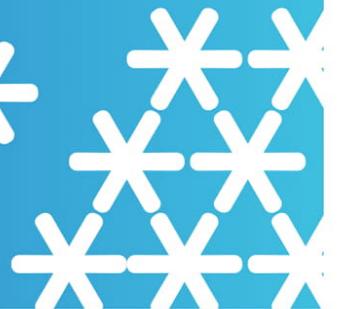


REPORT

Open Education in European Libraries of Higher Education

June 2020



Open Education in European Libraries of Higher Education, 2020

“Open Education in European Libraries of Higher Education”

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1. Executive summary

This report summarises the results of a survey of European libraries of Higher Education on Open Education (OE) and Open Education Resources (OER). We define OE as resources, tools and practices that are free of legal, financial, and technical barriers and can be fully used, shared, and adapted in the digital environment. The research analysed responses from 146 libraries, from 28 European countries. Respondents comprised mostly universities, followed by technical universities, specialised institutions, and universities of applied sciences. There were also four national libraries, one distance learning university, one teaching college, and one academic hospital that provided responses. This document presents the findings at a pan-European level and does not attempt to draw a connection between responses and the national context, which could be part of a separate analysis.

Funding

Very few libraries reported having seed funding or granting programmes to stimulate or kick-start Open Educational work. Furthermore, only 10 institutions reported having library budgets specifically for Open Education. Overall, this illustrates that the funding for OER in European libraries is still limited. Fund-raising or budget allocation for OE efforts is certain to progress OE activity.

Organisation

There was a positive correlation between the OE/OER services offered and the number of students an organisation serves, however there was no correlation between FTE size and services offered. Further, those who conduct a wide range of advocacy activities were not necessarily larger in FTE size but did have more students. Only 20% of institutions had a formal task force, committee, or entity with an OE focus, and those who did have a formal task force were more likely to have a policy on OER.

Open Education Policy

27 out of 145 institutions had OER policies, of these, 14 were part of a larger, overarching policy whilst four were standalone policies dedicated to OE. In most cases the library was involved in conceptualising OER policies, especially in the case of standalone policies.

Library engagement and leadership

Respondents were split 50/50 on whether the library takes a lead in advancing OE or OER in their organisations. Libraries that do take a lead were more likely to be involved in policy conceptualisation. On a regular basis, the bodies that libraries most often collaborate with on the advancement of OER were academic departments, information technology, faculty, e-learning/distance education, and teaching and learning centres.

Open Education Advocacy

The most popular ways for libraries to advocate for OE were through presentations, websites, events, library events, and social media channels coming ahead of faculty meetings, teacher training, other training and libguides. Most of the respondents who advocate for OER did so through a variety of different channels. By far, the two most common groups that respondents informed about OER were library staff and teaching staff, and many reporting liaison with faculty management, undergraduates and senior institutional management. The high number of respondents informing fellow library staff about OER indicates that Open Education is still a relatively new concept in the library.

Services

Libraries provide a supportive role much more consistently than they do a leading role in areas addressed by this survey. The most common areas in which libraries took a lead role in providing OER services were information literacy, discovery services, collection management / dealing with education publishers and aggregators, and advice on copyright and licensing when publishing material, followed by training and education. The main areas where the library had a supportive role was advice on copyright and licensing, OER co-creation and knowledge exchange, followed by technical support, training and education, scholarly communication knowledge, and storage services. Notably, libraries appear to have a strong supportive role in OER co-creation. The less popular areas for libraries to have a supportive role were course pack provision, data curation, discovery services, digitisation, collection management, reading list provision, and participatory design.

Skills

The most common areas where library staff had a full skill set to support OE were information literacy, discovery services, training/education, scholarly communication knowledge, and collection management and dealing with education publishers and aggregators. The areas where libraries had minimal skill levels were data curation, participatory design, technical support, course pack provision, knowledge exchange, advice on copyright, and reading list provision. Institutions had higher skill levels in areas where they worked together with other departments to provide OER services. The majority of libraries providing support in an area had full or many skills in that area.

Challenges and Opportunities

Respondents were prompted to provide three free-text responses on their top three challenges in supporting Open Education and the top three opportunities or benefits for doing so. 62 respondents provided answers to these questions and from them, five overall themes emerged which are briefly summarised below. The theme with the most challenges was culture and environment, closely followed by resources. The theme with the most opportunities was Quality, access, and reuse.

Policy

In terms of policy development, both institutionally and nationally, respondents report a challenge being the lack of an organisational or national OER policy. Interestingly, respondents who consider policy development to be an opportunity already have institutional policies in place and are a part of libraries which are engaged in the development of national policies.

People

For teaching and library staff, there were far more challenges than benefits mentioned, the main challenges being the ability to influence teaching staff and a lack of capacity for library staff. However, respondents saw more opportunities and benefits with students and external partners as key benefactors, partners and collaborators.

Resources

The main challenges concerning resources are in the lack of funding surrounding OE and OER as well as a lack of relevant skills and knowhow amongst library staff, and technical support.

Culture and environment

This theme had the highest number of instances of all the themes, which demonstrates that organisational concerns were significant for the majority of survey respondents. In the topic institutional leadership, the challenges far outweighed the opportunities; however, in library leadership, there were zero challenges reported.

Quality, access, and reuse

The opportunities for this area outweigh these challenges, with respondents reporting increased access, visibility and discoverability as an opportunity, even to raise their institution's profile in research-based teaching. Most of the challenges raised related to copyright and licensing.

Overall

This report illustrates that academic libraries are taking an important role in advancing Open Education in Europe and shows that libraries are playing to their strengths as Open information and knowledge managers, facilitators, and disseminators. To further accelerate OE and OER efforts, libraries must collaborate to build a more open, creative, legally, and technically sound, and informed education environment to facilitate access to education material for all.

2. Introduction

Background and objectives

Academic libraries have shown strong leadership in advancing Open Scholarship and Open Science (OS) in the last two decades in Europe. Education is essential to advancing society and making it open means connecting the dots between technology and affordable, quality teaching and learning to make use of its greatest potential: Retain, Reuse, Revise, Remix and Redistribute. Open Education policy and practice has advanced for over a decade with [The Cape Town Open Education Declaration](#), the [Open Government Partnership](#), the [UN's Sustainable Development Goals](#) and, most recently, the [UNESCO OER Recommendation](#). Recently, the UNESCO Recommendation on Open Educational Resources (OER), ratified in late 2019, and its [OER Dynamic Coalition](#) and roadmap – of which [SPARC Europe](#) is part – marks out ambitious actions and strategies to implement the OER Recommendation. Libraries are the natural partners in such an Open Education effort with their strong track record in Open information and knowledge management, facilitation and dissemination. To inform the strategic path ahead for libraries in this area, in late 2019, SPARC Europe, in consultation with the European Network of Open Education Librarians (ENOEL), launched a survey to investigate the current state of the OE/OER offering in libraries in Higher Education in Europe.

This report presents the results of a survey prepared by SPARC Europe in consultation with the European Network of Open Education Librarians (ENOEL). The survey investigates the current Open Education (OE) context, offering, challenges and opportunities in libraries of Higher Education in Europe today. The ultimate goal is to increase OE and OER across Europe by increasing OE support in HE institutions and their libraries in future years. Its findings will be used to inform the library community about the prospects of collaborating to build a more open and informed education environment to facilitate access to education material for all.

Survey question set

The question set used in the survey is available in the Zenodo repository: [10.5281/zenodo.3903175](https://zenodo.org/record/3903175) and in the Appendix. It addresses seven key areas, including related information on the organisation, the funding context, OE policy, library engagement with OE, OE advocacy, services, and related challenges and benefits.

Many questions were optional, thus the number of responses to each question vary. The text and figures indicate the total number (n) of responses to each question.

The dataset generated and analysed during this study is available in the Zenodo repository, [10.5281/zenodo.3903170](https://zenodo.org/record/3903170).

Breakdown of survey respondents

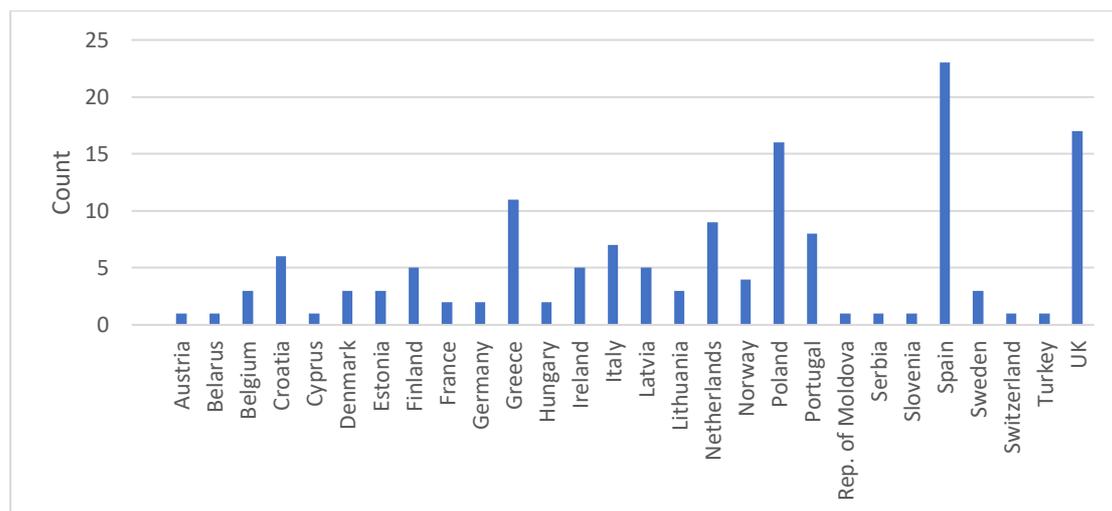
This study consisted of an online survey that was open for 8 weeks and closed on 24 January 2020. It was distributed to academic librarians across Europe utilising the [SPARC Europe](#) and ENOEL networks, e.g. the Information Literacy Group ([INFOLIT](#)), the Association des directeurs et personnels de direction des bibliothèques universitaires et de la documentation ([ADBU](#)) and the Spanish Network of Universities Libraries ([REBIUN](#)). It was also published on social media channels such as Twitter and LinkedIn.

182 responses were received, but 36 responses were eliminated from all analysis because they were tests or contained demographic data only, so 146 responses were analysed overall. All free-text answers were translated into English for analysis, but they remain in their original language in the dataset deposited in Zenodo.

University/comprehensive institution (97 responses, n = 146) was the most common type of organization, followed by technical university/university of technology (19 responses), specialised institution (14 responses), and university of applied sciences (7 responses). There were also four national libraries, two libraries, one distance learning university, one teaching college, and one academic hospital.

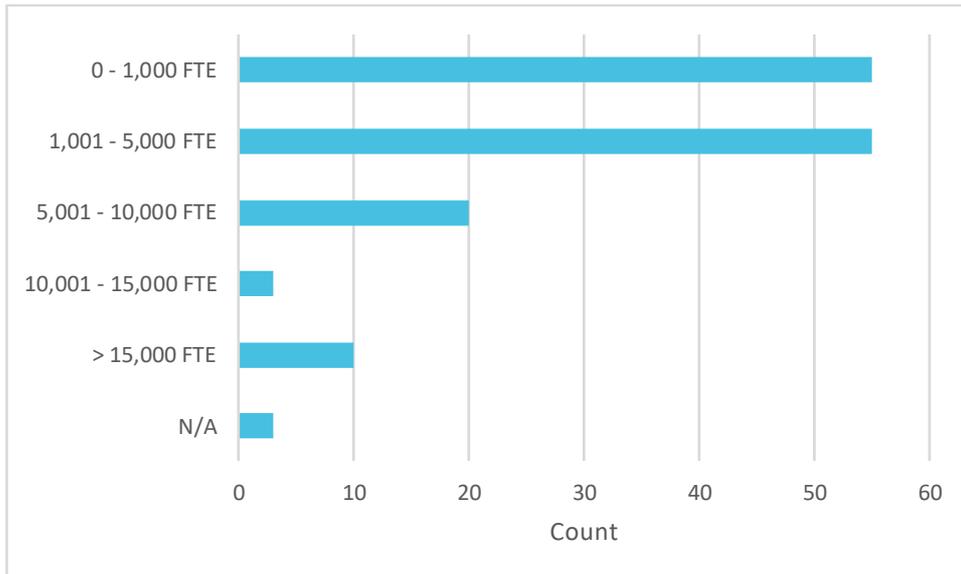
Responses to the survey came from institutions based in 28 countries (n = 146). The four most common countries were Spain (23), UK (17), Poland (16), and Greece (11). Nine countries saw responses from a single institution.

