The OER Research Hub was a three year project funded by The William and Flora Hewlett Foundation, and based in the Institute of Educational Technology at The Open University in the UK. The OER movement had just passed the decade mark when the project was initiated. There was a sense that although great work had been done in the implementation of OER globally during this period, research about their impact on teaching and learning was scarce. The aim of the project was to investigate many of the commonly held beliefs about the benefits of OER. It also had the intention of raising the profile of research in the OER community.

Working with 15 different collaborations around the world, the OER Research Hub investigated 11 hypotheses. These addressed issues such as performance, finance, educator reflection, improved access and the impact of openness. Four sectors were examined: K12, Community College, Higher Education and Informal Learning. In addition the attitudes of both learners and educators were surveyed. The full evidence report and academic publications arising from the project can be found at http://oerhub.net.
This summary report brings together three separate data reports, which highlighted some of the key findings for different groups of OER users: educators, formal learners and informal learners. The reports are presented in an easy to digest, infographic style layout which we hope you will find useful.

The OER Research Hub has also released all of the data underpinning these reports under an open license (CC-BY Attribution License 4.0). Researchers are already starting to work with our data, and we would love to hear if you use it to conduct any of your own investigations. You can access the data used to generate this report via http://bit.ly/oerhubdata. You are welcome to use this data as long as you provide attribution to us as the original authors.

The findings here indicate that OER have many different types of impact. For example, they are used widely by students to trial subjects before they enter formal education; educators use them to reflect and adapt their own practice; that they increased interest in the subject for learners, and so on. The challenge now is for OER researchers to further explore these findings, to produce a comprehensive evidence base. This will facilitate the mainstream adoption of OER, by focusing on solving specific problems.

Further context for understanding this data can be found in our accompanying OER Evidence Report 2013-2014 which is available from http://oerhub.net/reports/.

– The OER Research Hub team, November 2015
The OER Research Hub is a project funded by the Hewlett Foundation to research the impact of open educational resources (OER) on teaching and learning. During 2013-2015 survey data were collected from approximately 7,500 users of OER around the globe. This report presents a frequencies analysis of responses obtained from FORMAL LEARNERS.

Dataset available for download at http://figshare.com/articles/OERRH_Survey_Data_2013_2015/1528263
Decision to use OER

Which of the following factors influenced your decision to use OER? N=969

- The opportunity to study at reduced or no cost: 88.1%
- The chance to try university-level content: 41.1%
- The materials can be used flexibly: 68.9%
- The materials can be accessed any time: 79.6%
- The materials can be studied online: 79.3%
- A desire to have a learning experience/study a course: 72%
- A need to find information: 25%

Cost and ease of access are the most important factors influencing formal learners’ decision to use OER.

From informal to formal

Did you study your subject via [OpenLearn] before joining your course? N=955

The percentage of formal learners that report having used open content prior to registering for their course represents an underreported benefit of OER from which HE can potentially benefit.

Did your use of [OpenLearn] influence your decision to register for your current course of study? N=934

- YES (30%)
- NO (60%)
- Not sure (10%)
In what subject do you normally use OER? N=1199

- Computer & Information Science: 29.1%
- Psychology & Philosophy: 38.6%
- Religious Studies: 13.6%
- Social Sciences: 27.6%
- Languages & Linguistics: 32.6%
- Science: 43.4%
- Mathematics: 27.9%
- Arts: 25.4%
- Literature: 24.2%
- History & Geography: 28.2%
- Economics, Business & Management: 27.4%
- Applied Science & Engineering: 23.1%
- Medicine: 14.9%
- Health & Social Care: 14.7%
- Education Studies: 16.6%
- Physical Education: 7.3%
- Special Ed: 4.4%

OER coverage of subjects wider than STEM material
Types of OER

Which of the following types of OER have you used for studying? N=1887

- Videos: 79.2%
- Podcasts: 48.5%
- Images: 61.3%
- Infographics: 33.6%
- Games: 31.3%
- Lectures: 69.4%
- Tutorials: 65.6%
- Quizzes: 59.5%
- Full courses: 59.8%
- Course modules: 58.3%
- Open textbooks: 79.1%

A smaller number of respondents (N=583) were asked about their use of lesson plans (50.1%), data sets (38.5%) and learning tools, instruments & software plugins (43.9%).

