive of the project’s activity and outputs. The entire range of project outputs, comprising exemplar courses, reports, briefings and resources are hosted in the Opening Educational Practices in Scotland collection.\(^2\)
- The project outputs include fifteen new openly licensed courses co-created with organisations in Scotland.
- All but one of the OEPS courses offered recognition through Open Badges and the project established evidence of the use of badges at scale.
Project findings

- Awareness of open education among educators and policy makers in the university and college sectors is low. There is a case for including open education and open licensing in initial professional development programmes like the TQFE and PGCert and in subsequent CPD.
- Co-production of online resources with organisations in the informal learning sector has benefits for academic institutions, their partners and for students.
- There remains a need for a cross-sector approach to supporting development.
- The informal learning sector in Scotland is leading the way in the use of Open Badges.
- Policy discussion on open education is too narrowly focused on the use of MOOCs in the university sector.
- Developments in learning technology are affecting all parts of the education system. The availability of free openly licensed content poses new challenges for colleges and universities. In this context open practice has the potential to support learning journeys and enhance the quality and reputation of Scottish Education. To achieve this, however, systemic change that starts from student centred pedagogy is necessary.

Recommendations

1. Colleges and universities and the Scottish Government should consider formal adoption of the Scottish Open Educational Declaration.

2. Professional development is critical to the future development of open education in Scotland. The study of open pedagogy should be incorporated as a mainstream part of teacher education, the TQFE and higher education Post Graduate Certificates in Learning and Teaching.

3. Educational institutions in Scotland should release much more of their content in openly licensed format and should consider adopting an approach of open by default. In addition the SFC should consider encouraging sharing and collaborative initiatives between institutions.

4. To enable widening access to colleges and university, as well as to support lifelong learning, colleges and universities should work in partnership with the informal learning and third sector to create open resources and open practice. This can include supporting transitions into education and professional development in employment.

5. The creation of open courses and other openly licensed materials should be recognised by the Scottish Funding Council as a component of knowledge exchange and appropriate funding arrangements established.

6. There should be consideration by the Scottish Government and the Scottish Funding Council of the systems, support mechanisms, and policies required to facilitate and sustain institutional collaborations in open education. Outcome agreements might be one avenue that could be used.
About the project

Opening Educational Practices in Scotland (OEPS) was a three-year cross sector project funded by the Scottish Funding Council. The project ran for three years from the summer of 2014 to 31st July 2017.

Prior to the commencement of the project the publicity associated with Massive Open Online Courses (MOOCs) drew attention to the fact that, despite huge enrolments, the students studying these courses were mainly graduates. MOOCs are in fact only part of the burgeoning ecosystem of online educational materials. The project’s remit was to understand why the rapid growth of free, openly licensed educational resources seemed to be reinforcing educational inequality, and to work collaboratively across the Scottish education sector to develop and share good practice. The remit required a focus on the interface between learning technology and widening participation.

The project was led by the Open University in Scotland and supported by a steering group comprising representatives from the Universities of Edinburgh, Glasgow, Strathclyde and the Highlands and Islands, together with the College Development Network and the Scottish Funding Council (SFC). The SFC funded the project.

About this report

The report provides an overview of the activity and findings of the OEPS project. It begins with a discussion of the project rationale, context, opportunities and challenges and explains how these influenced the project strategy. It then reports separately against each of the objectives that were set in agreement with the SFC before reflecting on the project outcomes and making specific recommendations for the Scottish sector.

Some definitions

Open Educational Resources

‘Open’ is used in the education world in many different ways. The OEPS project was concerned with the use of Open Educational Resources (OER). OER are any kind of educational material that is released under what is known as a Creative Commons (CC) License. CC licenses allow unlimited use and the freedom to adapt, rewrite, mix together and reuse the material provided appropriate attribution is made to the originator of the material.

Openly Licensed Courses

OER can consist of a photograph or a video that has been shared with a CC license. However, the OEPS project was mainly concerned with the use of OER in the form of courses – structured educational material with defined outcomes, learning activities and some form of assessment.
Massive Open Online Courses

MOOCs are free online courses; typically they are released under copyright although some are also openly licensed. In most cases they are made available for study for limited periods of time with specific start and finish dates.

Open Educational Practice

We think of Open Educational Practices as those educational practices that are concerned with and promote equity and openness. Our understanding of ‘open’ builds on the freedoms associated with “the 5 Rs” of OER, promoting a broader sense of open, emphasising social justice, and developing practices that open up opportunities for those distanced from education.

Issues, challenges and collaborative methodology

Open Education in the sense of openly licensed educational resources (OER) is a new field. Its beginning is generally considered to date from 2002 when the Massachusetts Institute of Technology launched the Open Courseware initiative; sharing much of its course materials online as OER. Initially the materials were simply lecture notes. However, the concept of openly licensing educational materials developed momentum and has been extended to a variety of resources including texts, images, audio, video and entire courses. In the United States, for example, openly licensed textbooks have become an important part of the community college and university landscape. This development has been driven by the high cost of mainstream academic publishing and a concern that all students should be able to access texts. A social justice agenda has also been important in the global south where organisations like the Commonwealth of Learning have made the use of openly licensed texts and courses an important part of their development agenda.

As the OER movement grew in the UK it developed a necessary focus on the development of platforms and standards for creating and sharing resources. This led to an interest in OER repositories where learning objects, small shareable bits of learning materials, could be deposited and freely shared. Much of this work took place under the aegis of JISC, including the development of the JORUM repository as a resource for the HE sector, and later on of Re:Source, based on JORUM and designed to support the Scottish College Sector. Among both policy makers and learning technology practitioners there was a tendency to see openness as a technical problem with technical solutions.

The media attention that accompanied the release of the first Massive Open Online Courses in the US through autumn 2011 into 2012 had a major impact on the higher education sector internationally. The attention of educational policy makers in Scotland, as elsewhere, was drawn to open, online courses. MOOCs are not usually issued under an open licence, but discussions about whether to become involved in the production of MOOCs and the role of short online courses had the effect of increased recognition for ongoing work on open education in all its aspects, including OER. The Open Scotland
network and the JISC supported Open Badges in Scottish Education Group (OBSEG) provided important forums for cross-sector discussion.

By 2014 a consistent pattern was emerging from MOOC enrolment data. Free, online courses recruited learners in large numbers, but relatively few completed, and a majority of participants had already had access to further and higher education. Research commissioned by the OECD and conducted by a team at Glasgow Caledonian University that went beyond MOOCs to look at the impact of OER concluded that there had been very little impact on lifelong learning and widening participation.

In planning a strategy for the OEPS project it was therefore necessary to consider a number of factors:

- The clear remit to address open educational practice from a social justice perspective
- The existence of a well-established learning technology network involving staff from a number of Scottish universities and organised around Open Scotland
- The very few points of contact between practitioners in the learning technology and widening participation communities
- Evidence of effective use of openly licensed courses from a small number of widening participation partnerships
- No shared understanding of what might constitute good practice, or indeed why there was so little take up of free online courses in adult learning
- The remit to focus on use and pedagogy rather than technology
- The remit to work across the formal and informal learning sectors and develop and disseminate good practice

In these circumstances the project began by working with partners across Scotland to assess current practice and to collaborate in designing interventions that could be tested and evaluated in order to better understand barriers to participation. The project team concluded that the most effective way of meeting its objectives was to work with, rather than for, partners. So OEPS was conceptualised as a multi-stranded action research project; each strand of activity working with a partner through the action research cycle of planning, acting, observing and reflecting.
The following is a summary of the project outputs agreed with the SFC and the particular focus we took considering the above context.