Fig. 1 Survey respondents by geographical location (n = 146)



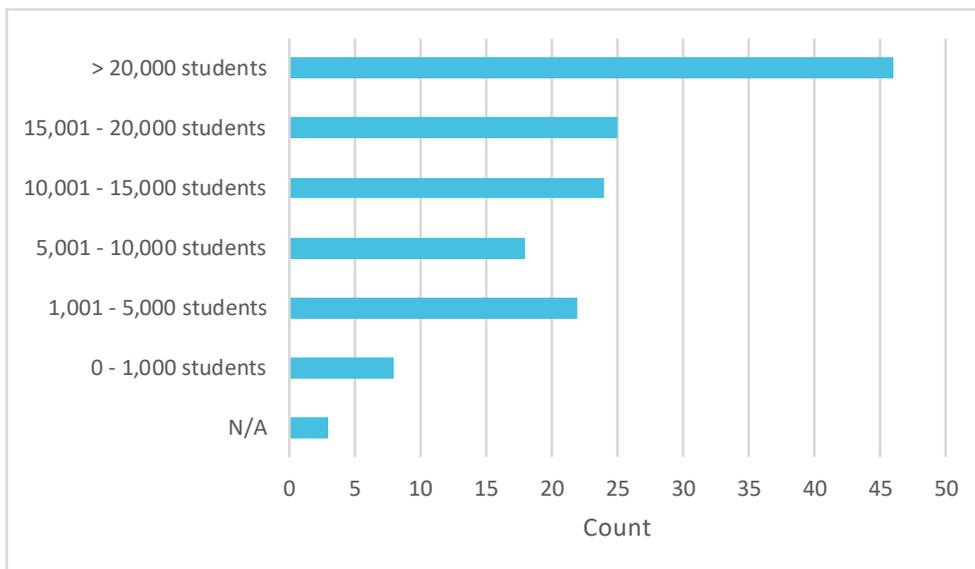
Most of the institutions had 5,000 FTE staff members or fewer (55 respondents each reported 0-1,000 and 1,001-5,000; n = 146). with a further 20 in the 5,001-10,000-person range. Only three institutions had 10,001-15,000 staff members, while 10 institutions reported having more than 15,000 staff members.

Fig. 2 Survey respondents by number of FTE staff members (n = 146)



Across the different institutions, there was a wide variety of student body sizes, with the majority having more than 20,000 enrolled students (46, n = 143), followed by 15,001-20,000 (25), and 10,000-15,000 (25). There were only eight institutions with fewer than 1,000 students.

Fig. 3 Survey respondents by student body size (n = 143)



The survey also inquired about the size of the organisation to see whether this affected OE activity. For those carrying out the most OE/OER services, i.e. offering more than ten different types of OER-related services, of those 39 organisations, there seems to be a correlation between OE and OER activities and the amount of students an organisation serves with the most organisations (17) reporting having

more than 20,000 students, 7 with more than 15,000 students, 5 organisations reporting both 10-15,000 and 5-10,000 serving students, and 3 organisations between 1 and 5,000. Only 2 organisations report many activities with 1,000 or less students. However, there does not seem to be a correlation between the amount of FTEs and the service offering with only two organisations reporting having over 10,000 FTEs, 16 organisations reporting 1-5,000 FTEs, and with 7 between 5 and 10,000, 13 organisations have less than 1,000 FTEs.

As regards advocacy activities in particular, those who conducted a wide range of advocacy activities were not necessarily larger in size: from the 29 organisations offering more than 5 different advocacy activities, only 2 had more than 10,000 FTEs, with the majority of organisations, 13, with between 1- 5,000 FTE, 9 with less than 1,000 FTEs and 5 with 5-10,000 FTEs. This concludes that there was no clear correlation between an institution's resources and its advocacy activities. However, similar to above, there seems to be a correlation between high numbers of students and advocacy activities since those with the most students, i.e. 18 out of 29 with more than 15,000 students offer the majority of advocacy activities.

Definitions

We define OE as resources, tools and practices that are free of legal, financial and technical barriers and can be fully used, shared and adapted in the digital environment.

Acknowledgements

This study was mainly undertaken by Dr Jen Smith on behalf of SPARC Europe. I'd also like to thank Rob Johnson, Victoria Ficarra, Tracey Clarke and Sophie Jennings from Research Consulting for their support in the research process. We are also grateful to the members of the European Network of Open Education Librarians (ENOEL) for helping design the survey and distributing the survey to their networks; in particular Nicole Allen, Wieteke Janssen, Daan van Loon, Gaby Lutgens, and Hilde van Wijngaarden, and to other colleagues such as Fabio Nascimbeni, Igor Lesko and Paul Stacey. We are also most thankful to Dr Gema Santos-Hermosa and Cécile Swiatek for their further analysis and guidance.

3. Survey results

3.1 The context: The costs of education and Open Education

In the US, the costs of education to students are significant, which is why we also investigated the costs of education in Europe, as well as the financial resources available to libraries to implement OE and OER.

For those **institutions which levy fees**, the most common average undergraduate tuition fee range was €1,001-€3,000 (22, n = 86), followed by more than €3,000 (17), €101-€1,000 (11), and €1-€100 (5). For many respondents, the question did not apply (31).

Fig. 4 Number of organisations with tuition fees



Respondents were also asked to estimate who paid for educational resources by percentage to see whether Open Education activities related to the costs of education. This proved challenging and was therefore inconclusive. Thirty-nine people entered numbers that added up to 100% which are reported on here. Of those 39, the organisation paid for 100% of educational resources in 14 cases, while students paid for 100% of resources in seven cases. In three cases, 100% of resources were funded by another source (two by OpenStax and one by the Ministry of Higher Education). The other fifteen cases split the costs between students, the organisation, and other sources. On average, across institutions, 61% of funding for educational resources was provided by the organisation, 27% came from students, and 12% came from other sources showing a mixed model, which also reflects the different educational systems in place and how they are funded across Europe.

When looking at how the educational resource funding structure is related to whether an organisation has a policy on open education, two of the institutions that

have policies see students paying 100% of their educational resources. One institution where students are responsible for 10% of educational resources and one institution where students are responsible for 20% also have policies on OE. Only one of the organisations that pays 100% of educational resources also has a policy on OE. The organisation that pays for 90% of resources and the organisation that pays for 80% of resources also have policies, but none of the organisations that provides 70% or less has a policy.

More analysis into individual responses by country and OE output could be explored although data is limited to make any useful conclusions on this point, which also goes for policy.

Financial resources for OE

When asked whether respondents had **acquired seed funding** for Open Educational work, six out of 87 people replied positively. The library provided funding for three respondents, senior institutional management funded two respondents, and IT services funded the final respondent. The Library leads on OER in five of the six institutions that had seed funding; however, none of the institutions that acquired seed funding also had a policy on OER, which might indicate how seed funding often serves to explore the need, develop demonstrators, develop advocacy or other activities before establishing a policy. Of those 39 libraries who carried out the most OE/OER activities, only 4 had seed funding.

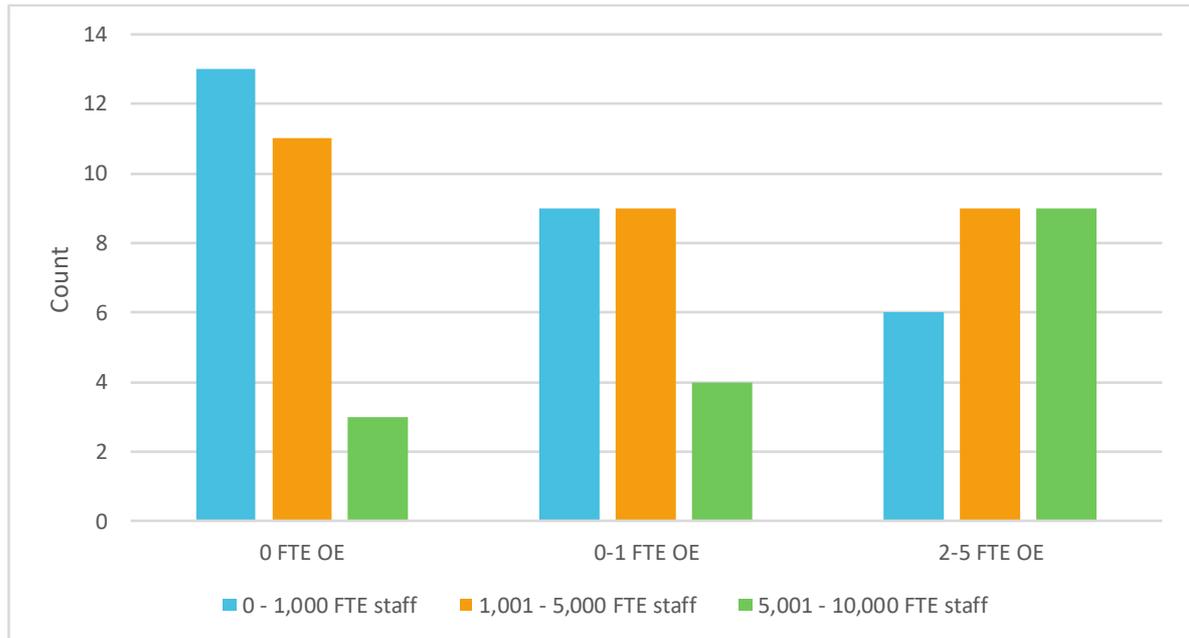
Overall, 10 out of 85 organisations had a **granting programme** to promote the creation of Open Educational Resources. Library budgets earmarked specifically for Open Education also exist in 10 out of 87 institutions surveyed. Three of the organisations that have granting programmes also have library budgets for OER, but it is not possible to tell from the data whether they are distinct pots of money or if they could be the same. Of those 39 libraries who carried out the most OE/OER activities, only 7 organisations had dedicated budgets for Open Education. Two of these have a granting programme to promote the creation of OERs and 4 others fund this with no dedicated OE budget to hand.

Personnel dedicated to OE

Of the 84 respondents who reported on their dedicated Open Education personnel, 53 had staff members in their libraries dedicated to working on Open Education, while 31 did not. Of those 53 who did have OE staff, 26 had just one FTE or less and 24 had between 2 and 5 FTE. Two institutions had 6-9 FTE, while only one had more than 10 FTE dedicated to working on OE.

The chart below (Fig 5) demonstrates that as the size of an institution increases in staff FTE, the number of staff dedicated to OE also tends to increase. For example, institutions with 0-1,000 FTE in total are most likely to have no staff dedicated to OE; conversely, institutions with 5,001-10,000 FTE are most likely to have 2-5 FTE staff dedicated to OE.

Fig. 5 Number of FTE dedicated to Open Education vs. total FTE

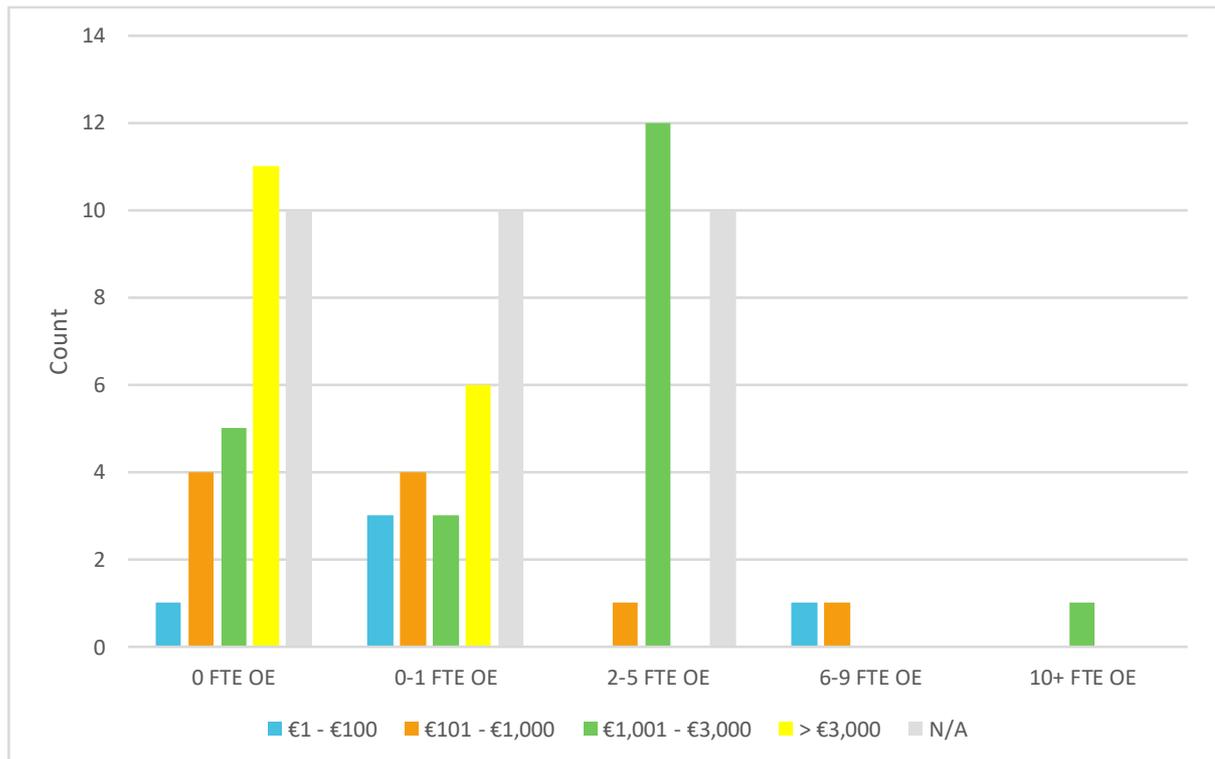


When considering the relationship between undergraduate fees levied and the number of FTE dedicated to OE, three distinct patterns emerge.