Formal learners use a broad range of open educational resources.
Impact of OER use

In which of these ways has your use of OER made an impact on your formal studies? N=1167

- Increased participation in class discussions: 32.6%
- Increased interest in the subjects taught: 61.9%
- Increased satisfaction with the learning experience: 60.7%
- Grades improving: 38.9%
- Gaining confidence: 51.6%
- Having increased independence and self-reliance: 51%
- Increased engagement with lesson content: 48.5%
- Increased experimentation with new ways of learning: 53.2%
- Increased collaboration with peers: 26.8%
- Increased enthusiasm for future study: 60.4%
- Becoming interested in a wider range of subjects: 54.7%
- Being more likely to complete my course of study: 46.9%

Biggest impact of OER use not on grades improving but on increased interest and enthusiasm for study

Do you believe you have saved money by using OER? N=322

- YES (61%)
- NO (11%)
- Don't know (28%)

Do you believe your institution benefits financially by using OER? N=309

- YES (47%)
- NO (9%)
- Don't know (44%)
Selecting OER

Which of the following factors would make you more likely to select a particular resource when searching for open educational content? N=802

- Evidence of interest in that resource (e.g. lots of downloads) 45%
- The resource being recently created, uploaded or updated 38%
- The resource being easy to download 58%
- A description of learning objectives or outcomes being provided 66%
- The resource being created by a reputable/trusted institution/person 61%
- The resource having a Creative Commons license 24%
- The resource having an open license allowing adaptation 21%
- The length/complexity of the resource 43%
- Use of interactive or multimedia content (e.g. video) 52%
- Positive user ratings or comments about the resource 47%
- Personal recommendation 44%
- Having previously used this resource successfully 43%
- The resource being relevant to my particular interests/needs 73%
- The resource featuring a catchy title or attractive image(s) 15%
- Being required to use a resource for a project or study task 34%
- A detailed description of the resource content being provided 51%

Relevance, reputation and clear learning objectives guide formal learners' selection of open content.
Challenges of using OER

Which challenges, if any, do you most often face in using OER? N=1479

- Discoverability of resources remains biggest challenge to OER adoption

Future behaviour

As a result of using [OpenLearn], how likely are you to do any of the following? N=1464

- More likely | No change | Less likely | Don’t know

<table>
<thead>
<tr>
<th>Activity</th>
<th>Likely Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take a free course/study an OER</td>
<td>82%</td>
</tr>
<tr>
<td>Take a paid-for course</td>
<td>38%</td>
</tr>
<tr>
<td>Do further research in the subject</td>
<td>79%</td>
</tr>
<tr>
<td>Download more OER</td>
<td>83.5%</td>
</tr>
<tr>
<td>Share OER with others</td>
<td>65%</td>
</tr>
<tr>
<td>Recommend OER to others</td>
<td>80%</td>
</tr>
</tbody>
</table>

The OER Research Hub is a project funded by the Hewlett Foundation to research the impact of open educational resources (OER) on teaching and learning. During 2013-2015 survey data were collected from approximately 7,500 users of OER around the globe. This report presents a frequencies analysis of responses obtained from INFORMAL LEARNERS (i.e. learners who are not registered for a course at an educational institution).

Dataset available for download at http://figshare.com/articles/OERRH_Survey_Data_2013_2015/1528263
What is your highest educational qualification? N=3203

A majority of informal learners using OER are full-time employed and already hold a degree

What is your employment status? N=3290

Decision to use OER
Which of the following factors influenced your decision to use OER? N=3147

- The opportunity to study at reduced or no cost: 89%
- The chance to try university-level content before paying for a course: 32%
- The materials can be used flexibly: 59%
- The materials can be accessed at any time: 74%
- The materials can be studied online: 74%
- A desire to have a learning experience/study a course: 75%
- A need to find information (but not study a course): 14%

Cost remains the biggest factor driving OER adoption
Use of OER

In what subject(s) do you normally use OER? N=2401

- Computer & Information Science: 31.8%
- Psychology & Philosophy: 25.2%
- Religious Studies: 8.2%
- Social Sciences: 20.4%
- Languages & Linguistics: 24.3%
- Science: 28.2%
- Mathematics: 26.4%
- Arts: 20.4%
- Literature: 19.5%
- History & Geography: 22.8%
- Economics, Business & Management: 30.6%
- Applied Science & Engineering: 16.9%
- Medicine: 8.6%
- Health & Social Care: 11.1%
- Education Studies: 11.5%
- Physical Ed: 3%
- Special Ed: 2.4%

Economics and Computer Science top wide subject coverage of OER used by informal learners.
Types of OER