<table>
<thead>
<tr>
<th>Output</th>
<th>Particular focus</th>
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<tr>
<td>The State of OEP in Scotland</td>
<td>To consider educational practice in informal learning as well as in the college and university sectors.</td>
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<tr>
<td>Events Programme</td>
<td>Aim to include practitioners from both the informal and formal learning sectors.</td>
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<tr>
<td>Hub Development</td>
<td>To provide access to best practice during and beyond the life of the project.</td>
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<tr>
<td>Exemplar OER</td>
<td>To showcase the use of open courses in contexts that are not limited to colleges and universities nor to core undergraduate provision</td>
</tr>
<tr>
<td>Quality and Accreditation</td>
<td>To explore issues that are relevant to both the informal and formal learning sectors.</td>
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<tr>
<td>Pedagogies of Open Practice</td>
<td>To develop good practice that supports widening participation and educational transitions.</td>
</tr>
<tr>
<td>Evidence Base</td>
<td>To evidence the case for adopting open education in supporting journeys from informal to formal learning.</td>
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<tr>
<td>Economic Models</td>
<td>To consider the business case and rational for mainstreaming open education.</td>
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From 2014 to 2017 the project team worked with partners to identify good practice and share new understanding. Each strand of activity involved a cycle of development, that combined with longitudinal development through the project, as learning was shared, developed and refined. In the course of this activity the OEPS team was able to develop a rich, evidence-based picture of the needs and motivations of partner organisations.
More on terminology

Throughout this report we refer to the formal and informal sectors in Scottish Education. The formal sector comprises the nineteen Universities and Higher Education Institutions, Scotland’s Colleges and the school system. The informal sector is harder to define and its boundaries are less well delineated. We use the term to cover the host of organisations that have some interest in education and training. This includes third sector organisations and the networks they belong to, trade unions and employers. There are multiple connections between the informal and formal sectors. Understanding the impact of open education on learner journeys and transitions within and between the two sectors formed an important part of the activity of the OEPS project.
Open Educational Practice in Scotland 2017

Output 1

The state of OEP in Scotland

An analysis of what is currently happening in Scottish tertiary education in the area of open educational practice (OEP) and provide some strategic clarity within the sector. The project should also seek to understand the engagement with open online learning by other organisations outwith the tertiary education sector in both the public and private sectors.

Our conclusions on the current state of open educational practice in Scotland are drawn from multiple sources. Over the course of the project we engaged in collaborative activity with 68 organisations from the formal and informal education sectors including a majority of the institutions in the university sector. We also reviewed the academic and grey literature and conducted surveys and focus groups. In addition we learnt from individuals (from all the universities, from colleges, third sector bodies, unions and businesses) in one to one discussions, at workshops, at forums and at events where we made presentations.

Universities and Colleges

In its first year the project provided financial support for the updating of the Scottish Open Education Declaration and its conversion from draft to first edition status. The first year of the project also coincided with the publication of the European Commission’s POERUP report. Both documents recommended the adoption of new policies to support open education in the Scottish Universities. Three years on, 4 of the nineteen Scottish Universities now have formal policy on OER and OEP. At the beginning of the project the Open University was alone in having an institutional website dedicated to sharing OER. The University of Edinburgh and Glasgow Caledonian University now also have such sites. At the same time, however, JISC has withdrawn support from JORUM, which was a repository of open resources for the whole sector.

From a sector perspective it can be argued that the pace of change in Scotland has slowed. However, a policy view doesn’t tell the whole story. There are many examples of good practice in the use of openly licensed resources across higher education in Scotland. Twenty-one examples from a range of institutions have been written up as case studies and can be found in the OEPS legacy collection. These include innovative involvement of students as co-creators of OER, the use of Open Badges and the development of institutional policy frameworks.

Among staff in higher education the general awareness of OER and OEP is low and there is relatively little awareness of dedicated open resource repositories. On the other
hand use of Google, YouTube, Ted talks and Wikipedia is widespread. An OEPS survey found that awareness of open licensing is higher than awareness of OER but there was no evidence that this translates into sharing of resources across the sector. Most staff share teaching materials via their institutions Virtual Learning Environment (VLE) but few share openly online. Staff who attend CPD opportunities are more likely to engage with OER and OEP. Lack of awareness is perceived as the highest barrier to adoption of OER.

Engagement with OER and OEP is more limited in the college sector although there has been innovative work with Open Badges. The OEPS colleges survey found that staff awareness of OER and OEP was very similar to the university sector.

A persistent theme throughout the project’s engagement with the university and college sectors was the value of professional development in supporting greater awareness of the potential of the use of OER. The OEPS team worked with staff involved with the Teaching Qualification for Further Education to explore how open resources might contribute to professional development. This influenced the design of the OEPS exemplar course ‘Becoming An Open Educator’. The openly licensed resources and activities contained in the course can be used and remixed in the TQFE or in its university sector equivalent the Post Graduate Certificate in Higher Education Learning and Teaching.

The project aimed to enhance the reputation of the Scottish sector and sought out opportunities to share the Scottish perspective on OEP more widely, participating in international events and webinars. It contributed evidence on the state of OER and OEP in Scotland to the European Commission’s Joint Research Centre (JCR) study of ‘Member States Case Studies on Policies for Open Education’.

The informal learning sector and widening participation

Prior to the start of the project, with the exception of work done by the OU in Scotland, there was very little contact between the open education and widening participation communities in Scottish education. The project made it a priority to talk to widening participation staff at an institutional level and in networks like the Scottish Universities Association for Lifelong Learning (SUALL) about open education. Conversely we sought opportunities to talk to learning technologists about widening participation.

From the outset we found a high level of interest in the use of openly licensed courses in the informal education sector. Over the lifetime of the project nearly half of the organisations that we worked with were from the third sector, trade unions or employers. The fact that open resources are ‘free’ was often the catalyst for initial interest. However, concerns for meeting the needs of clients or members in a digital world meant that this frequently led to a deeper engagement with issues of effective use, sharing and collaboration.

Working with these organisations and their learners provided valuable insights into the barriers faced by both learners and organisations in using free, openly licensed courses. The findings are collected in a number of reports and briefings in the OEPS collection.
Case study

University of the West of Scotland

The University of the West of Scotland (UWS) is currently consulting on an institutional policy on open educational resources, which received expert input from the Opening Educational Practices in Scotland (OEPS) project.

Although there are pockets of open educational practice across the university, particularly within the Learning Innovations Department where staff have long recognised the potential of open educational resources (OER), UWS is keen to engender a wider understanding of such material.

Championed by the Associate Vice-Principal for Education, the university’s OER policy has been taken forward by Resources Librarian, Nik Hussin. The draft policy, modelled on one developed by the University of Leeds, provides a definition of OER, sets out how OER should be presented and clarifies copyright issues in relation to OER. Development of the policy has itself generated greater awareness of OER across the university particularly amongst student representatives who have welcomed the development from a learner’s perspective and have expressed interest in working with library staff to develop their own open material.