- First, institutions that do not charge undergraduate student fees are twice as likely to have staff dedicated to OE (20 in total) as they are to have zero FTE (10).
- Next, institutions that charge €1,001-€3,000 are three times as likely to have staff dedicated to OE (16 in total) as they are to have zero FTE (5).
- Finally, institutions which charge the highest amount (>€3,000) are also the ones least likely to have any staff dedicated to OE: 11 of the 17 institutions have zero FTE, while the other 6 institutions have 0-1 FTE dedicated to OE. No institutions that charge >€3,000 have more than 1 FTE dedicated to OE, while all of the other tuition fee bands (including N/A) have some representation at the higher end of the scale.

When examined together, the three patterns show that the more an organisation charges undergraduates for tuition fees, the less likely it is for that organisation to have staff dedicated to OE.

Fig. 6 Number of FTE dedicated to OE by undergraduate tuition fees



3.2 Organisation

As far as how **OE is organised within the institution** is concerned, only just over 20% (23, n = 110) of institutions have a formal task force, committee, or other entity with an Open Education focus. More than two-thirds of the formal task forces are organisation-wide (16) as opposed to being based in the library (7).

Of the 23 institutions that have a formal task force, 18 of those also report that the library leads the institution in OER efforts indicating the important role that libraries play as partners in OE.

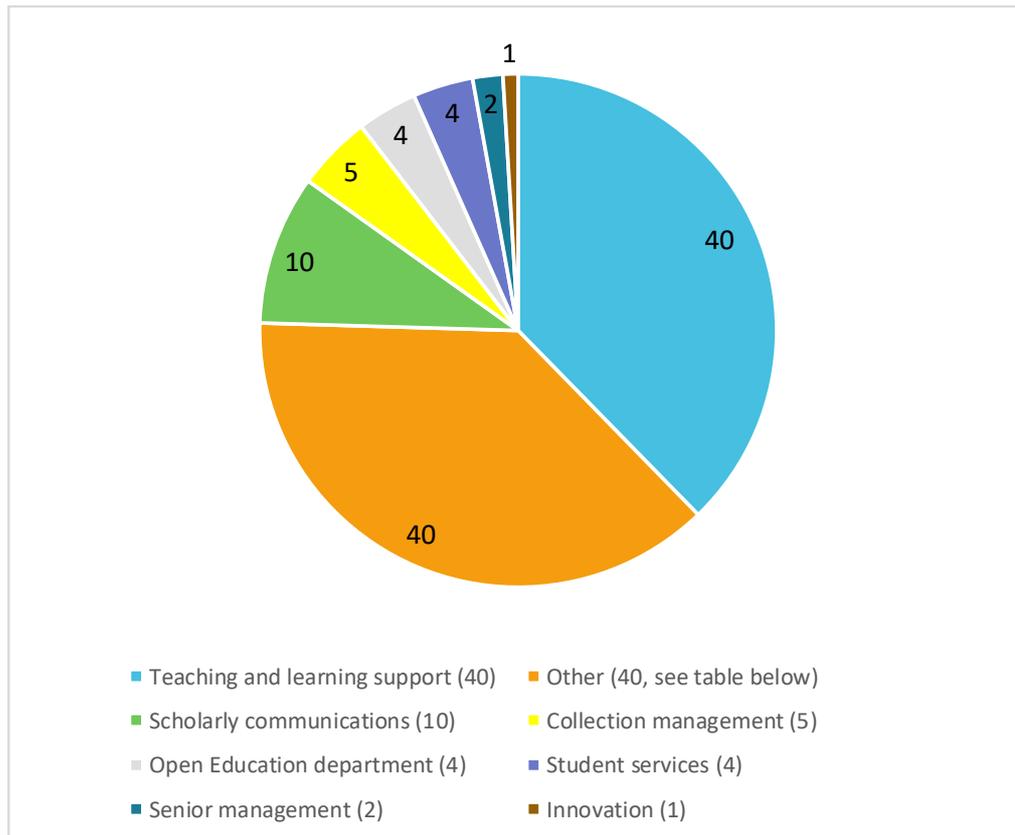
Of the 23 institutions that have a formal task force, 10 of them also have a policy on OER. Only four of the 87 institutions that do not have a formal task force also have a policy. This is a statistically significant difference, $\chi^2(1) = 24.76$, $p < .001$, with a moderate effect size (Cramer's $V = .47$).

Within the library, teaching and learning support was the most common department to lead in OER efforts (40, n = 101), with scholarly communications (10) far below that. Since Open Education is by definition a part of teaching and learning, this is a foreseeable result.

The pie chart below (Fig. 7) gives an overall picture of responses to which library department, if any, takes the lead in Open Education / OER efforts: teaching and

learning support (40), scholarly communications (10), collection management (5), student services (4), Open Education department (4), senior management (2), innovation (1), and other (40). The Table 1 below details the “other” answers.

Fig. 7 Library department that leads on OER efforts



Forty respondents used the “other” section in total. Three respondents used the “other” section to say that multiple departments within the library work together, rather than a single department taking the lead. Fifteen respondents actively used the “other” section to say “none” or “no one”. This has been included because it evidences the number of institutions where staff were engaged enough with OER but did not consider leading them.¹

¹ It may be argued that some of the “other” responses below could have been combined with other answers from the main choices, but it is difficult to compare them directly because no respondents included an organisational chart. Since sections can be organised differently in different institutions, the “other” answers in the table below have been left verbatim, rather than making potentially erroneous assumptions for the sake of fewer categories.

Table 1 Library department that leads OER efforts ("other" list)

"Other" library department that leads OER efforts (free text)²	Number of respondents
Education/Information Literacy	4
Faculty Liaison	3
Institutional Repository	2
User Services	2
Scientific and Technological Information Section	2
Open Access department	1
Open Science section	1
Multiple: Institutional Repository and Research Support Library Services	1
Multiple: Scholarly Communications Team, Learning Support Unit, and Faculty Engagement Team	1
Multiple: Scholarly Communications, Student Services, and Teaching and Learning Support	1
Automation Section and The Direction	1
Library in general. Our Library has only 16 employees.	1
Outside the library	1
Publishing House	1
Research Services	1
Scientific Information and Magazines Department	1
None	15

The multiplicity of focal points for library leadership of OER efforts speaks to the ways in which library staff are engaging with creators and consumers of OER, and also the variety of ways OER is approached by institutions. This emerging space is more difficult for some institutions to navigate than others, which is reflected in the challenges and opportunities section at the end of this report.

² Responses in the "multiple" responses that duplicate other answers were amalgamated individually, so they are not counted twice. They are recorded here for information only.

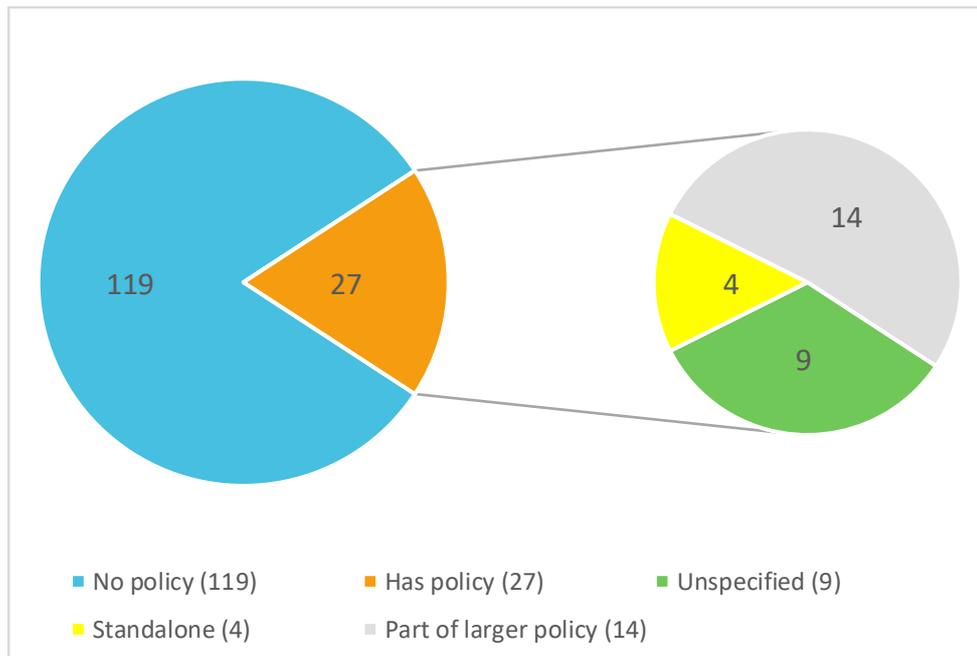
3.3 Open Education Policy

In the survey, we **define policy** as a written document that stipulates the expectations related to Open Education for an institution or country. Its goal is to lead to the creation, increased use and/or support for improving Open Educational Resources (OER). Beyond an institutional policy document, laws, rules, green papers, white papers, roadmaps, declarations, and funding programmes are included in policy.

Overall, 27 of 145 institutions indicated that they **have OER policies**. Of those policies, 14 are part of a larger, overarching policy, while four are standalone policies dedicated to Open Education. Seventeen of the 146 respondents indicated their involvement with the conception of the OER policy: 11 reported that the library was involved, while six were not. The **library was involved** with **conceiving** three of the four standalone **policies** and eight of the policies which are part of a larger, overarching policy. Please see Appendix B for the list of institutions that have reported having policies, along with links to the policies themselves (when provided by the respondents).

However, please note that the survey had two separate questions regarding policy existence and status (Appendix D, question 6: Does your organisation have an Open Education policy, and 7: Is your Open Education policy part of a larger, overarching policy, or is it a standalone policy dedicated to Open Education). On one hand, some respondents reported not having a policy at all; however, they went on to declare in the next question that their policy was part of a larger, overarching policy. On the other hand, some respondents reported having a policy, but they did not specify whether it was part of something larger or whether it stood alone. For the purposes of this survey, the two response sets have been amalgamated for a total of 27 institutions that (a) answered “yes” to Question 6, (b) answered Question 7 at all, or (c) answered both questions. This is visualised in Figure 7. Since there are some inconsistencies with some of this data, more work would need to be done to investigate the actual status of the 27 policies reported.

Fig. 8 OER policy status, including level within institution (n = 146)

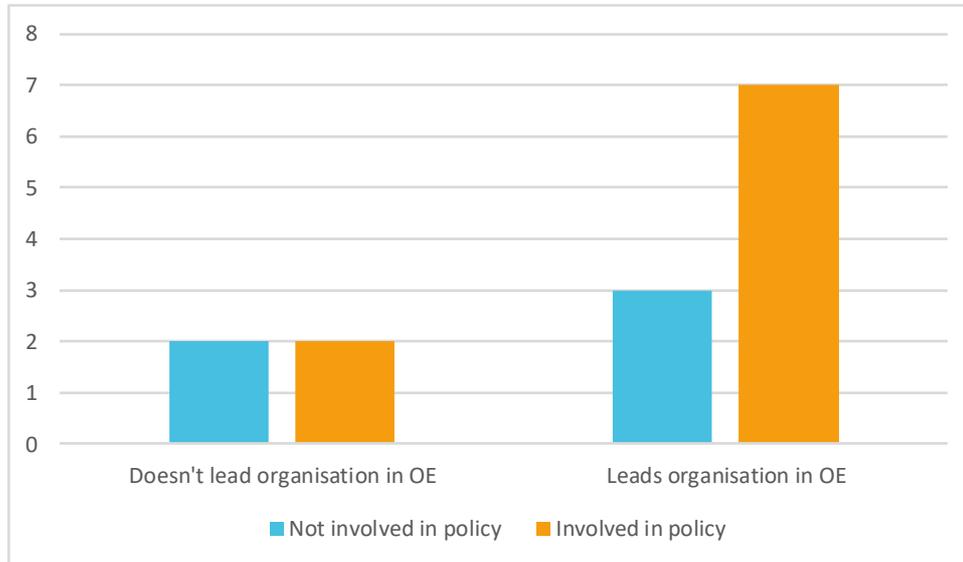


3.4 Library engagement and leadership

Respondents were asked whether the **library takes the lead in advancing Open Education or Open Educational Resources** in their organisations. For those who answered this question (n = 109), the split was 50% (Yes = 54, No = 55).

Libraries that take the lead in OER initiatives are more likely to be involved in policy conception: seven of the nine libraries (78%) that were involved in conceiving the policy also take the lead in advancing OER, whereas only three of the five libraries (60%) that were not involved in conceiving the OER policy take a lead on OER activities within the organisation.