Which of the following types of OER have you used for studying? N=2232

- Videos: 64.1%
- Podcasts: 31.9%
- Images: 38.8%
- Infographics: 19.3%
- Games: 16.2%
- Lectures: 55.4%
- Tutorials: 55.1%
- Quizzes: 48%
- Full courses: 49.4%
- Course modules: 43%
- Open textbooks: 69.8%

A smaller number of respondents (N=101) were asked about their use of lesson plans (32.7%), data sets (22.8%) and learning tools, instruments & software plugins (34.7%).
Selecting OER

Which of the following factors would make you more likely to select a particular resource when searching for open educational content? N=3012

- Evidence of interest in that resource (e.g. lots of downloads) - 38%
- The resource being recently created, uploaded or updated - 30%
- The resource being easy to download - 52%
- A description of learning objectives or outcomes being provided - 63%
- The resource being created by a reputable/trusted institution/person - 56%
- The resource having a Creative Commons license - 16%
- The resource having an open license allowing adaptation - 14%
- The length/complexity of the resource - 35%
- Use of interactive or multimedia content (e.g. video) - 43%
- Positive user ratings or comments about the resource - 45%
- Personal recommendation - 38%
- Having previously used this resource successfully - 36%
- The resource being relevant to my particular interests/needs - 70%
- The resource featuring a catchy title or attractive image(s) - 9%
- A detailed description of the resource content being provided - 45%

Relevance to one's particular needs and clear learning objectives guide informal learners' selection of open content. Few mindful of open licenses allowing adaptation.
Challenges of using OER

Which challenges, if any, do you most often face in using OER? N=1723

- Overcoming technology problems: 26.6%
- Knowing where to find resources: 48.8%
- Finding suitable resources in my subject area: 45.9%
- Finding resources of sufficiently high quality: 38.2%
- Finding resources that are up-to-date: 28.3%
- Finding resources relevant to my context: 18.4%
- Not having time to look for resources: 23.3%
- Not having connections with OER-using peers: 15.5%
- Missing the support of a teacher: 18.7%

Support techniques

Which of these techniques have you used to support your learning with OER? N=1921

- Writing or reading blogs: 38.8%
- Informal study groups: 16.2%
- Use of a learning diary: 25%
- Use of a study calendar: 24.2%
- Discussion via social networks: 26.2%
- Discussion in online forums: 38.7%
- Discussion with others in person: 37%
- Writing my own study notes: 50.5%
Future behaviour

As a result of using [OpenLearn] resources, how likely are you to do any of the following? N=2701

- Take a free course/study an OER: 84.5%
- Take a paid-for course: 24.6%
- Do further research in the subject of my interest: 37.5%
- Download more OER: 19.5%
- Share OER with others: 19.5%
- Recommend OER to others: 7.6%

High percentages of informal learners likely to continue using OER. A quarter of respondents inclined to go into formal education.

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Dataset available for download at http://figshare.com/articles/OERRH_Survey_Data_2013_2015/1528263

Sample

Country of residence

English as first language?

Disability?

Age

USA (37%)  UK (13%)  Canada (7%)  South Africa (5%)  Ireland (3%)
China (2%)  Australia (2%)  India (2%)  115 other countries (28%)
Types of OER

Which of the following types of OER have you used for teaching? N=1473

- Videos: 64.6%
- Podcasts: 59.1%
- Images: 26.2%
- Infographics: 24.8%
- Games: 33.4%
- Lectures: 35%
- Tutorials: 36.2%
- Quizzes: 18.3%
- Full courses: 39.3%
- Course modules: 53%
- Open textbooks: 39.3%

A smaller number of respondents (N=845) were asked about their use of lesson plans (36.2%), data sets (16.1%) and learning tools, instruments & software plugins (36%).

Subjects

In which subject(s) do you normally use OER? N=983

- Science: 44.2%
- Mathematics: 23.7%
- History & Geography: 17%
- Applied Science, Technology & Engineering: 17.5%
- Literature: 16.2%
- Education Studies: 22%
- Computer & Information Science: 17.8%
- Psychology & Philosophy: 21.2%
- Social Sciences: 20.4%
- Languages & Linguistics: 20.3%
- Computer & Information Science: 17.8
Impact of OER use on teaching

To what extent do you agree with the following statements about the impact on your teaching practice of your using OER? N=977

- Strongly agree
- Agree
- Neither/nor
- Disagree
- Strongly disagree

I have broadened my coverage of the curriculum
17.6%  41.4%  27%  5%  9%

I use a broader range of teaching and learning methods
17.8%  46.5%  23.8%  3%  8.4%

I have improved my skills in information and communication technologies
14.2%  30.2%  39.4%  7.6%  8.6%