Whilst the policy was in development, OEPS delivered two workshops at UWS, which were attended by over fifty people. The workshops received very positive feedback and were deemed to have been particularly helpful in addressing barriers to greater engagement with OER, such as a lack of understanding around copyright.

It is anticipated that once the OER policy is approved, UWS will join the growing number of Scottish HEIs, which have established repositories for OER. The repository will help foster the sharing of learning materials across the sector, as well as with the university’s partner colleges and schools.

Lesley Hamilton and Nik Hussin and the Staff from the Learning Innovation Department and university’s library believe the input from OEPS has been very valuable to UWS, particularly as the sector is only just beginning to tap into the potential of OER.

There is a longer version of this case study in the OEPS legacy collection\(^2\).
Advisory forums

The spine of the events programme during the first two years of the project was the OEPS Advisory Forums. There were four of these events, one in Edinburgh, two in Stirling and one in Glasgow. All four forums were organised to maximise participation and dialogue, and to provide a space for sharing ideas. They brought together individuals with educational technology, widening participation and learning and teaching backgrounds from the formal and informal education sectors.

The plenary speakers at the forums reflected the broad range of the OEPS concerns:

- **Professor Martin Weller** on ‘the battle for open’ took a broad view of the contested terrain of open licensed resources and open educational practice in higher education.

- **Professor Laura Czerniewicz** from the University of Cape Town (via Skype) reflected on the challenges of using OER and developing open practice and widening participation in the South African context.

- **Professor Alison Littlejohn** discussed some of the findings of the ExplOERer project and talked about learning to widen participation.

- **Josie Fraser** looked at the issues of changing culture and practice through connecting open practice.

Output

<table>
<thead>
<tr>
<th>Formal sector audience</th>
<th>Informal sector audience</th>
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<tbody>
<tr>
<td>79 Workshops</td>
<td>44 presentations</td>
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<tr>
<td>4 open forums</td>
<td>44 presentations</td>
</tr>
<tr>
<td>1 seminar + 2 conferences (one with UHI)</td>
<td>161 unique participants</td>
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Workshops

The workshop programme evolved in dialogue with partners and in response to new evidence. Over the course of the project there were 79 workshops split almost equally between the formal and informal learning sectors. Workshop locations spanned Scotland from Stornoway to Dumfries. The three most popular workshops were:

- ‘Understanding the Learning Journey’ a learning design workshop run with organisations intending to develop new online materials and/or new practice
- ‘Introduction to open educational practices’ which involved groups of Union Learning Representatives in considering how to use OER and OEP in the workplace;
- ‘Thinking about open’ which provides an introduction to OER and OEP for staff working in the formal education sector.

Like all the materials produced by the project the workshop designs and resources are openly licensed and available for use and modification from the OEPS legacy collection and on Slideshare.

Seminars and conferences

In September 2016 we were delighted to be able to host a seminar by Professor Rory McGreal, a world authority on Open Education. The event was recorded and advertised to the extended project mailing list. In May 2017 we collaborated with staff at the University of Highlands to hold a symposium that looked at the impact of digital technology and open education on higher education. The outputs of the conference which was titled ‘The Porous University’ have been made publicly available.
The Scottish Crofting Federation

Crofters make a unique contribution to rural Scotland, and their way of life is supported by the Scottish Crofting Federation (SCF).

At a workshop delivered by the Opening Educational Practices in Scotland (OEPS) project, SCF staff were introduced to the open educational resource, Rural Entrepreneurship10 that had been developed by the Open University in Scotland in 2014. The discovery of the module was timely as SCF were developing a course for new entrants to crofting. However, the Scottish Government training grant required the SFC to focus on primary agricultural production rather than aspects of crofting such as business management, despite the fact many crofters run their own businesses.

‘The module was a great fit for the Access to Crofting Toolkit we were developing,’ said Training and Development Manager, Lucy Beattie. ‘Many crofters want to know how to set up and run a business.’

The Access to Crofting Toolkit signposts participants to the badged online module Rural Entrepreneurship. The module is free and can be studied by crofters at a time and at a place that suit crofters who often live in remote locations and work round the clock.

Lucy, who studied the module before incorporating it into the toolkit, found it easy to access and of high quality. Moreover, it did not require fast broadband which is often not available in rural areas.

Access to Crofting was launched in August 2016 as a weekend training course. By May 2017, 100 participants had attended the course and of those, two thirds had completed Rural Entrepreneurship.

Following the OEPS workshop and their experience of using Rural Entrepreneurship, SCF staff see huge potential for open educational resources. SCF would like to contribute to the pool of open material available but do not currently have the resources to do so. However, they now look for any relevant open material to incorporate into their courses for the existing 17,700 crofters in Scotland and any aspiring crofters located elsewhere.

There is a longer version of this case study in the OEPS legacy collection2.
The Co-operative Education Trust Scotland (CETS)

The Co-operative Education Trust Scotland (CETS) promotes cooperative enterprise in education but as a small organisation struggles to disseminate its educational resources to a wide audience.

A presentation at an Opening Educational Practices in Scotland (OEPS) forum by the University of Edinburgh on the potential of Massive Open Online Courses (MOOCs) to reach tens of thousands of people, therefore made CETS Director, Hugh Donnelly, sit up and take note.

Hugh was already aware of the advantages of open resources as CETS had previously worked with the University of Aberdeen to produce an open undergraduate module which lecturers could copy and adapt for their own teaching purposes.

‘Open’ also aligned with the cooperative values of making education freely available for everyone, although a lack of resources had always hampered CETS’ efforts to market their educational material. Against that backdrop, Hugh approached staff from the University of Edinburgh at the OEPS forum to learn more about the potential reach of MOOCs.

Following that initial conversation, Hugh brought together staff from the University of Edinburgh’s open education team and academics with an interest in cooperatives and employee ownership to discuss the idea of developing a MOOC. Once Donald George from the university’s School of Economics took responsibility for driving the project forward, Hugh Donnelly took a step back and let others run with the idea.

The University of Edinburgh subsequently launched the MOOC, Economic Democracy, The Cooperative Alternative, in partnership with the University of St Andrews and the James Hutton Institute in November 2016. The MOOC is self-paced, which means students can enrol at any time, and uses automated quizzes and community forums, monitored by the academic team.

The successful launch of the MOOC was a significant outcome for CETS. Hugh Donnelly said, ‘Although I wasn’t involved with the writing, if I hadn’t gone to the OEPS forum then I wouldn’t have met the staff from the University of Edinburgh and the MOOC wouldn’t have happened.’

There is a longer version of this case study in the OEPS legacy collection.
Case study

JobCentre Plus

As a work coach at Jobcentre Plus in Dundee, Andrew Dainty helps a variety of people from different backgrounds into work.

Andrew could see the potential of open education courses to help customers into employment or onto further study, and asked the Opening Educational Practices in Scotland (OEPS) project to present to his colleagues.

More than 80 members of staff attended the presentations by OEPS which were positively received and led to much discussion about how the vast range of available open educational resources (OER) could be used with customers.

Andrew and his colleagues now encourage customers to use OER, particularly Massive Open Online Courses (MOOCs) to upskill or fill a knowledge gap which they can add to their CV. In addition to being free, many open courses can be downloaded onto mobile devices, which allows customers to study at a time that suits them. The courses have also boosted customers’ confidence and encouraged many to take up more formal study.