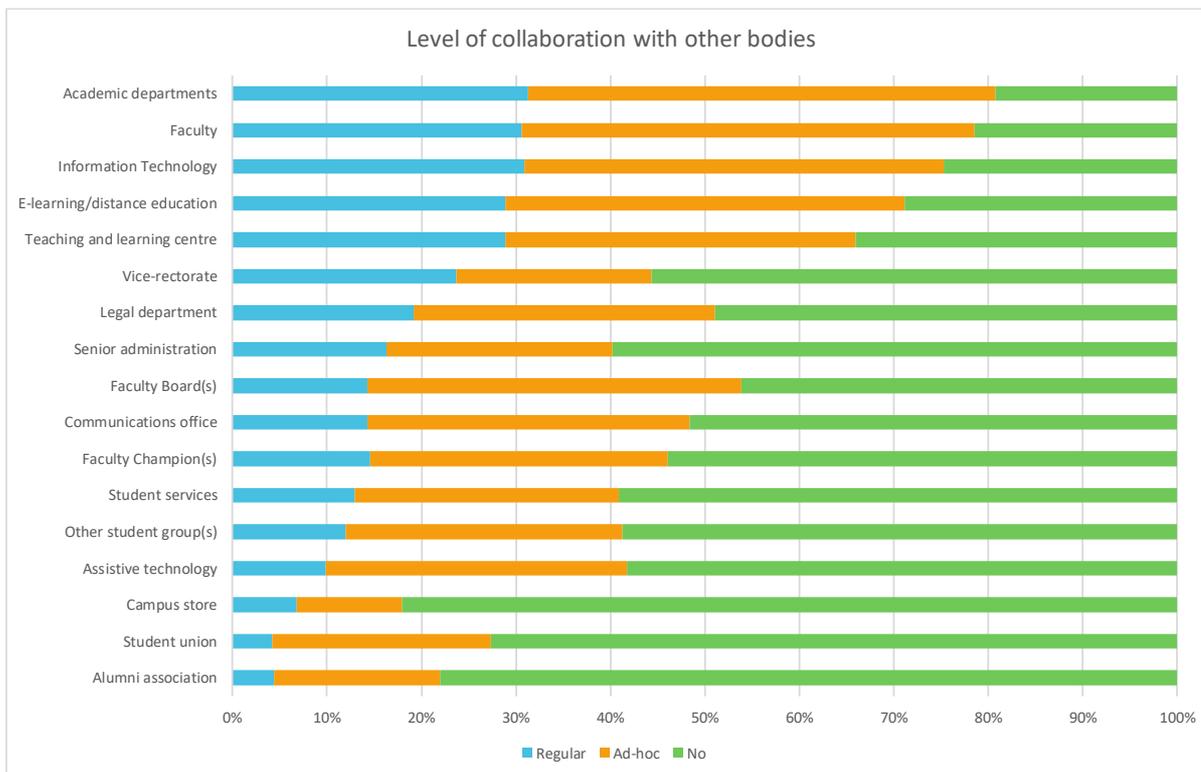
Fig. 9 Leadership in OER across institution by OER policy involvement



Furthermore, libraries that take the lead in OER initiatives engage in more activities than those that do not. On average, leaders engage in 5.3 activities, while those who do not take the lead average only 3.3 activities. These activities are described below (see Figure 12 “Ways in which libraries advocate for OER”).

When asked on what level libraries collaborate with bodies to advance Open Education or OER, the top five bodies that **libraries collaborate with on a regular basis** in their advancement of OER were academic departments (31, n = 99), information technology (30, n = 97), faculty (30, n = 98), e-learning/distance education (28, n = 97), and teaching and learning centres (28, n = 97). Note for the last two activities, although total numbers are the same, respondents are not always identical for each.

Fig. 10 Level of collaboration with other bodies by regular contact (n = 89 to 99)³



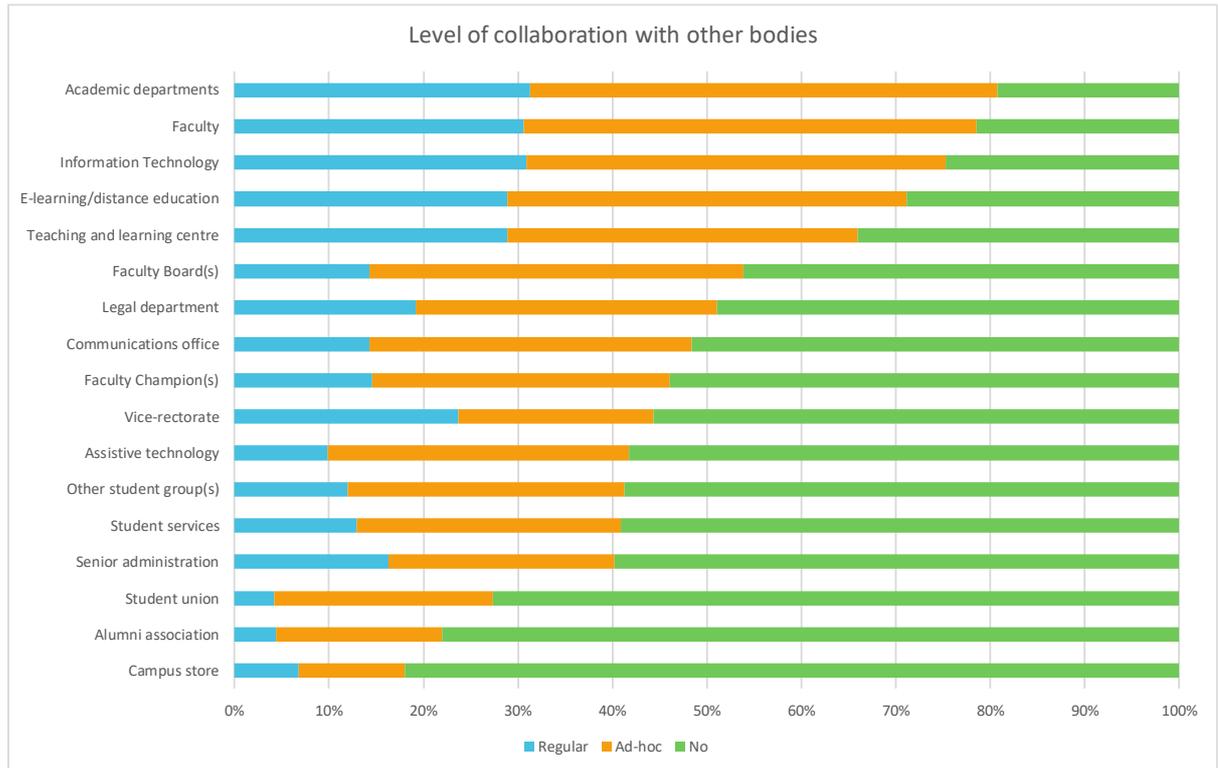
On an ad-hoc basis, the top five bodies that **libraries collaborate** with were academic departments (49), faculty (47), information technology (43), e-learning/distance education (41), and faculty boards (36, n = 91). Since the aggregate number for ad hoc work is 216 – as opposed to 147 for regular – this shows that library engagement seems to takes place on more of an ad-hoc basis.

The least likely bodies for libraries to collaborate with were campus stores (No = 73, n = 89), senior administration (No = 55, n = 92), vice-rectorate (No = 54, n = 97), student unions (No = 69, n = 95), student services (No = 55, n = 93) and other student groups (No = 54, n = 92) showing less engagement with students overall.

Other places of collaboration mentioned included other libraries (2), national associations (2), research groups (1), doctoral school (1), faculty library committees (1), university-wide open science initiatives (1), special interest groups (1), external users (1), and the university innovation centre (1). Figure 11 brings regular and ad hoc statistics together to show the general patterns of engagement.

³ The chart differs slightly because it is based on percentages rather than raw numbers, and each category was answered by a different number of respondents. Responses ranged from 89 participants (“faculty champions”) to 99 participants (“academic departments”).

Fig. 11 Level of collaboration with other bodies – most total contact, i.e. regular & ad hoc (n = 89 to 99)⁴



3.5 Open Education Advocacy

The most popular **ways for libraries to advocate for Open Education** were through presentations (56, n = 93), websites (53), events (46), library events (42), and social media channels (40). Faculty meetings (35), other training (26), teacher training programmes (26), and Libguides (25) were the next most common ways for libraries to promote OE.

The least popular choices for advocacy were through publications (24), newsletters or blogs (22), and professional development programmes for graduates (11) and undergraduates (10).

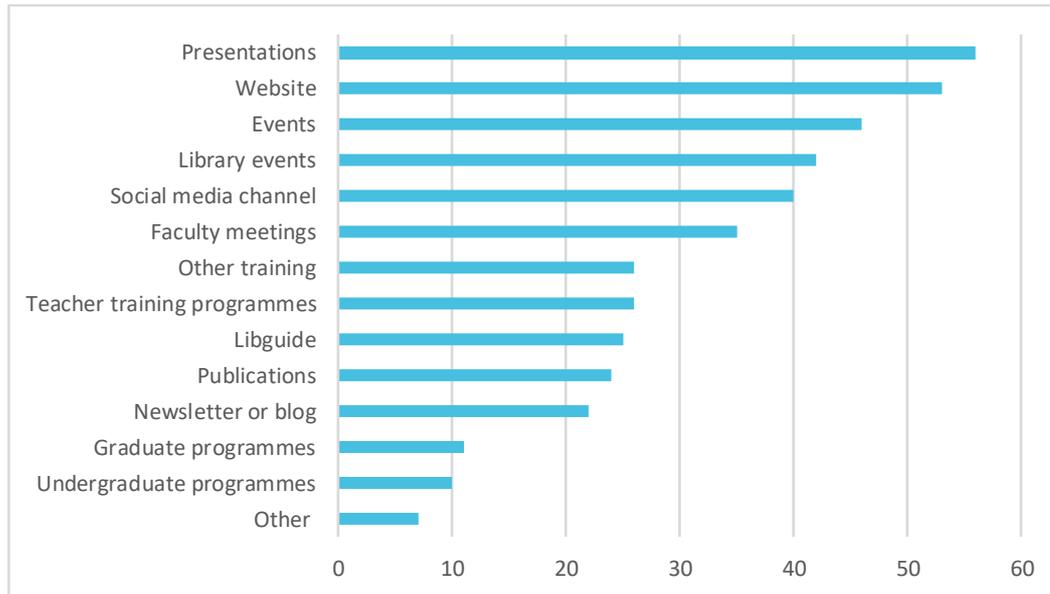
Other avenues included communities of practice in the library; being an OER project member;⁵ seasonal schools/workshops with teachers, education specialists and information specialists; the repository; and the institutional open access policy.

One institution entered “not yet” into the “other” free-text box, which implies that they are planning future activities.

⁴ The chart differs slightly because it is based on percentages rather than raw numbers, and each category was answered by a different number of respondents. Responses ranged from 89 participants (“faculty champions”) to 99 participants (“academic departments”).

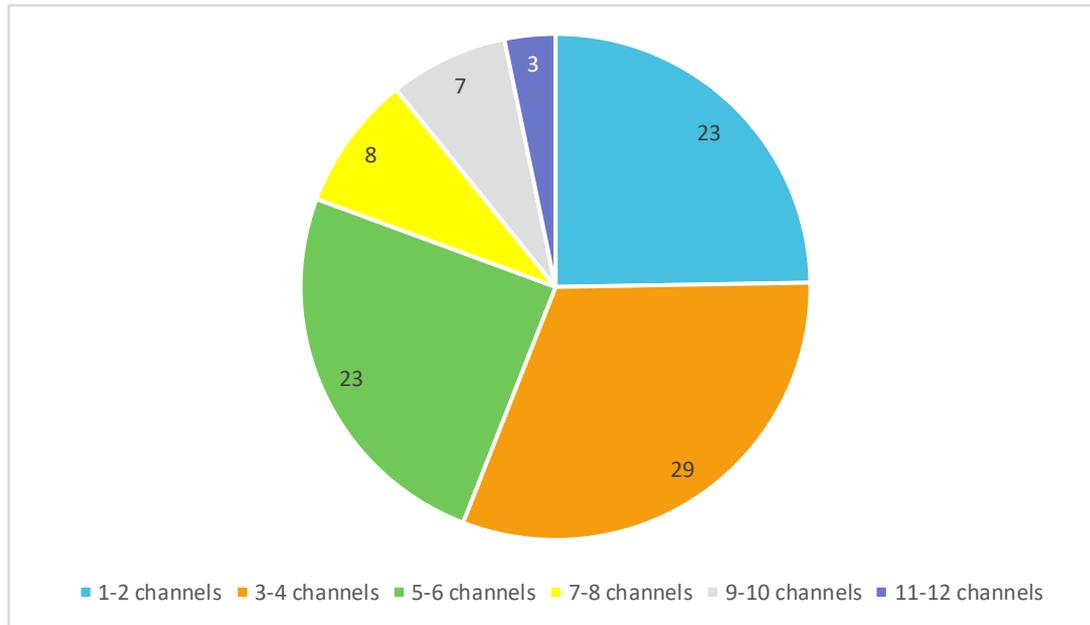
⁵ Anatomy Tool 2, <https://anatomytool.org/TOOL2>

Fig. 12 Ways in which libraries advocate for OER (n = 93)



Most of the institutions that advocate for OER do so through a variety of different channels. One institution reported using 12 of the options; most used three or four channels (29) although many also used 5-6 or 1-2. In attempting to find a pattern among the channels used by multiple institutions, it was difficult to tell whether the clusters reflected true similarities of approach or whether they were artefacts of the sample size. Initial cluster analysis appeared to group “presentations” and “websites” together, and “events” and “library events” in another cluster; however, that might simply have been because they were the most popular choices overall, and therefore the most likely to have been chosen by the largest number of institutions in total.