I make use of a wider range of multimedia
17.7%  41.3%  27.6%  5.6%  7.7%

I make more use of culturally diverse resources
10.1%  29.2%  43.4%  9.8%  7.4%

I have more up-to-date knowledge of my subject area
15.8%  40.2%  28.1%  5.3%  10.6%

I reflect more on the way that I teach
16.2%  43.2%  27.9%  4%  8.7%

I more frequently compare my own teaching with others'
12.5%  32%  39%  9.8%  6.6%

OER allow me to better accommodate diverse learner needs
20.4%  43.9%  31.4%  1.9%  2.4%

I collaborate more with colleagues
12.4%  24.9%  43.3%  12%  7.4%
Impact of OER use on learning

To what extent do you agree with the following statements about the impact of using OER on students?
N=868

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither/nor</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of OER increases learners' participation in class discussions</td>
<td>15.8%</td>
<td>37.8%</td>
<td>41.1%</td>
<td>2.8%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Use of OER increases learners' interest in the subjects taught</td>
<td>16.3%</td>
<td>44.5%</td>
<td>34.6%</td>
<td>2.1%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Use of OER increases learners' satisfaction with the learning experience</td>
<td>17.8%</td>
<td>44.3%</td>
<td>33.7%</td>
<td>1.8%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Use of OER leads to improved student grades</td>
<td>13.5%</td>
<td>30.6%</td>
<td>51.2%</td>
<td>2%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Use of OER builds learners' confidence</td>
<td>13.8%</td>
<td>38%</td>
<td>43.9%</td>
<td>1.8%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Use of OER develops learners' independence and self-reliance</td>
<td>17.7%</td>
<td>41.8%</td>
<td>35.8%</td>
<td>2.2%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Use of OER increases learners' engagement with lesson content</td>
<td>17.4%</td>
<td>42.2%</td>
<td>35.6%</td>
<td>2.4%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Use of OER increases learners' experimentation with new ways of learning</td>
<td>18.9%</td>
<td>41.4%</td>
<td>35.9%</td>
<td>1.6%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Use of OER increases collaboration and/or peer-support amongst learners</td>
<td>14.7%</td>
<td>32.9%</td>
<td>45.2%</td>
<td>4.6%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Use of OER increases learners' enthusiasm for future study</td>
<td>14.7%</td>
<td>34.1%</td>
<td>46.3%</td>
<td>2.4%</td>
<td>2.4%</td>
</tr>
</tbody>
</table>
Purpose of using OER

For which of the following purposes have you used OER in the context of your teaching? N=1611

Educators use OER to broaden their teaching methods and the range of resources available to their students.
Selecting OER

Which of the following factors would make you more likely to select a particular resource when searching for open educational content? N=987

- Evidence of interest in that resource (e.g. lots of downloads) - 45%
- The resource being recently created, uploaded or updated - 43%
- The resource being easy to download - 64%
- A description of learning objectives or outcomes being provided - 65%
- The resource being created by a reputable/trusted institution/person - 68%
- The resource having a Creative Commons license - 40%
- The resource having an open license allowing adaptation - 43%
- The length/complexity of the resource - 41%
- Use of interactive or multimedia content (e.g. video) - 53%
- Positive user ratings or comments about the resource - 48%
- Personal recommendation - 51%
- Having previously used this resource successfully - 53%
- The resource being relevant to my particular interests/needs - 76%
- The resource featuring a catchy title or attractive image(s) - 14%
- The resources having previously been used with students - 24%
- A detailed description of the resource content being provided - 52%

Relevance, reputation and clear learning objectives guide educators’ selection of open content.
Challenges

Which challenges, if any, do you most often face in using OER? N=997

- Overcoming technology problems when downloading resources (34.9)
- Knowing where to find resources (53.3)
- Finding suitable resources in my subject area (58.2)
- Finding resources of sufficiently high-quality (56.1)
- Finding resources that are up-to-date (39.3)
- Finding resources relevant to my local context (37.2)
- Getting managers to accept OER use (20.9)
- Not being skilled to edit resources (18.2)
- Not knowing whether I have permission to use a resource (28.2)
- Not having enough time to look for suitable resources (47.8)
- Not having connections with OER-using peers (22.7)
- Not knowing how to use resources (9.5)
- Not having enough time/opportunities to experiment (32.5)
- Lacking institutional support for my use of OER (15.6)
- Resources not aligned with standards (12.1)

Open content needs to be relevant, high-quality and discoverable for educators to adopt OER.

Credits

OER Research Hub

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