In addition to suggesting particular courses such as the MOOC, How to Succeed at Interview, and the maths courses on BBC Bitesize, Andrew and his colleagues also provide a list of the main MOOC providers and encourage customers to search for relevant courses.

‘MOOCs have provided a lifeline for customers at Jobcentre Plus,’ said Andrew. ‘The only resistance we have had is people finding it hard to believe there is no up-front fee and that there isn’t some kind of catch.’

Given the successful use of open learning materials in Dundee and Tayside, Andrew is hoping that Jobcentre Plus staff across Scotland can be encouraged to offer similar learning opportunities to customers. As a Learning Coordinator with the Public and Commercial Services Union Andrew has also shared his experience with different unions at the STUC learning forum.

There is a longer version of this case study in the OEPS legacy collection.
Development of a hub

Development of an online hub to encourage and share best practice in open education.

At the beginning of the project a blog and website\(^1\) was established to communicate with the sector and share progress. However, to meet the project objectives we also needed to address the need for a sustainable online presence that could support the sharing of good practice and provide tools for making and sharing OER beyond the lifetime of the project. We wanted to ensure that the project outputs would be useful, usable and accessible to the Scottish sector for an extended period.

(NB the website was only active for 7 months in 2014 and 7 months in 2017)

After obtaining feedback from partners, and considering all the available options, it was decided that these objectives were best met by working with two websites. The first of these was already in existence. OpenLearn Works (OLW) had been created by the Open University (OU) with the support of Hewlett Foundation funding. OLW was a community site that allowed any organisation or individual to create or host openly licensed courses. The site included advice and guidance on OER creation. In addition it hosted tools that could be used to develop quizzes and other interactive activity and provided support for the creation of digital badges. These features were critical to the OEPS focus on pedagogy and practice. Moreover OLW was guaranteed a long-term future.

In the event, during the course of the project, the OU as custodians of OpenLearn Works invested in a major upgrade, improving its look and feel and the functionality of the embedded tools for making and remixing OER. As a significant user the OEPS project was able to influence the redesign of the site, which was relaunched as OpenLearn Create. The rebranded site continues to be a community site, which can be and is used by many different organisations.
The second site, which we refer to as the good practice hub, was dedicated to sharing examples of good practice and materials to support the development of practice. The site is in three sections. The first two provide generic advice, examples and specific case studies of Open Educational Practice and Open Educational Resources. There are currently 21 major case studies from the Scottish sector featured in these two sections. The final section is designed so that specialist communities can set up, develop and maintain their own space, through which evolving good practice and experience can be shared. There are currently four such communities hosted in this section. The good practice hub includes blogging and forum tools to encourage dialogue and participation and a Google custom search, which is optimised to enable users to locate good quality, openly licensed courses and content.

In the final six months of the project we reviewed the operation of the good practice hub and took advice from the project steering group on how best to achieve a sustainable legacy. The hub had proved popular for its hosting of good practice materials and case studies but had not generated the hoped for level of interactivity with a wider community. To be effective beyond the lifetime of the project it would need maintenance and funding. The recently upgraded OpenLearn Create site provided options that had not been available at the start of the project. The rebranded site has a high level of traffic and already hosted all the exemplar openly licensed courses created by OEPS in partnership with other organisations in Scotland. In addition the site has a long term future and hosting there would not require maintenance or further funding. It was agreed that all of the reports, briefings, case studies and resources should be migrated to an OEPS collection on OpenLearn Create to provide a one-stop location where these legacy materials could be located and where there are tools for reversioning and remixing derivatives of the materials. A further benefit of locating the collection on OpenLearn Create is that it is possible for others beyond OEPS or the OU to add to the site thus further developing the OEPS collection.

The website/blog had proved successful in attracting a significant audience for the project. However, it too would require ongoing funding to survive for the long-term. It was considered that there was value in preserving the site content. It was therefore decided to convert the website to a free WordPress site as an archive of the project activity. Posting workshop presentations on the Slideshare site also proved a valuable method of sharing activity with approximately 20,000 views over the course of the project.

<table>
<thead>
<tr>
<th></th>
<th>Blog views</th>
<th>Blog visitors</th>
<th>Slideshare views in last 12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>29,832</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>12,220</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>7,577</td>
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Fifteen exemplar openly licensed courses were produced during the three years of the project. In line with the project methodology courses were produced in partnership with the aim of developing the partner’s confidence and competence in the course production process. Partners included Parkinson’s UK, Dyslexia Scotland, Scottish Association for Marine Science (UHI), The University of Glasgow, the Equality Challenge Unit and Education Scotland. Nine of the courses were launched before the project end date of 31st July 2017; partners scheduled the remaining six for release over the autumn of 2017. All the courses are hosted on OpenLearn Create.

Within the overall constraints of the project remit the topics and objectives of the exemplar courses reflect demand from the sector. They fall into three overlapping groups:

- Courses with a focus on widening participation and transitions
- Professional development courses
- Knowledge exchange and sharing research findings

### OEPS exemplars

- **Becoming an open educator**\(^3\) – written by OEPS team with input from wider open education community
- **Dyslexia: Identification and Support**\(^12\) – with Dyslexia Scotland
- **Global Trends in Death and Dying**\(^13\) – with the Global Interventions at the End of Life research project at the University of Glasgow
- **How to make an open online course**\(^14\) – written by the OU free learning team with input from OEPS
- **Introduction to Dyslexia and Inclusive Practice**\(^15\) – with Dyslexia Scotland
- **My Seaweed Looks Weird**\(^16\) – with the Scottish Association for Marine Science (UHI)
- **Open Science: analysing pesticides experiment**\(^17\) – written by OEPS team as part of a pilot in 2 Scottish schools
- **Open Science: genetic variations experiment**\(^18\) – written by OEPS team as part of a pilot in 2 Scottish schools
- **Parkinson’s Palliative and End of Life Care**\(^19\) – with Parkinson’s UK
In its first year the project established its identity and developed a network of partners. At this point there was relatively little interest in the idea of course writing. Initial conversations tended to focus on the use of already existing free open resources. However, there were a small number of organisations that were interested in course creation. Not all of these initiatives came to fruition but the experience of working through course design and production in partnership was an invaluable source of insights for the project. We learnt that the initial learning design phase is critical. We adapted ideas from design thinking to structure a process that focussed on learner needs and contexts. However, although this approach allowed shared values to be made explicit we found that implicit assumptions about online learning pedagogy among the course team could be left unresolved. As a result we modified the design of these workshops drawing on ideas from participatory design. Resources to support and enable others to follow the design approach are available in the OEPS legacy collection.

In years two and three we found that many more organisations began to be interested in the possibility of creating OER. In part this was because we now had concrete examples to share but more fundamentally it reflects what Joanna Wild, Alison Littlejohn and others have referred to as the ladder of OER engagement. A process that starts with exploring what open licensing allows in terms of use then leads on to an understanding that materials can be created or remixed. As a result the project activity in co-creation of exemplar OER was heavily skewed towards the final year of the project. Indeed we were unable to take up other possible options for course creation that began to emerge.

Active interest and engagement with course creation was not confined to the partners associated with the fifteen exemplars. In a number of cases we worked through the Learning Design phase but found that partners were not ready at that point to make a commitment to proceed. In several cases it looks likely that the process will be picked up at some point after the end of the project.