Fig. 13 Number of advocacy channels used by each institution (n = 93)

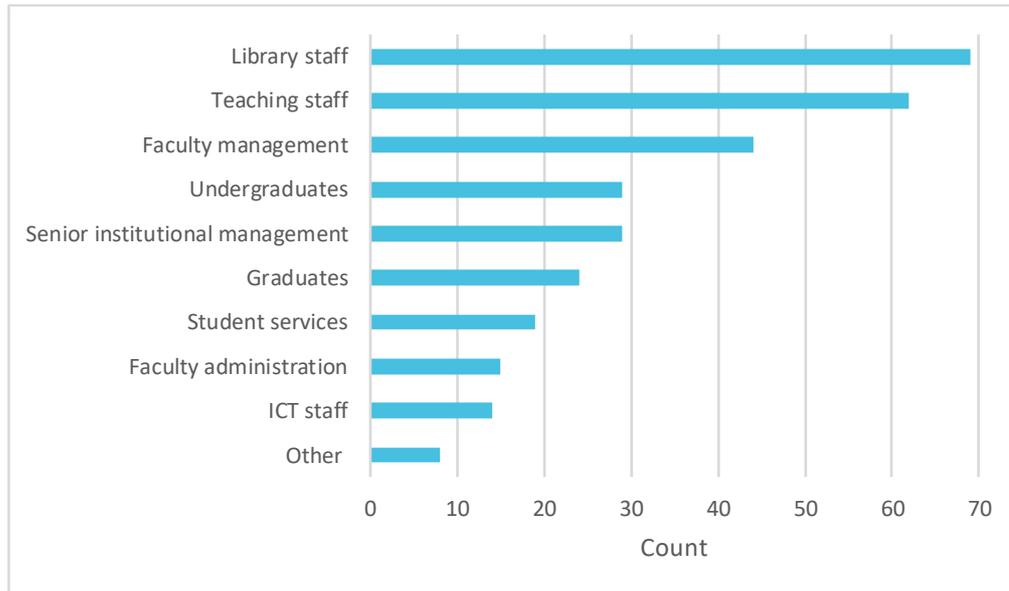


Survey respondents were also asked **who they inform about OER**. By far, the two most common groups that respondents informed about OER were library staff (69, n = 93) and teaching staff (62). Faculty management (44) was the group informed third most often, followed by undergraduates (29) and senior institutional management (29). The high numbers of library staff indicates that Open Education is still a relatively new concept in the library.

Graduates (24), student services (19), faculty administration (15) and ICT staff (14) were the groups least often informed by respondents about OER.

Other audiences cited by respondents include student communities (2), learning support services (1), faculty teaching and learning committees (1), the Department of Educationalists (1), external users of the library (1), graduate students and researchers (1), social networks (1), staff in other libraries (1), the OER community (1), and the public, through the institution’s Wikimedian in Residence (1). Two respondents also wrote “I don’t do that” and “we do not discuss this with others” in the “other” field.

Fig. 14 Groups that respondents informed about OER



Some cross-tabulations were attempted to examine the relationship between the groups of people informed by respondents against advocacy channels; however, the results were inconclusive. Further investigation with highly active individuals would be an effective way to draw links between audiences and delivery channels.

3.6 Services

Respondents were asked about the **extent to which their library provided Open Education and OER services**, and whether they took a lead role, a supportive role, or not applicable. The most common areas in which libraries **took a lead role** in providing OER services were information literacy (59, n = 83), discovery services (37, n = 82), collection management / dealing with education publishers and aggregators (35, n = 85), and advice on copyright and licensing when publishing material (35, n = 86), followed by training and education (34, n = 81). The next most popular areas for libraries to lead were scholarly communication knowledge (29, n = 80), digitisation (28, n = 81), storage services (25, n = 80), knowledge exchange (24, n = 82), data curation (23, n = 79), and reading list provision (22, n = 78). The least popular areas for libraries to lead in providing OER services were technical support (15, n = 79), course pack provision (12, n = 80), OER co-creation (7, n = 79), and finally, participatory design (3, n = 78).

The top area where the library had **a supportive role** was advice on copyright and licensing (43), but the second and third were OER co-creation (41) and knowledge exchange (37), followed by technical support (36), training and education (34), scholarly communication knowledge (32), and storage services (30). It is interesting to observe that libraries have such a strong supportive role in OER co-creation. The less popular areas for libraries to have a supportive role were course pack provision (29), data curation (29), discovery services (29), digitisation (28), collection

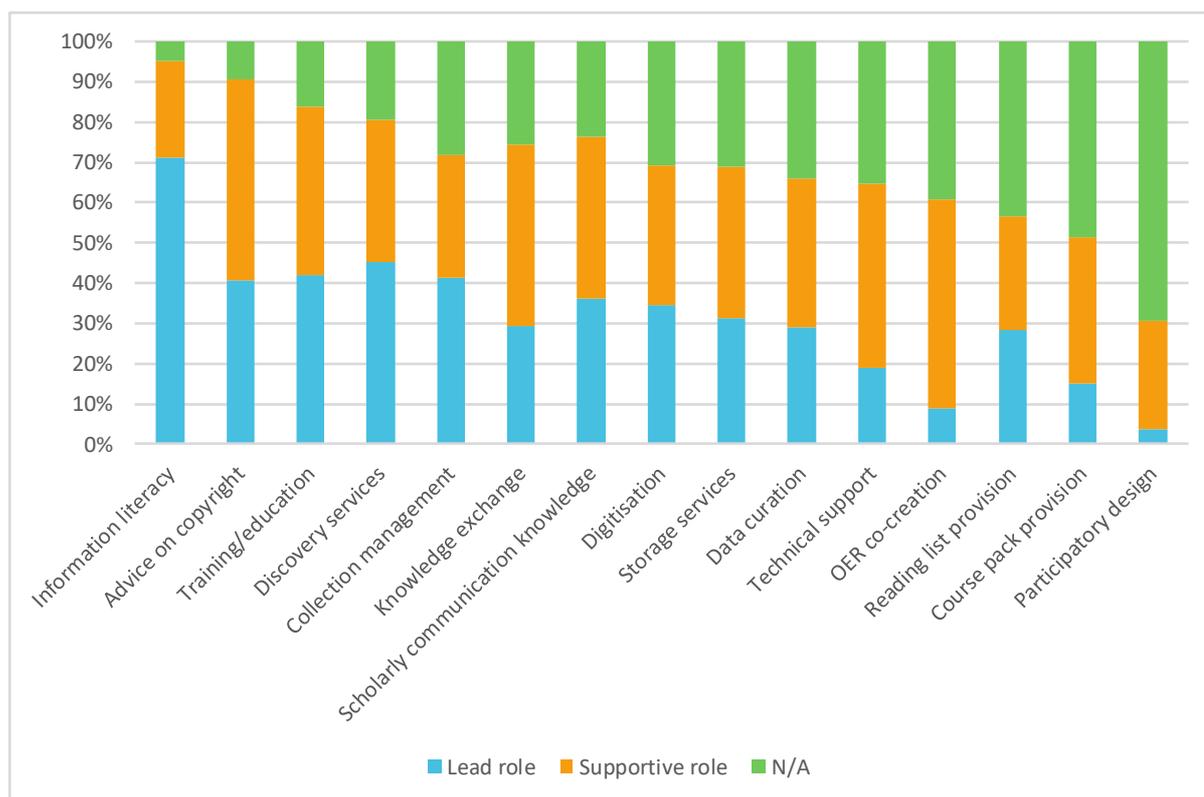
management (26), reading list provision (22), and participatory design (21) although one should note that these numbers are not insignificant.

Libraries provide a supportive role much more consistently than they do a leading role in the areas addressed by this survey: the most popular area for leading (information literacy, 59) contrasts greatly with the least popular area for leading (participatory design, 3), whereas the most popular area for supporting (advice on copyright, 43) was much closer to the least popular area for supporting (participatory design, 21).

Finally, it is informative to report on the **rank of the activities which libraries felt were not applicable to their OER services**, which is different to simply leaving the entire question blank. The area that was not applicable to the highest number of respondents was participatory design (54). This was followed by course pack provision (39), reading list provision (34), and OER co-creation (31). The rest of the areas were ranked as follows: technical support (28), data curation (27), storage services (25), digitisation (25), collection management (24), knowledge exchange (21), scholarly communication knowledge (19), discovery services (16), training and education (13), advice on copyright (8), and finally, information literacy (4).

In the “other” responses, one library wrote that they have a supportive role only, and another wrote that “the library doesn’t support open education/OER (yet)”, which may indicate forward momentum in developing services for that institution.

Fig. 15 Open Education/OER services provided by the Library



3.7 Skills

Survey respondents were asked to **what extent their library had the skills** it needs to support Open Education, with choices of “full skill set”, “many skills”, “minimal skills”, “no skills”, or “N/A”. Between 77 and 83 people made a choice for each option.

The most common areas in which respondents felt their library staff **had the full skill set** to support open education were information literacy (43, n = 82), discovery services (34, n = 81), training/education (31, n = 80), scholarly communication knowledge (30, n = 78), and collection management and dealing with education publishers and aggregators (25, n = 83). Additional areas where libraries had a full set of skills were digitisation (24, n = 78), storage services (22, n = 79), reading list provision (20, n = 77), and advice on copyright and licensing (17, n = 83). The areas where the fewest libraries had full skill sets were knowledge exchange (9, n = 79), technical support (9, n = 78), course pack provision (8, n = 78), and finally, participatory design (4, n = 77). This was the widest spread among the five choices, with four institutions having a full set of skills for participatory design and 43 having a full set for information literacy. Each of the other choices had a narrower spread of answers.

Respondents felt their library staff **had many skills** around advice on copyright and licensing when publishing material (46), knowledge exchange (40), collection management (35), information literacy (32), training/education (31), digitisation (31), and technical support (30). Institutions also had many skills in discovery services (29), storage services (27), data curation (26), scholarly communication knowledge (24), reading list provision (22), course pack provision (22), and participatory design (18). The three highest areas in which libraries have many skills are notably quite different to those in which they have full skills.

The most common areas where libraries reported **having minimal skills** were data curation (34), participatory design (23), technical support (20), course pack provision (19), knowledge exchange (18), advice on copyright (17), and reading list provision (15). The areas where the fewest libraries reported having minimal skills were collection management (14), storage services (14), training/education (12), digitisation (12), scholarly communication knowledge (12), discovery services (9), and information literacy (4).

Respondents of the Open Education survey reported having no skills in these areas: course pack provision (12), participatory design (10), technical support (9), data curation (6), reading list provision (5), scholarly communication knowledge (5), and discovery services (5).

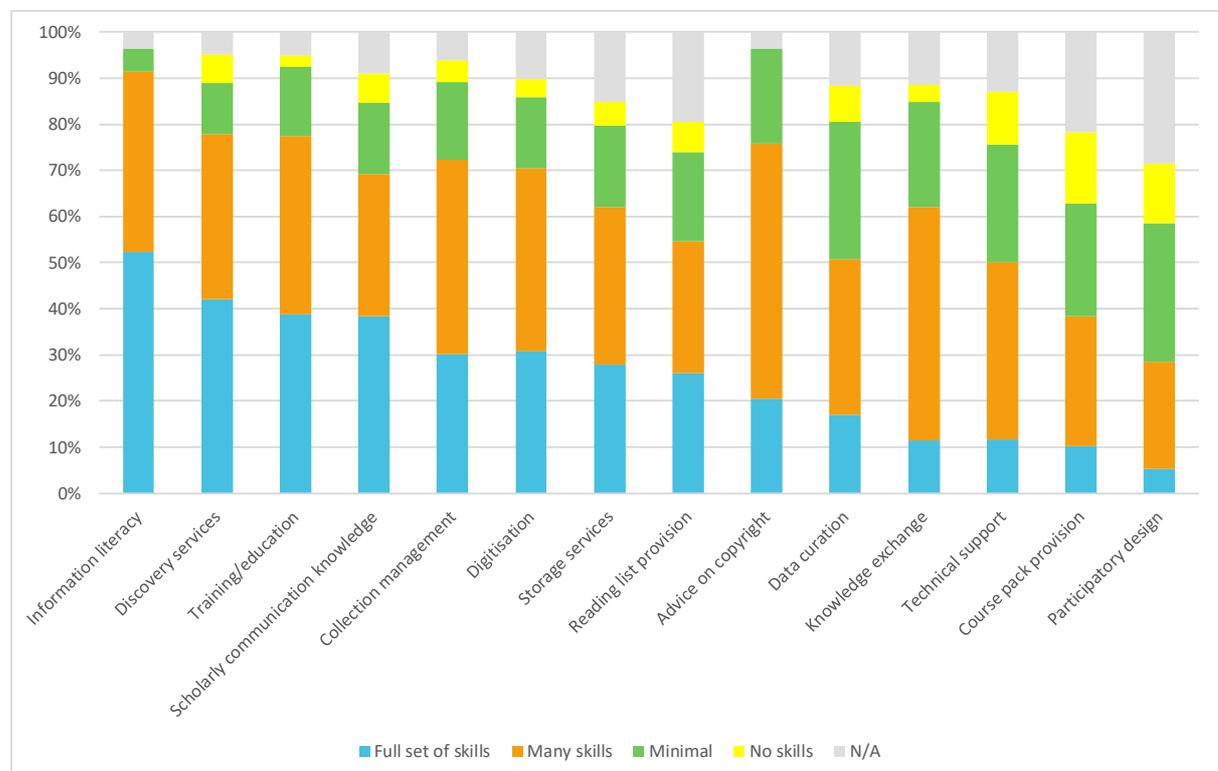
It should be noted that there were two areas in which zero libraries reported having no skills, i.e. all having skills in the areas of advice on copyright and information literacy.

The “N/A” column generated more responses than “no skills”, with participatory design (22) reported as the least applicable area, followed by course pack provision

(17), reading list provision (15), storage services (12), technical support (10), data curation (9), and knowledge exchange (9). The most relevant areas, as determined by the fewest number of responses labelling them “N/A”, were digitisation (8), scholarly communication knowledge (7), collection management (5), discovery services (4), training/education (4), advice on copyright (3), and information literacy (3). Further investigation is needed to interpret these figures.

Areas mentioned in the “other” field were speech to text, learning technologies, interoperability of content, and OER co-creation. One person wrote “none” in the “other” field.

Fig. 16 Level of library skills to support Open Education



When **comparing** areas where **respondents** actively **worked together with specialists against the skill levels reported within libraries**, it was often the case that institutions had higher skill levels in areas where they worked together with other departments to provide OER services. Furthermore, the majority of those libraries providing support in an area had full or many skills in that area. However, there was also a minority for whom that was not the case—they were providing support with less skills in that area. These areas include knowledge exchange, data curation, technical support, and participatory design. This suggests that in some institutions, more work needs to be done to invest in skill development so that library staff can provide the support that is being requested of them or that they join forces with other specialists from within the institution or outside of it. Further

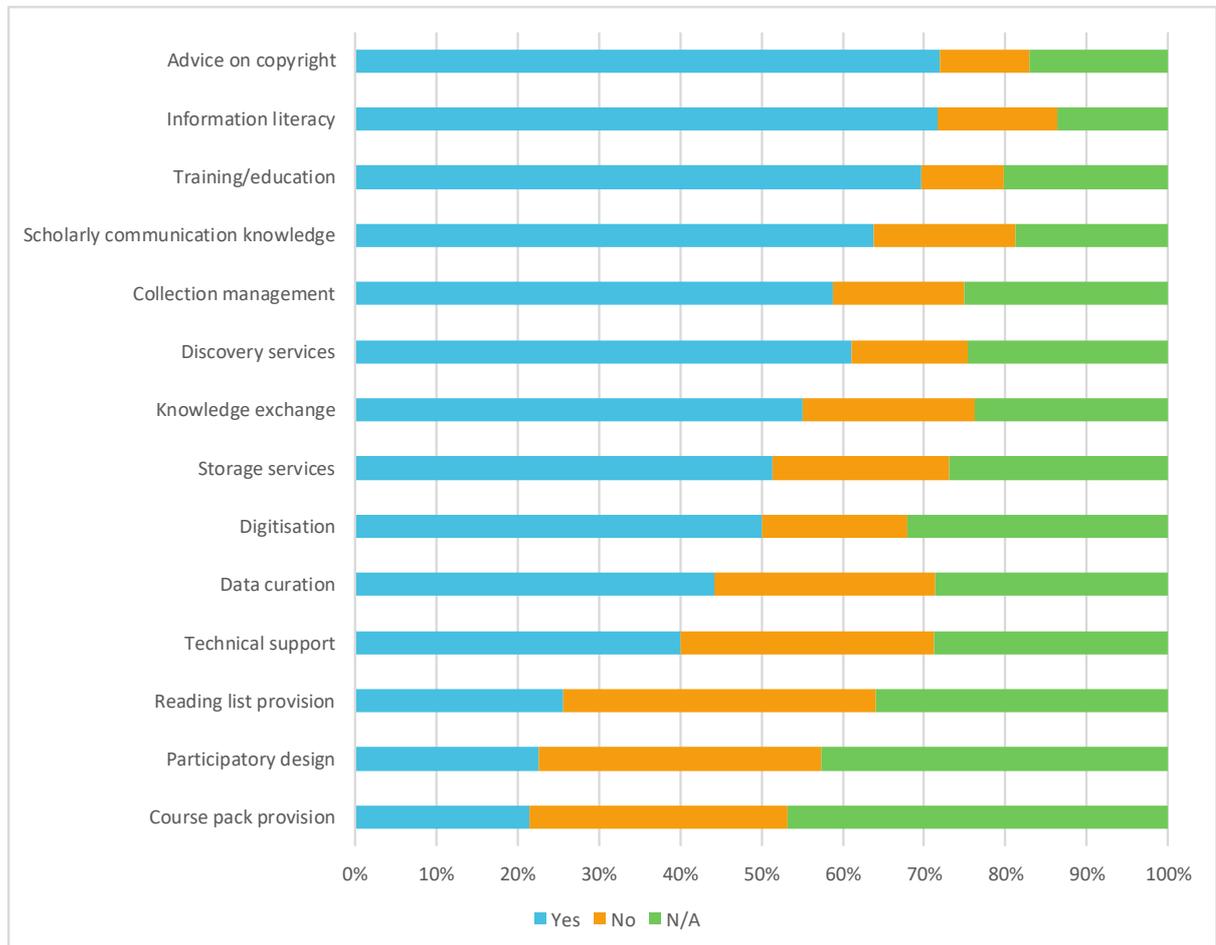
analysis is needed to see who is providing what activities with less skills and without expertise support.

The breakdowns by area of collaboration are as follows:

- **Advice on copyright:** Of the 59 respondents who do provide advice, 14 reported a full skill set, 37 reported many skills, and eight reported minimal skills. Five of the nine respondents who did not provide advice reported full or many skills, suggesting the library may be underused in this respect although numbers here are small.
- **Information literacy:** Of the 58 respondents who provide support for information literacy, 36 reported a full skill set, 20 reported many skills, and 2 reported minimal skills. It is curious that all twelve of the respondents who do not provide support for information literacy also reported full or many skills, which indicates that they are not utilising their potential. This reflects the high level of information literacy skills across the sample, as only four institutions reported minimal skills, and zero institutions reported no skills in this area.
- **Training/Education:** Twenty-six of the 55 libraries that work together with people involved in training/education have full skills in the area, while 24 have many skills. The other 5 libraries have minimal skills, which means that all of the collaborating libraries have some level of skills in this area.
- **Scholarly Communications:** Of the 51 libraries that collaborate with scholarly communication specialists, 24 of them have a full skill set, 19 have many skills in the area, and 5 have minimal skills. One library that collaborates with scholarly communications specialists has zero skills in the area, and one respondent marked it as “N/A”. Half of the libraries that do not work together with the scholarly communications team (7) have full or many skills in this area.
- **Collection management/dealing with education publishers and aggregators:** Of the 47 libraries that collaborate with collection management specialists, 18 have a full skill set, and 23 have many skills. Six have minimal skills in the area. Again, a high proportion of libraries that do not collaborate on collection management (8 of the 13) have full or many skills, which could suggest underuse from an overall institutional perspective, or it could be that this is an area where libraries have traditionally worked alone and have not yet developed partnerships with other areas of the institution for Open Education support.
- **Discovery services:** All 47 of the libraries that collaborate with discovery services have some level of relevant skills: 25 have a full skill set, 20 have many skills, and 2 have minimal skills in the area. Of the 11 institutions that do not collaborate, 3 have a full skill set, 4 have many skills, and 3 have minimal skills. One library reported having no skills in the area.
- **Knowledge exchange:** A relatively small proportion of the 44 libraries that collaborate in this area have a full skill set—eight—with 25 having many skills and eight having minimal skills. One institution that collaborates with knowledge exchange also marked it as “N/A”. None of the libraries that does not collaborate has a full skill set, though six of the 17 have many skills, and seven have minimal skills. This might be an area for further development where libraries capitalise on being a facilitator of knowledge as well as information.
- **Storage services:** Forty institutions collaborate on storage services, with 15 of them having a full skill set, 20 having many skills, and three having minimal skills. For the libraries that do not collaborate with storage services, two have a full skill set, four have many skills, six have minimal skills, and three have no skills in the area.
- **Digitisation:** Of the 39 libraries that collaborate on digitisation, 17 have a full skill set, 16 have many skills, and five have minimal skills. No libraries have zero skills. Two of the 14 libraries that do not collaborate also have a full skill set, with eight having many skills and three having minimal skills in the area.

- **Data curation:** For data curation, eight of the 34 libraries that collaborate have a full skill set. Nineteen have many skills, and six have minimal skills. One institution that does collaborate on data curation marked it as “N/A”. Of the libraries that do not collaborate, two have a full skill set, five have many skills, and 11 have minimal skills, while two have zero skills in the area.
- **Technical support:** There were 32 libraries that reported collaborating on technical support, with four having a full skill set, 21 having many skills, four having minimal skills, and one having zero skills. One institution that collaborates also answered “N/A”. Of the 25 institutions that don’t collaborate, three have a full skill set, six have many skills, nine have minimal skills, and seven have no skills in the area.
- **Zero reported having minimal or no skills,** though one respondent did not answer the skills question. In the 30 institutions that do not collaborate on reading list provision, four libraries have full skill sets, nine have many skills, 11 have minimal skills, four have zero skills, and two answered “N/A”.
- **Participatory design:** Only 17 respondents indicated that they collaborate on participatory design. Of those, one has a full skill set, 11 have many skills, three have minimal skills, zero have no skills, and two marked “N/A”. For the 26 libraries that do not collaborate, one has a full skill set, two have many skills, 11 have minimal skills, six have no skills in the area, and five marked “N/A”.
- **Course pack provision:** Finally, of the 17 institutions that collaborate on course pack provision, five have a full skill set, eight have many skills, three have minimal skills, zero have no skills, and one respondent marked “N/A”. Of the 25 libraries that do not collaborate on course pack provision, one has a full skill set, seven have many skills, nine have minimal skills, four have no skills, and three marked “N/A”.

Fig. 17 Active collaborators with libraries to provide Open Education support



Respondents were asked if they **actively work together with persons involved in Open Access or Open Science/Scholarship or use resources common to both** when providing Open Education support. The most common specialists with whom survey respondents actively collaborated were those who provide advice on copyright and licensing (59, n = 82), information literacy (58, n = 81), training/education (55, n = 79), scholarly communication knowledge (51, n = 80), collection management (47, n = 80), discovery services (47, n = 77), knowledge exchange (44, n = 80), and storage services (40, n = 78).

The least common specialist areas for collaboration were digitisation (39, n = 78), data curation (34, n = 77), technical support (32, n = 80), reading list provision (20, n = 78), participatory design (17, n = 75), and course pack provision (17, n = 79).

The areas in which respondents did not actively work with these specialists were in reading list provision (30), participatory design (26), technical support (25), course pack provision (25), data curation (21), knowledge exchange (17), storage services (17), and scholarly communication knowledge (14) and digitisation (14). The other areas were collection management (13), information literacy (12), discovery services (11), advice on copyright (9), and training/education (8). Further investigation would

be needed to understand whether specialists were not needed as in-house expertise exists, or whether this is a general lack in the institution or library, or whether this is specific to Open Education support.

The least relevant choices, i.e. marked as N/A, were course pack provision (37), participatory design (32), reading list provision (28), digitisation (25), technical support (23), data curation (22), storage services (21), and collection management (20). The rest of the list included knowledge exchange (19), discovery services (19), training/education (16), scholarly communication knowledge (15), advice on copyright (14), and information literacy (11). All of the choices were marked as “N/A” by at least 11 respondents showing no relation to OA or OS activities or staff in these cases.

One of the free-text comments mentioned OER co-creation, and two institutions wrote “not yet”.

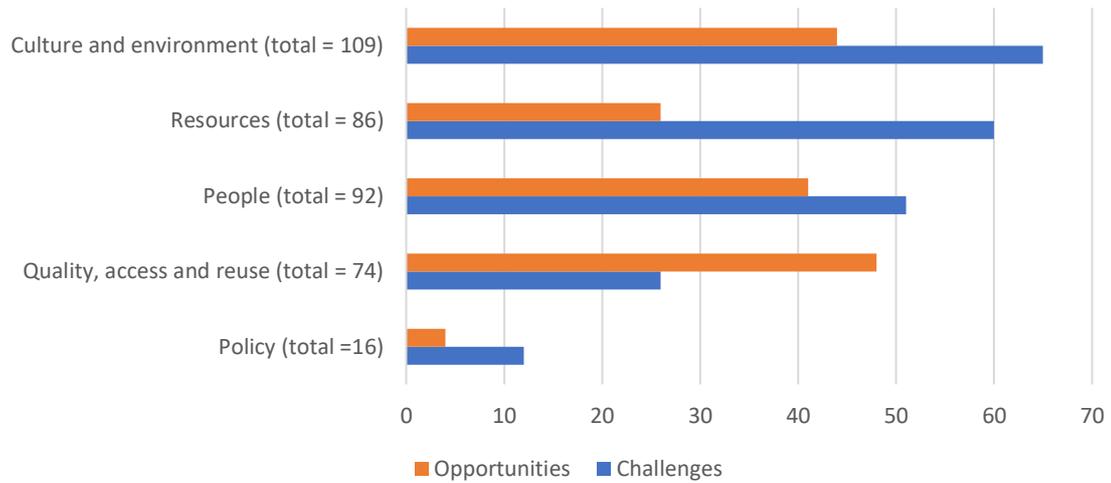
3.8 Challenges and Opportunities

Among the final questions of the survey were three free-text prompts to provide respondents with the chance to share more information: one question invited respondents to list their top three key challenges in supporting Open Education, one sought the top three opportunities or benefits, and the last question asked for any further comments. Sixty-two respondents filled out these sections. Some responses were a single word, while others wrote complete paragraphs with links to further resources. The detailed breakdown of these responses can be found in Appendix C.