The Colleges Development Network have taken three of the OEPS courses, ‘Becoming an open educator’, ‘Introduction to Dyslexia and Inclusive Practice’, and ‘Supporting collective learning in workplace and community settings’ and are embedding these courses in their own virtual learning environment CDN LearnOnline.

One further course resulted from the projects activity. Inspired by an OEPS workshop held in conjunction with the Learning for Sustainability network the Royal Highland Education Trust developed Grow Your Own Loaf a course for Scottish school students.

The two most popular of the OEPS courses released to date are Understanding Parkinson’s and Introduction to Dyslexia and Inclusive Practice. Take up of both has been excellent benefiting from proactive promotion through existing partner networks. Courses can be studied without registering and many users may choose to do so. Registration is required in order to complete the course assessment.

There are interesting differences in student behaviour. Becoming An Open Educator has had a 9078 page views, a similar number to Dyslexia and Inclusive practice but just less than a sixth of the badges awarded. My Seaweed Looks Weird shows a similar pattern with 1,758 page views but only 5 badges awarded. The analytics suggest that these courses are being dipped into as a reference resource rather than studied as a complete course.

<table>
<thead>
<tr>
<th>Understanding Parkinsons: May 2016 – June 2017</th>
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<tbody>
<tr>
<td>Page views: 19,974</td>
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</table>

<table>
<thead>
<tr>
<th>Introduction to Dyslexia and Inclusive Practice: March 2017 – June 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page views: 9078</td>
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NB Bounce rate refers to the proportion of visitors to the course who land on the site once only.
Case study

Three openly licensed courses co-created with Parkinson’s UK

OEPS worked in partnership with Parkinson’s UK to develop a free openly licensed online course called ‘Understanding Parkinson’s’.

The course is aimed at care staff in residential homes, community centres and similar settings who typically have limited or no previous experience of higher education. The course is derived from original material that has been used in face-to-face settings and was assessed through a reflective log and examination. The driver for Parkinson’s is that the online course allows them to reach much greater numbers. The course is assessed through online quizzes and successful completion is recognised by the award of a digital badge. The course is hosted on the OpenLearn Create site. The course was launched formally in May 2016 but ran with a pilot group of learners in the Western Isles in the preceding eight weeks. An intensive evaluation was conducted of the pilot. As of June 2017 the course had 900 registered learners of whom 258 had already achieved the Open Badge. The course was shortlisted for digital development of the year at the 2017 SCVO Charity Awards. Openly licensed courses are now key part of their education and training strategy. Two further specialist courses produced with the support of the OEPS team are scheduled for phased release in autumn 2017.

There is a longer version of this case study in the OEPS legacy collection².
A number of the exemplar open courses address resource issues or professional development needs in the school sector. This included two small-scale pilots working with teachers and pupils. The first looked at how open resources could be used to enrich pupil experience in sixth year. The activity was popular with students but evaluation suggested that there is a need for more support for teachers. The project also piloted the use of Open Science Lab experiments, which give pupils access to virtual experiences such as controlling an electron microscope. The pilot was successful and the materials developed to support teachers and pupils have been made available as two short online courses. In addition to the Open Science courses five of the OEPS exemplar courses are concerned with teacher professional development. These involved collaboration with Dyslexia Scotland and Education Scotland and also with Scots Language experts. The course on STEM capital and unconscious bias co-created with the Equality Challenge Unit (ECU) provides a good example of how open practice supports cross-sector collaboration.

ECU were funded by the SFC to support colleges and universities in researching and tackling the low numbers of young women moving on from school to STEM study in post compulsory education. The consensus from institutions was that early school experience is a critical factor. The openly licensed course is therefore aimed at meeting the needs of groups of teachers in their school setting and provides activities that can be carried out individually and collectively. However, it meets a need identified by multiple institutions and because of the open license it can be readily used, adapted and reversioned by those institutions at minimal cost.

Quality and accreditation

Through the sharing of best practice, the project will consider issues around quality (of pedagogy and content) and accreditation. By working in partnership with organisations such as the SQA, the project will engage with the badging of informal learning with a view to augmenting Scotland’s reputation in education. The project will seek to develop the facility that other HEIs are able to badge their content from the host platform. The potential for badging learning design and the development of a Scottish standard should also be considered, taking into account the work organisations, notably the SQA, have started in this area.

Open Badges are digital credentials that can be saved and shared by their owner. Their use in Scotland is growing with the informal learning sector leading the way. The Scottish Social Services Council has taken a major initiative to use Open Badges in the recognition of professional development. At the beginning of July 2017 there were 159 different badges available and 1217 badges had been awarded. In the formal learning sector the University of Abertay has pioneered the use of badges to recognise extra- and co-curricular activity. Badges are typically awarded for activity that supports educational transitions and innovative approaches to linking digital credentials with formal credit are beginning to emerge.

At the start of the project the focus for discussion at a national level was the JISC supported Open Badges in Scottish Education Group (OBSEG). However, the group no longer exists although both the SQA and SCQF maintain an interest in developments. As a project we engaged in dialogue with SQA and SCQF over the recognition of...
badges and the relationship between badges and credit. Increasingly it is the case that students applying to colleges and universities may have a portfolio of Open Badges. Each badge typically represents only a small number of hours of study. Arguably simply converting badged micro-credentials to credit points is unhelpful.

There seems generally little appetite in the sector for directly attributing small amounts of credit to badges. However, there are a number of innovative schemes being piloted to recognise Open Badges and support transition into accredited qualifications. These issues are explored in more depth in an OEPS briefing document ‘Open Badges, Recognition and Credit’ which is included in the OEPS resources collection on OpenLearn Create.

Case study

John Casey, City of Glasgow College

With a background in e-learning, John Casey, Senior Learning technologist at City of Glasgow College, sees enormous potential for open education within the college sector. In his view, creating and using open text books could standardise teaching, bringing savings for both students and colleges, and open the way for “challenge exams” i.e. assessments without course attendance.

Attending Opening Educational Practices in Scotland (OEPS) forums confirmed to John that others were thinking along similar lines. He subsequently got useful input from the OEPS team for an Erasmus Plus consortium bid to promote the use of open educational resources (OER) in his College and four European partner institutions. Although the bid was rejected, John plans to resubmit the application. A separate bid to the Ufi charitable trust to create OER for vocational literacy skills and an open source toolkit, which would enable people to create their own open textbooks, has successfully reached the second round.

OEPS also provided advice to John as he embarked on creating an open badged course on e-assessments, which has been approved by the SQA’s College E-assessment Group and will be released later this year.

Despite its potential, John believes there is currently very little awareness of open education in the college sector. To realise that potential, he suggests that various barriers need to be tackled including: a lack of funding; limited engagement from senior staff; and a change in culture both within the teaching profession and within SQA. In John’s view, if we are to realise the opportunities offered by open education practice we need policy interventions at Scottish Government level and sustained support for OER activities, like the OEPS project, over the long term.

There is a longer version of this case study in the OEPS legacy collection².
Pedagogies of open practice

As particular pedagogies of open educational practice emerge, the project should give particular consideration to ‘open’ in its broadest sense, emphasising approaches to learning design that acknowledge and break down barriers to participation in education. Pedagogically sound OERs can be used in supportive learning contexts to go further than providing access to materials but promote digital inclusion and engage new learners who would not otherwise participate in tertiary education.