In addition to Policy, four larger themes emerged from the responses: People; Resources; Culture and Environment; and Quality, Access, and Reuse. Many of the topics were mentioned in both the challenges and the opportunities questions, which may reflect the different stages of respondents on their institutional journeys with OER: if an institution does not have a policy, then respondents may be focused on developing one; however, if an institution already has a policy, then respondents are more likely to be working on implementation. This may impact their considerations of any individual topic as a challenge or benefit.

Across four of the themes—all but Quality, Access, and Reuse—the challenges outweighed the opportunities and benefits. The total number of instances across all responses is 377, which is composed of 214 challenges and 163 opportunities or benefits. The split between each of the five themes is illustrated in Figure 18 below. The total number of instances for each is listed next to each theme.

Figure 18 Number of challenges and opportunities identified across five key themes



Due to the nature of qualitative analysis, many of the responses have been coded to multiple themes, so the total number of responses for all of the themes is larger than the number of individual responses. All responses are available in the accompanying dataset, along with a list of individual codes. If a topic has been mentioned in the “any further comments” area of the survey, it has been discussed within the associated topic section.

Table 2 Key challenges and opportunities/benefits by theme

Theme	Opportunities/Benefits	Challenges
Policy	<p>Policy (16 total instances: 12 challenges, 4 opportunities) - Notably, those that consider policy to be an opportunity already have institutional policies in place and are part of libraries which are engaged with the national development of policies.</p>	<p>Policy (16 total instances: 12 challenges, 4 opportunities) - There are challenges on two levels: institutional and national. Both institutionally and nationally, respondents report a key challenge being the lack of an organisational or national OER policy.</p>
People	<p>Teaching staff (45: 29 challenges, 16 opportunities) - There are opportunities identified in cooperation with teaching staff and working on integration of OER into learning and teaching, for instance in virtual classrooms, which will provide the benefit of an improved educational offering. An additional benefit identified was in saving the working time of teachers. Respondents also reported a further opportunity in involving the libraries' teaching activities within the academic structure.</p> <p>Library staff (12: 11 challenges, one opportunity) - Only one organisation considered library staff as a benefit, claiming to have an open scholarship librarian.</p> <p>Students (12: 2 challenges, 10 opportunities) – The majority of comments reflected that this group are the main beneficiaries of OER, with opportunities for students to engage further with OER which will facilitate and improve learning and access to education, with the associated financial benefits also identified.</p> <p>External partners (23: 9 challenges, 14 opportunities) – Respondents had a more positive perspective on collaboration with external partners. Respondents based in countries with a more developed OER infrastructure report library engagement with the national development of policies as a benefit. Many respondents</p>	<p>Teaching staff (45: 29 challenges, 16 opportunities) - The overwhelming majority of respondents identified that the key challenge is the difficulty in influencing teaching staff in OE and OER although lack of time, advocacy, policy, and low recognition were also mentioned.</p> <p>Library staff (12: 11 challenges, one opportunity) – All but one respondent considered library staff a challenge, reporting that the key challenge is a lack of time and capacity and staff. A specific challenge was identified in recruiting library staff, and ensuring the right skill set in the creation of new roles.</p> <p>Students (12: 2 challenges, 10 opportunities) - The only challenge identified (by two respondents) is a lack of awareness of OE and OER.</p> <p>External partners (23: 9 challenges, 14 opportunities) - The challenges reported relate to a lack of national policies. Wider challenges related to a need to encourage Open Science to the Science community are also reported.</p>

	were enthusiastic about the potential to collaborate and share best practices in OE amongst scientific communities.	
Resources	<p>Financial (28: 16 challenges, 12 opportunities) – The monetary benefit to readers was identified as a key opportunity, as well as the financial benefits to staff when resources can be shared openly. Funding opportunities for OE teaching were also identified as an opportunity.</p> <p>Technical (19: 18 challenges, 1 opportunity) – Only one institution mentioned technology as an opportunity or benefit, focusing on how technology could optimise documentary support for activities on OA and through reading lists, spread OE platforms.</p> <p>Materials (12: 6 challenges, 6 opportunities) – The opportunities focus around expanding the range of resources provided.</p> <p>Library Skills (27: 20 challenges, 7 opportunities) – Opportunities in this area focus around improving skills development in libraries, identifying a particular opportunity around knowledge on repositories and metadata and public engagement and knowledge exchange activities.</p>	<p>Financial (28: 16 challenges, 12 opportunities) – As OE is a developing area, and OER are often cost-neutral to the end user, with various resources required to create them, the lack of funding to create OERs is a key challenge reported by a number of respondents.</p> <p>Technical (19: 18 challenges, 1 opportunity) – The majority of respondents identify technical resources as a challenge. The main challenge is in developing better infrastructure, tools, platforms and tech support. Detailed challenges focused on the difficulty of interactive online OER materials, the implementation of contextualised metadata in combination with profiles of interest and an overall lack of confidence of skills for co-creation technologies.</p> <p>Materials (12: 6 challenges, 6 opportunities) – The main challenge is a lack of resources and being able to share OE material which is already available.</p> <p>Library skills (27: 20 challenges, 7 opportunities) – The vast majority of respondents reported that the key challenge here is a lack of skills.</p>
Culture and environment	<p>Changing culture (11: 5 challenges, 6 opportunities) – Respondents identify that the benefits of this are in its creation of a culture of openness, with positive changes to the organisation’s ability to adapt and the educational practices of some teachers.</p>	<p>Changing culture (11: 5 challenges, 6 opportunities) – The challenge of this topic is the speed at which the culture is developing. Other challenges identified were surrounding how to enact change in teaching and learning environments, the institutional culture and the mindset of academics.</p>

	<p>Institutional leadership (22: 18 challenges, 4 opportunities) – Opportunities were identified in creating institutional policies or strategies, which indicates the importance of a open policies – particularly Open Science or Scholarship – within an institution.</p> <p>Library leadership (17: zero challenges, 17 opportunities) – Responses in this section were encouraging for the enterprise of OER, with respondents reporting positively the rise of the importance of the library and its leading role within the institution.</p> <p>Advocacy (35: 30 challenges, 5 opportunities) – Some institutions reported raising awareness of OER, research and changing patterns of thought and the promotion of open practice within the university as opportunities.</p> <p>Cooperation within the institution (24: 12 challenges, 12 opportunities) – The main benefit for this topic is the chance for the library to deepen its collaboration with other departments in the institution, and with teachers, educational staff, learning technologists and repository staff; and to expand faculty participation in resource creation.</p>	<p>Institutional leadership (22: 18 challenges, 4 opportunities) – The low number of institutional OER policies is reflected in the high number of respondents who cited a lack of an institutional leadership as a challenge. As a result of this, a key challenge is around convincing the relevant hierarchies of the benefits of OE and OER. The focus on Open Science was also mentioned as a challenge by one.</p> <p>Library leadership (17: zero challenges, 17 opportunities) – In contrast to the institutional leadership section, no challenges were identified for this topic.</p> <p>Advocacy (35: 30 challenges, 5 opportunities) – A prominent challenge for many respondents was in raising awareness and increasing engagement with teaching staff and the institution overall.</p> <p>Cooperation within the institution (24: 12 challenges, 12 opportunities) – The prominent challenges are the lack of overview of the organisation structure, and a lack of communication between system developers and educators and alignment and engagement with academic units. There was also a challenge identified around the lack of recognition of scholar community needs.</p>
<p>Quality, access, and reuse</p>	<p>Copyright and licensing (14: 8 challenges, 6 opportunities) – Cost-cutting was mentioned as positive. One respondent also reported this as a benefit being ‘an obvious partner’ for copyright and licensing.</p>	<p>Copyright and licensing (14: 8 challenges, 6 opportunities) – Copyright and licensing is the only topic that had more challenges than opportunities in this theme. The challenges for this topic are in the lack of understanding and confidence in the skills needed for co-creation, it being a barrier to sharing, and the costs of copyright (both awareness of them and cutting them).</p>

<p>Sharing and reuse (15: 5 challenges, 10 opportunities) – The majority of responses involving sharing were presented as opportunities, with a focus on the confidence in legally sharing reusable material with beneficiaries.</p> <p>Discoverability (12; 3 challenges, 9 opportunities) – Discovery and visibility were mentioned mostly as opportunities, in improving the ease of finding OER, visibility and in raising the institution’s profile in research-based teaching.</p> <p>Accessibility (18: 6 challenges, 12 opportunities) – The opportunities reported directly counter the challenges, mainly being to improve accessibility of content and eliminating barriers to high quality education.</p> <p>Quality (15: 4 challenges, 11 opportunities) – The prevalent perspective was that OE will increase the quality of education, with education open for public review in the same way as research publications. A wider benefit identified of OE is for equality in society to increase as university teaching resources are made publicly available.</p>	<p>Sharing and reuse (15: 5 challenges, 10 opportunities) – Challenges were identified in sharing OER in international contexts and in sharing OE best practices.</p> <p>Discoverability (12; 3 challenges, 9 opportunities) – The main challenge for this aspect was in improving visibility and impact of OER offered.</p> <p>Accessibility (18: 6 challenges, 12 opportunities) – Challenges associated with this topic concerned, delivery, distribution, usability, availability, and the accessibility to knowledge.</p> <p>Quality (15: 4 challenges, 11 opportunities) - Only one third of respondents who mentioned quality thought it was a challenging issue. The main issues are centred around quality assurance and persuading parties of the quality of OER.</p>
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4. Conclusions

This report has summarised findings from a survey of European libraries of Higher Education on Open Education (OE) and Open Education Resources (OER). It has taken a pan-European perspective and has not analysed the national context in which these libraries operate. We draw the following conclusions from the results obtained.

Funding Open Education

A very small minority, only six out of 87 respondents, reported having acquired seed funding for Open Educational work. Of those 39 libraries who carried out the most OE/OER activities, only 4 had seed funding showing that libraries are investing in this new activity themselves albeit a clear challenge on resources. Exploring more opportunities for seed-funding can help kick-start efforts within the institution and could stimulate more growth and adoption of OER. Granting programmes for OER creation for teachers can also encourage more OER activity within the institution. Only 10 out of 85 organisations had a granting programme to promote the creation of Open Educational Resources and a further 10 institutions have library budgets specifically for Open Education. Three of the organisations that have granting programmes also have library budgets for OER, but it is not possible to tell from the data whether they are distinct pots of money or if they could be the same. Of those 39 libraries who carried out the most OE/OER activities, only 7 organisations had dedicated budgets for Open Education. Overall, this evidence illustrates that the funding for OER in European libraries is still limited, with the overwhelming majority of institutions never having acquired seed funding, established granting programmes or having dedicated OE budgets. More fund-raising efforts and budget allocation for OE efforts is likely to progress OE activity.

Open Education Policies

The evidence shows that libraries are making formal commitments to OE through adopting policies, though this is currently limited: only 27 organisations out of 146 reported having policies, with 14 of these instruments being part of a larger or overarching policy.⁶ Eleven libraries report being involved in the conception of the OER policy. More specifically, libraries were involved in 3 of the 4 standalone OE/OER policies, which suggests that when the library is engaged in institutional policymaking, it may encourage the development of standalone OE/OER policies. This low number of institutional policies reflects a similar pattern found in the low prevalence of policies in Europe in the [OER Policy registry](#) which as of March 2020 recorded only 13 OE/OER institutional policies in Europe. A plausible cause for this is

⁶Proudman, V, Santos-Hermosa, G. Smith, J (2020). Open Education in academic European libraries, *The 2020 Envisioning Report for Empowering Universities, 4th Edition*, April 2020, p15

a lack of institutional commitment and leadership on OE, which is one of the main challenges reported. The study shows a general trend: OE is often part of a larger overarching institutional policy, which reflects similar conclusions from qualitative research on European institutional policies (Santos-Hermosa, 2019) or national policies in Europe which embed OE in ICT or broader educational strategies (Inamorato dos Santos, Punie & Castaño, 2016; Atenas et al, 2019). Since most OE policies reported by respondents are part of larger institutional policies, this could suggest that an institutional backing is a crucial step in the creation of formal OE policies. Concluding, there are clear opportunities for libraries to support the development of more policies to support the implementation of their work in improving access to education. Inspiration can be drawn from building on the work of other nations and academic peers.

Library Leadership and engagement

Half of the libraries surveyed take the lead in OE or OER in their institutions. These libraries are also more likely to be involved in OE policy development, with seven of the nine libraries who are involved in conceiving the OE policy reporting also taking the lead in advancing OER in their institutions. Furthermore, libraries that take the lead here unsurprisingly engage in more activities than those who do not. On average, leaders engage in 5.3 activities, while those who do not take the lead average only 3.3 activities. Note that since respondents are self-selecting and are more likely to engage with such a survey if involved with OE, this positive activity might even be considered low. More libraries could therefore consider stepping up responsibilities in this area by following their peers' examples, and following on from their leadership in Open Science.