Output 6 was the core of the project. In view of its social justice remit OEPS found it useful to extend the definition of OEP to include how educational practice supports use and participation. Throughout the life of the project we learnt from and with partners and fed new ideas back into practice. These ideas are captured in the papers, reports and briefings, which are available in the OEPS legacy collection. At the same time we attempted to catalogue new thinking from across the sector. Much of this is documented in practice-based case studies, which can also accessed from the OEPS legacy collection.

In this section we summarise the highlights of the project’s contribution and some of the key areas of developing good practice in the rest of the Scottish sector.

Widening Participation

The promise of open education is that it can break down educational boundaries. The reality is that the promise is largely unfulfilled. OEPS adopted a multi-pronged approach to understanding why this is the case. Where they existed we studied reports of practice at the interface of widening participation and new technology and we brought together practitioners from both fields to discuss and debate at the OEPS forums. However, the workshop programme was critical to making progress. The partnership with Scottish Union Learning (SUL) was particularly important. SUL runs Learning Forums for Union Learning Representatives (ULRs) in locations across Scotland.

SUL and many of the ULRs were interested in the potential of free open courses to expand learning options for their members. We ran workshops at all the Scottish Union Learning forums in the spring of 2015 exploring barriers to engagement with online learning. We then revisited and refined our findings in a further series of workshops at the autumn learning forums. The insights from this work were invaluable and we then found opportunities to triangulate our findings with groups of non-traditional learners and in discussion with practitioners from third sector organisations.

The exemplar course Supporting Collective Learning in Workplace and Community Settings draws on insights and ideas contributed by Union Learning Representatives and others to acquire the necessary skills.

In the widening participation literature non-traditional learners are understood to face situational, institutional and dispositional barriers to learning. We found that while these categories remain helpful the online learning context adds new dimensions. Among the
factors that layer over and intersect with better-known obstacles to engagement we found that the following are important:

- Perceptions of online learning as individualised and isolating
- An assumption that online means tick box and unengaging
- Lack of recognition by learners and/or providers of the value of the experience that learners bring to their studies
- Lack of support for developing digital literacy
- Absence of clear pathways through the huge range of available materials
- Insufficient attention by providers to the curation of resources

## Case study

### Open Learning Champions

The huge range of educational resources freely available on the internet could be used to support people from non-traditional backgrounds into education but the sheer volume of online material is often overwhelming.

This barrier was the starting point for the Open Learning Champions project which has worked with Opening Educational Practices in Scotland (OEPS) to widen access by helping people identify and make use of relevant open educational resources.

The Open Learning Champions project is run by The Open University (OU) in Scotland and recognises that non-traditional learners, such as carers and homeless people, can make the transition into formal education with the encouragement of a trusted intermediary. By working with those ‘trusted advisors’, the project has been able to reach people who don’t necessarily consider themselves learners.

The project built upon a workshop developed by OEPS and the Open University in Wales, which guides participants through the open material available on OpenLearn, FutureLearn and OpenLearn Works before introducing the concept of Creative Commons and explaining how open material can be adapted for different audiences.

The workshops received very positive feedback and have been described as transformative to date, the project has trained more than 120 Open Learning Champions in over fifty (predominately third sector) organisations across Scotland. A survey of Open Learning Champions found that over a third of respondents had reached 20-plus learners, and over 70 per cent of those learners had come from groups who are currently underrepresented in higher education.

The insights gained by the project into how people from non-traditional backgrounds are using open material have been shared with OEPS so the project team can disseminate the learning more widely.

There is a longer version of this case study in the OEPS legacy collection.2
Learning Design

Working with partners across the informal and formal learning sectors led the project team to develop a participatory design approach to formulating new practice. This approach proved to be particularly effective in the design and remixing of openly licensed course materials. Collaborative working, making shared values explicit and emphasising the need to overcome contextual barriers had a strong influence on the pedagogical approaches adopted in the OEPS exemplar courses.

All the courses were built around active learning combined with opportunities to reflect on prior experience. Student feedback from an intensive evaluation of the first course produced with Parkinson’s UK reinforced our view that activity and reflection is always contextual and takes place in social settings. This insight was reinforced feedback from Union Learning Representatives and others involved in supporting informal learners. The learning design process focused on student needs and context but we learnt that it is also possible to design activities that allow students to make use of colleagues and friends. Peer support and peer engagement enhance learning and increases the likelihood of completion and success.

Revising and remixing

Openly licensed online courses can be relatively easily updated or revised and published as new versions. Some of the OEPS exemplar courses aimed to facilitate knowledge exchange. We aimed to engender genuine exchange by incorporating activities that provide feedback to the course providers or by incorporating opportunities for feedback. It’s too early to evaluate the effectiveness of these approaches but in principle they open up the possibility of providing useful research data, which could also inform new and updated versions of the course.

Evidence base for future development

There has been considerable research and evaluation undertaken on OERs and OEP, which the project needs to take into account and build upon. The Open University has built up some expertise in evaluation of OER projects and would seek to collaborate with others to ensure there has been a rigorous analysis of the impact of open educational practices delivered through learning analytics and social research methods which will lead to the development of a strong evidence base on which to build any future work.

Output 7 refers to an important European Commission report, Overview and Analysis of Practices with Open Educational Resources in Adult Education in Europe, published in 2013. The report proposed that developments in OEP should:

1. Recognise that ‘learning’ takes place everywhere
2. Extend the range of people and organisations who produce and use resources
3. Think of OER more broadly than as content
Case study

UNITE the Union

UNITE the Union is trailblazing an innovative new model that combines the advantages of open education resources with the rewards of learning alongside fellow workers; this initiative has been developed with support from the Opening Educational Practices in Scotland (OEPS) project.

“We could see the benefits of working with open, online materials straight away,” said Learning Organiser, Pat Egan. “Free learning is a God send.”

Moreover, as material from online courses can be downloaded onto smartphones and PCs, UNITE members can fit their study around shift patterns.

However, aware that online study can be an isolating experience, UNITE has developed a portal that allows members to sign up for carefully selected online courses which are complemented by study groups facilitated by a Union Learning Representative.

“Short chunks of learning, pitched at the right level are vital,” says Janet Dunbar, fellow Learning Organiser, who helped to select four courses of 8-12 hours study for a pilot, which will run between May and August 2017 with 16 NHS care support workers.

All four courses are badged which is particularly important for UNITE to ensure members’ learning is recognised.

After the pilot, UNITE intends to roll out the portal across the UK and Ireland to enable hundreds, if not thousands, of members to enrol on open courses for their own personal fulfilment, to upskill or to take their first step into formal education.

UNITE has described the technical expertise and overall support received from OEPS to date as “immense”, and plans in the future to adapt the content of open courses to make them more relevant to members.

There is a longer version of this case study in the OEPS legacy collection.

4. Promote awareness of open licensing and its implications

5. Improve the usability of OER

6. Plan for sustained change

These six recommendations have underpinned the OEPS approach to developing an evidence base. The first three recommendations informed the range and scope of the organisations that we worked with. Working in partnership and viewing each strand
of partnership activity as part of an interconnected web of action research provided evidence for developments in the project’s lifetime and contributed to the legacy of resources that the project has passed on. The project promoted open licensing and its implications through practice-based developments and also through the workshops and presentations.

In parallel with practice interventions members of the OEPS team were also proactive in identifying examples of innovative practice in the Scottish sector. Working with the individuals involved to produce good practice case studies that have been widely shared and that also contribute to the evidence base. These case studies have been added to the OER World Map, which catalogues international developments in open educational resources and open educational practice.

In conjunction with the steering group the project team reflected on the need for sustained change. Open Education is a new field. The team developed a strong sense that the availability of free online content combined with ubiquitous digital technology is driving change in the way that individuals perceive and access learning. The view of many participants in the OEPS forums from across the formal and informal sectors was that policies and systems are not currently aligned with practice, and this is evolving unevenly across sectors. The project developed a proposal for a Scottish Concordat on open education that built on the Scottish Open Declaration and the recommendations of the POERUP Scotland report. The draft concordat suggested that institutions might sign up to three different levels of action-based commitment in order to drive sustained change. However, after discussion with, and on the advice of, the Project Steering group it was concluded that the circumstances were not yet ready for such an initiative. A policy framework that supports sustained change remains a challenge for Scottish education.

**Economic models of openness**

The project will undertake an evaluation of various economic models of openness. To date most of the funding for OERs and OEP has come from the public sector or philanthropic organisations. HEIs have invested in open and freely available resources for reasons of institutional reputation building, long term student recruitment and the potential for reducing costs. This project will explore the role of partnerships in funding open educational practice such as charging fees for support workshops or OER service delivery. It will also evaluate alternative economic models of openness including crowd funding, subscriptions and freemium.

Open education continues to evolve. Between 2014 and 2017 there were significant changes in the ways that higher education institutions engage and fund their activity. Arguably the principal driver for change has been engagement with MOOCs. There has been differentiation in Scotland, the UK and internationally between a minority of institutions who are involved with MOOCs and a majority who have chosen not to engage. Increasingly MOOC platforms have also begun to differentiate themselves by audience and function. The trend, however, is towards core free services coupled with fees for certification, assessment and additional support services. At this stage, however, it’s not clear that there are any examples where these freemium models are
sustainable in their own terms. In a report on Developing Business Models (part of the OEPS legacy collection) we analyse six reasons why higher education institutions engage with open:

1. Institutional profile
2. Public Good
3. Knowledge Exchange
4. Curriculum Development
5. Supporting transitions and widening participation
6. Professional development

Developing and maintaining institutional profile remains the primary reason why institutions invest in open education developments. Such initiatives often overlap with considerations of public good and in many cases large-scale developments are supported by philanthropic donation. Institutional profile also connects to student recruitment and there are examples where the feed through to enrolments from providing open resources online makes a significant contribution towards the cost of engagement. Universities can make examples of cutting edge research available online.

Curriculum development is also an area of significant activity. In the main this is concerned with new models of providing qualifications on line. Examples include integrating informal study of MOOCs or other openly licensed courses with more conventional qualifications, or developing an entire degree programme in online formats. These, and many more are in development, but where they are operational student numbers are currently small and it’s too early to judge whether they offer attractive and sustainable models for the future.

The final two categories are ones where the OEPS project found significant demand in the Scottish informal sector and formed the basis of the majority of the co-created open courses that the project produced. Both categories are also evident in recent MOOC developments; however, the OEPS experience with short openly licensed courses suggests that there is a strong case for partnerships between the informal and formal sectors in producing targeted and contextualised materials. Such partnerships have the potential to grow strong communities of practice and provide an interchange of academic and practice based experience that provides invaluable insight into student needs and experience. In the case of one of the OEPS partners it also opened up a significant strand of charitable funding.

Open licensing and widely available free digital content presents opportunities and challenges for curriculum development. In the US large adoption of Open Text Books is resulting in the production of high quality openly licensed texts that pool the knowledge of multiple authors. The texts evolve as material is edited, reversioned and remixed. They can be reversioned and contextualised for particular contexts. This approach is not confined to text books and could be used in the production of other educational materials and indeed for entire online or blended modules. New initiatives include the collaborative development of degree programmes comprising free openly licensed resources from a single institution or from multiple institutions, with the student able to opt to pay for assessment. The University for the People and the Saylor Academy in
the US offer this model, as does the OERu, which is an international consortium that includes the University of the Highlands and Islands and the Open University.

There is the potential to create virtuous cycles of development, however, when content is ubiquitous and collaboratively created it challenges institutions to articulate the value that their approach to teaching and learning brings.

The OEPS experience also suggests that collaborative approaches to designing high quality, openly licensed courses could have particular value in supporting widening participation and educational transitions. In the OEPS report on Developing Business Models we note that

‘… for many non-traditional learners routes into formal education begin with part-time, informal learning. However, the informal environment has changed radically and now includes large amounts of online material. By itself this can constitute another barrier to participation. There are opportunities widening participation practitioners to work together with learning technologists and organisations that support non-traditional learners to transform this situation. Well-structured and supported materials can be designed to fill gaps in the complex pathways that learners experience before they enrol for a formal qualification. Open licensing allows tried and tested material to be contextualised for specific contexts and brought together to form supported pathways appropriate to particular groups of learners.’
Reflection

The open education movement shares roots with open research and open data. All three combine technological means with a concern for public access to knowledge. Open licensing and OER, however, have arguably had the least impact on public policy in Scotland.

A decade ago the OECD suggested that that the case for open education was founded on:

‘Altruism, leveraging taxpayers’ money; efficiency in cutting content development costs; providing a showcase to attract new students; offering potential students a taster of paid-for content; and to stimulate internal development and innovation.’

Subsequent developments have broadly followed this track. The approach is institution centred and builds on the affordances of the technology. However, in the last ten years there has been a historic shift in the way that society uses digital technology. Ownership of smart digital devices has grown rapidly. An OFCOM report published in 2015 found that 66% of UK adults owned a Smartphone, up from 39% just three years before. This has had an impact on culture, communication and self-directed learning. However, the links between digital engagement and the digital literacies required for learning are not straightforward. In 2009 the JISC report on Learning Literacies in a Digital Age noted that learners in general are ‘poor at deploying their digital skills in support of learning’. This remains the case for young people entering higher education direct from school and evidence collected during the OEPS project suggest that this is also the case for non-traditional students.

Exploring open education and OER from a social justice and practice based perspective the OEPS experience suggests an alternative case for OER which is compatible with the OECD case but starts from the needs of learners and educators in a world where digital technology is ubiquitous and online content is readily available.

From a student perspective open education has the potential to transform the learning landscape, reshaping boundaries and bridging gaps. From an educator’s perspective the affordances of open education offer the possibility of collaborative curriculum development. For both of these promises to be met the primary barriers are pedagogical and organisational rather than technological.

Thus open education is an issue for everyone associated with learning and not just a specialist concern for the university sector.
With a remit to understand widening participation and use practices the project strove to make links with individuals and organisations in the informal learning sector. Those we engaged with were not necessarily aware of the terminology associated with open education but almost all had a keen interest in using free open resources and a high level of awareness of the importance of supporting digital participation and the development of digital literacies. For many organisations digital has moved from being an issue to be avoided or cautiously engaged with, because of concerns about equity and accessibility for non-traditional and low-income learners, to a mainstream part of the learning landscape. We found it helpful to reflect on successful pre-digital models of widening participation. One such was the wide-scale use of high quality, loose-leaf university produced education packs by community educators in the West of Scotland in the 1990s. The packs were flexible and adaptable and could be reused and remixed by tutors and facilitators. By the end of the project OEPS and some of our partner organisations had developed a strong sense that short online courses can be the digital equivalent of these community packs. The parallels between the remixing and reversioning possible with openly licensed resources and this powerful pre-digital practice has implications for universities and colleges in terms of partnership, pedagogy and understanding student context, experience and needs in a digital world.

The importance of professional development for educators in colleges and universities formed a major theme of the feedback from surveys but also in the responses from staff at the workshops that OEPS held for college and university staff. As noted earlier in the report, awareness of OER is relatively low in both sectors. Pockets of highly innovative practice in the university sector are not widely known beyond those involved or outside the relatively small learning technology specialist community. The survey evidence suggests that awareness and confidence with open is correlated with opportunities for professional development. There is interest in both sectors in incorporating material on OER, OEP and open licensing in the formal professional qualifications for further and higher education lecturers.

Throughout the project we came across the view that open is impacting on further and higher education in ways that are not well recognised. This was emphasised by participants at the fourth OEPS forum, which provided structured opportunities to think about challenges for the formal education sector. This theme is also picked up in the outputs from the Porous University Symposium jointly hosted by OEPS and the University of the Highlands and Islands. Students bring elements of ‘open’ into the classroom and learn from open resources that their lecturer may not be aware of. At the same time content that is formally bounded in an institutional VLE ‘leaks’ into the open when students and staff download and share materials. This has profound implications for how content is licensed and for staff and student expectations of use. Professional development is needed to equip staff to operate confidently in this porous world, but it is not enough. There was a strong consensus from the forum participants that systemic change is necessary and requires a combination of grassroots initiatives and policy changes supported by senior management.

The international learning technology community sees Scotland as being at the forefront of the open education movement. The Open Scotland Declaration has provoked interest around the world. However, open education still sits outside the mainstream. Although surveys of US educators show similar lack of awareness as in Scotland regional
and state supported policy mandating support for Open Textbooks is driving change. Similarly issues of cost, access and widening participation are prominent in the Global South and organisations like the Commonwealth of Learning provide a rich source of experience. This report argues that pedagogy should central to the adoption of open education. In a broad sense this requires a move away from a view that open education is synonymous with MOOCs. MOOCs are part of the landscape but they embody very specific purposes and practices. The originators of the MOOC approach envisaged a wider range of practice and pedagogy and the evolving ecosystems of short openly license courses of which the OEPS exemplar courses form a part hint at a much wider range of purposes and pedagogic models. Although pedagogy is central and needs to be continually emphasised precisely because too frequently technological solutions are given primacy, there are also some technical issues that need to be addressed. The demise of JORUM as an OER repository available for the whole sector arguably reflected changing priorities. However, it also underlines the need for a focus on pedagogy and practice without which the use of openly licensed materials is likely to remain an area of specialist and minority interest. The growth in the number institutional sites for OER is important and reflects growing engagement with open education in the institutions concerned. However, if as we argue, creation, revision and use of OER is an issue for everyone interested in education and training and not just the university sector and requires mainstream adoption of open practice then sites that are open to the whole community, provide the tools for doing open in addition to hosting OER and allow good practice to be shared and developed collaboratively are necessary.
Recommendations

We hope that this report will encourage readers to follow up on some of the issues raised and make use of the supporting resources located in the OEPS legacy collection². The legacy collection will remain a living resource for the Scottish sector as it can be updated, remixed and added to.

Open education is a dynamic and developing field. The OEPS evidence can and should be interpreted in many different ways depending on context and experience. However, based on our experiences over the last three years, we would like to offer a short list of recommendations that are aimed at further developing open educational practices in the sector as a whole.

**Recommendation 1**
Colleges and universities and the Scottish Government should consider formal adoption of the Scottish Open Educational Declaration.

**Recommendation 2**
Professional development is critical to the future development of open education in Scotland. The study of open pedagogy should be incorporated as a mainstream part of teacher education, the TQFE and higher education Post Graduate Certificates in Learning and Teaching.

**Recommendation 3**
Educational institutions in Scotland should release much more of their content in openly licensed format and should consider adopting an approach of open by default. In addition the SFC should consider encouraging sharing and collaborative initiatives between institutions.

**Recommendation 4**
To enable widening access to colleges and university, as well as to support lifelong learning, colleges and universities should work in partnership with the informal learning and third sector to create open resources and open practice. This can include supporting transitions into education and professional development in employment.

**Recommendation 5**
The creation of open courses and other openly licensed materials should be recognised by the Scottish Funding Council as a component of knowledge exchange and appropriate funding arrangements established.

**Recommendation 6**
There should be consideration by the Scottish Government and the Scottish Funding Council of the systems, support mechanisms, and policies required to facilitate and sustain institutional collaborations in open education. Outcome agreements might be one avenue that could be used.
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The OEPS steering group comprised of senior representatives from:

- The Open University in Scotland (lead institution)
- University of Edinburgh
- University of Glasgow
- University of Strathclyde
- University of the Highlands and Islands
- Colleges Development Network
- Scottish Funding Council

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Appendix 1: Useful links

Colleges Development Network CDN LearnOnline
https://professionallearning.collegedevelopmentnetwork.ac.uk

MIT Open Courseware https://ocw.mit.edu/

Edinburgh University’s Open.Ed www.open.ed.ac.uk

OpenLearn Create www.open.edu/openlearncreate/

Glasgow Caledonian University’s edshare@GCU www.edshare.gcu.ac.uk


OpenLearn www.open.edu/openlearn/

FutureLearn www.futurelearn.com

Open Scotland www.openscot.net

Open Scotland. Grass Roots - Making the Case and Drafting the Policy, defining the problem and the solution. http://openscot.net/about-2/

JISC www.jisc.ac.uk - useful report on openness at
https://www.jisc.ac.uk/reports/open-by-default

Scottish Open Education Declaration http://declaration.openscot.net

POERUP report http://poerup.referata.com

European Commission Policy Recommendations for Opening Up Education

Creative Commons https://creativecommons.org

OERu www.oeru.org

Saylor Academy www.saylor.org

OER World Map www.oerworldmap.org

Open Educational Resources Myth-busting

Scottish Social Services Council Open Badges https://www.badges.sssc.uk.com

SUALL www.uall.ac.uk/suall

Scottish Union Learning www.scottishunionlearning.com

OEPS Legacy Collection http://www.open.edu/openlearncreate/OEPS
Footnotes

7. https://oepsctotland.files.wordpress.com/2016/03/learningtowidenparticipaton.pptx
11. http://www.oeps.ac.uk
17. http://www.open.edu/openlearncreate/analysing-pesticides
27. https://oepsctotland.org/2016/07/14/preliminary-findings-evaluation-pilot-cohort-studying-understanding-parkinsons/
28. ULRs are union members whose remit is to help their colleagues find adult learning opportunities. They receive training for their role and have a statutory function to survey learners’ needs, arrange training and support and liaise with the employer about learning in their workplace.
29. The six summary recommendations in the recent European Commission report Overview and Analysis of Practices with Open Educational Resources in Adult Education in Europe (2013) complement the aims of this project and the research from this report will provide valuable evidence on which to base the project’s outputs. OECD, 2007, pp. 64-5
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www.open.edu/openlearncreate/OEPS

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Archive website: www.oepscotland.org