When we observe how OE is managed in the HE organisation, only 16% of respondents report having a formal task force, committee or other similar body with an Open Education focus in their institution. Of the 23 institutions that have a formal task force, 10 of them also have a policy on OER, and 18 report that the library leads the institution in OER efforts. Although this number is small, this shows some libraries as facilitators and connectors, involved in a broader institutional effort uniting a range of stakeholders to support and drive OE forward. Since a much higher proportion of institutions with task forces also have policies, one might suggest that institutions that convene task forces are likely to have policies to drive and back them up. However, further investigation is needed to support this conclusion. As far as how OE is organised in the library itself is concerned, teaching and learning support is the most common department to lead in OER efforts, which is, by definition, an expected outcome. The second most prevalent department to manage OE was the scholarly communication section (10) suggesting strong connections between Open Science/Scholarship and Open Education.

Library advocacy and services to support Open Education

The survey explored how libraries are delivering OE support on a range of levels. Almost sixty-five respondents reported advocating for Open Education. Libraries report informing library staff on OER above other groups, which still indicates the novelty of OE in the library offering. Teaching staff come in a close second as the group to advocate, with faculty management as the third most informed group. Faculty administration and ICT staff are the groups least often informed by respondents about OER. Libraries advocate for OE by using a range of different means, with presentations, websites, events and social media averaging between 60% and 40%. To lesser extents, they are using other channels such as library communities of practice, OER project collaboration, and organizing workshops with teachers. More library engagement and advocacy targeted towards the needs of senior management, teaching staff and IT is highly likely to see more OE adoption.

Interestingly, the findings show that there is positive correlation between the OE/OER services offered and the number of students an organisation serves. The four most common areas in which libraries provide OE/OER services include information literacy (95%), advice on copyright and licensing (91%), training (84%) and discovery services (80%). Respondents also report that libraries take a leading rather than a supportive role in both information literacy and discovery services. In addition to the traditional roles of libraries and their inherent ability to discover relevant resources, the prevalence of information literacy and licensing support for OE is to be expected. For well over a decade, libraries have been educating researchers, teachers, and students about the concept and practice of “open” (open access, open science and scholarship, and now open education) helping faculty understand copyright and open licensing. Interestingly, almost as many respondents report that the library has a leading role in advice on copyright and licensing as it does a supportive one: 35 and 43 respectively. This shows the variance in skills in this area across institutions. More recently, libraries are expanding their task portfolios as they become more involved in the creation and curation of OERs (Okamoto, 2013), such as the co-creation of open textbooks (Hilton, 2016); furthermore, they are strengthening collaborative relationships with teaching faculty (Adams et al., 2018; Braddlee & VanScoy, 2018). Survey data reflects this new panorama in terms of the supporting role that libraries play in OE with about half the sample reportedly having a supportive role in OER co-creation and one quarter in participatory design. Though a promising development, more libraries could engage in such activities to increase OER. This evidence demonstrates that libraries are clearly – as claimed by other studies (West & Jensen, 2015; Braddlee & VanScoy, 2018) – exercising leadership and support in Open Education practice.

Challenges and Opportunities

This report identified a number of areas which libraries feel there are distinct challenges and opportunities in OE and OER implementation. We have summarised three key areas we feel are most pertinent to libraries from the responses received.

Resources

The availability of resources is a challenge and places limitations on what OE and OER services a library can offer. The financial and library skills topics report the most prevalent challenges in this area. Whilst the low-cost of OE for the end-user is a clear benefit, due to the emerging nature of OE and OER and the various resources required to create them, there is a highly reported lack of funding.

As far as skills to support OE are concerned, institutions reported having higher skill levels in areas where they worked together with other departments to provide OER services. This illustrates that a collaborative cross-university approach appears to facilitate skill advancement within libraries. It is therefore recommended that those working on OE and OER ensure having a strong understanding of the interplay between professionals and stakeholders internally and externally before increasing engagement there to collaboratively deliver on OER. However, the vast majority of respondents also reported suffering from a lack of skills and knowledge of OE. Our findings illustrate that the specific areas where libraries had minimal skill levels were data curation, participatory design, technical support, course pack provision, knowledge exchange, advice on copyright, and reading list provision. Therefore, it is apparent that more could be done to train librarians, as is reflected by respondents' suggestions that training opportunities could lie in areas such as knowledge on repositories and metadata and knowledge exchange and public engagement activities.

Quality, access, and reuse

The discoverability and accessibility of OER services appear to be notable challenges in this area, with improving visibility of OER and the delivery and distribution of OER being key. However, interestingly, the opportunities for this area outweigh these challenges, with some respondents reporting discoverability as an opportunity to raise their institution's profile in research-based teaching. Quality was communicated predominantly as an opportunity to increase the quality of education overall and making it subject to the same public review and validation as research publications. Notably, a wider benefit of OE was recognised by respondents, with the potential for the increased availability of university teaching resources to directly contribute to creating a more equitable society.

Culture and environment

The culture and environment of a given institution is evidently a significant factor in a library's OE and OER activity, as is reflected by the theme having received the

highest number of instances for both challenges and opportunities. Striking here is the disparity between the challenges reported in terms of institutional leadership and library leadership, with a high number reporting that a lack of institutional leadership was a challenge and no challenges being identified for library leadership. It should be noted that this emerging space is more difficult for some institutions to navigate than others, with library leaders of OER efforts facing a multiplicity of focal points. The positive response to library leadership is encouraging for the enterprise of OE, but seemingly, the institutional leadership and support to allow this is still a barrier to OE activity.

Overall

The survey revealed that academic libraries are taking an important role in advancing Open Education in Europe and the evidence shows that libraries are playing to their strengths as Open information and knowledge managers, facilitators, and disseminators. Indeed, some libraries are taking the lead to drive OE forward in their institutions and are working from the control rooms of teaching and learning or scholarly communication with a range of institutional departments to further OE and OER, although such work clearly needs to be increased. In addition, some libraries are advocates for Open Research and Open Education, and they provide essential support in information literacy and discovery, along with copyright and licensing. Furthermore, libraries could do more to support co-creation and other knowledge activities scaffolding Open Education, with innovative work here the exception rather than the rule.

We recognise that to sustain and progress the positive steps that libraries have already taken, there are a number of challenges which they must first overcome. The most significant challenge that we identify libraries face in advancing OE is the lack of institutional leadership and support of OE and OER. With a clear correlation between those who did not have an OER policy and those who saw institutional leadership as a barrier, it is evident that libraries are subject to the bureaucracies innate to the higher education environment. In order to overcome this challenge, an increased awareness and advocacy of OE is necessary, and libraries with successful OE and OER activities must further demonstrate how they have overcome this challenge. Libraries also have the potential to take a leadership role in exploring how their institution might commit more to OE through institutional policymaking, particularly in the absence of a national OE policy. Lessons can be learnt from a range of libraries who have led the way here. The next vital step is for libraries to collaborate to build a more open, creative, legally and technically sound, and informed education environment to facilitate access to education material for all.

5. Recommendations

The following ten recommendations for academic libraries can be drawn from the survey. Their relevance depends on where you are in the lifecycle of OE offering:

1. Explore opportunities for **seed-funding** projects to kick-start efforts
2. Explore **establishing a granting programme** to create OER
3. **Earmark** some of your library **budget for OE**
4. **Libraries: take leadership** in OE; many peers are. Hearts and minds have already been won with OS.
5. Help **initiate or develop an OE policy** (locally or nationally); policies are still thin on the ground. **Build** on the **policies of peers**
6. Invest more in **understanding the interplays** between **professionals & stakeholders** locally and externally, e.g. **develop a stakeholder management plan**
7. Engage more in the **co-creation of OER**
8. **Identify the skills** you need for OE/OER, and **upskill** by **partnering** more internally / externally
9. **Step up advocacy efforts** towards teaching staff and management by drawing on good practices / advocacy tools & **identify local champions**
10. Locate **where and what OERs are being created** to make them **optimally accessible** and **monitor growth** over time.

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Appendix A: Respondents by country

Austria	University of Applied Arts Vienna
Belarus	National Library of Belarus
Belgium	KU Leuven Libraries Université libre de Bruxelles University of Liège
Croatia	Juraj Dobrila University of Pula Ruđer Bošković Institute University of Osijek University of Zagreb
Cyprus	Cyprus University of Technology
Denmark	Royal Danish Library
Estonia	Tallinn University of Technology University of Tartu
Finland	Laurea University of Applied Sciences Oulu University Seinäjoki University of Applied Sciences University of Helsinki University of Jyväskylä
France	French Academic Libraries Association (ABDU) Université Paris 3
Germany	Charité Universitätsmedizin Berlin ZBW - Leibniz Information Centre for Economics
Greece	Athens University of Economics and Business Hellenic Mediterranean University International Hellenic University Panteion University University of Ioannina University of Macedonia University of Patras University of Peloponnese University of Piraeus
Hungary	University of Debrecen University of Pécs
Ireland	National University of Ireland, Galway National University of Ireland, Maynooth University of Limerick
Italy	Consiglio Nazionale delle Ricerche: Istituto per le Risorse Biologiche e le Biotecnologie Marine John Cabot University Politecnico di Torino Università di Parma Università Europea di Roma
Latvia	Daugavpils University Library National Library of Latvia

	The Library of the University of Latvia
	Ventspils Library
Lithuania	Kaunas University of Technology
	Vilnius College of Technologies and Design
	Vilnius Gediminas Technical University
Netherlands	Leiden University Medical Center
	Maastricht University Library
	Radboud University
	TU Delft
	TU Eindhoven
	University of Groningen
	University of Twente
	Utrecht University
	Vrije Universiteit Amsterdam
Norway	BI Norwegian Business School
	Nord University
	Norwegian Veterinary Institute
	University of Agder
Poland	Bialystok University of Technology
	Gdansk University of Technology
	Józef Piłsudski University of Physical Education in Warsaw
	Kazimierz Wielki University in Bydgoszcz
	Lublin University of Technology
	Medical University of Lodz
	Pope John Paul II State School of Higher Education in Białą Podlaska
	Poznan University of Technology
	University of Szczecin
	University of Warmia and Mazury
	University of Wrocław
	Uniwersytet Mikołaja Kopernika w Toruniu
	Wrocław University of Environmental and Life Sciences
Portugal	Instituto Superior de Engenharia de Lisboa
	Polytechnic Institute of Leiria
	Polytechnic Institute of Santarém
	Universidade da Beira Interior
	Universidade de Lisboa
	Universidade do Minho
	Universidade Europeia de Lisboa
	Universidade Fernando Pessoa
Republic of Moldova	Academy of Economic Studies of Moldova
Serbia	University of Belgrade
Slovenia	University of Maribor
Spain	Euskal Herriko Unibertsitatea/Universidad del País Vasco
	Mondragon Unibertsitatea
	Universidad Carlos III de Madrid

	Universidad de Castilla-La Mancha
	Universidad de Córdoba
	Universidad de Extremadura
	Universidad de Granada
	Universidad de Las Palmas de Gran Canaria
	Universidad de Navarra
	Universidad de Salamanca
	Universidad de Sevilla
	Universidad Francisco de Vitoria
	Universidad Loyola Andalucía
	Universidad Pablo de Olavide
	Universidad Politécnica de Cartagena
	Universidade de Santiago de Compostela
	Universitat Autònoma de Barcelona
	Universitat de Barcelona
	Universitat de Girona
	Universitat de Lleida
	Universitat Oberta de Catalunya
	Universitat Politècnica de València
	Universitat Pompeu Fabra
Sweden	Linköping University
	Stockholm University
	Swedish Defence University
Switzerland	Pädagogische Hochschule Schaffhausen
Turkey	Marmara University
UK	Birkbeck, University of London
	BPP University
	Coventry University
	Lancaster University
	Leeds Beckett University
	Royal Holloway, University of London
	Staffordshire University
	The University of Manchester
	The University of Sheffield
	UCL
	University of Derby
	University of Edinburgh
	University of Exeter
	University of Glasgow
	University of Leeds
	University of Salford

Appendix B: Open Educational Resource policies

Although 27 policies were mentioned by respondents, only the following links to policy documents were provided.

Greece	University of Patras	https://www.upatras.gr/en/elearning
Netherlands	TU Delft	https://www.tudelft.nl/en/about-tu-delft/strategy/tu-delft-strategic-framework-2018-2024/
Spain	Universidad de Córdoba	https://ucodigital.uco.es/index.html
	Universidad Politécnica de Cartagena	http://repositorio.upct.es/themes/Mirage2/recursos/institucional.pdf
	Universitat Oberta de Catalunya	http://hdl.handle.net/10609/4965
UK	Coventry University	http://opened.coventry.domains/oer-policy/
	University of Edinburgh	https://www.ed.ac.uk/files/atoms/files/openeducationalresourcespolicy.pdf
	University of Leeds	https://ses.leeds.ac.uk/download/96/open_educational_resources

Appendix C: Challenges and Opportunities

Among the final questions of the survey were three free-text prompts to provide respondents with the chance to share more information: one question invited respondents to list their top three key challenges in supporting Open Education, one sought the top three opportunities or benefits, and the last question asked for any further comments. Sixty-two respondents filled out these three free-text sections. Some of the responses were a single word, while others wrote complete paragraphs with links to further resources. Responses in quotation marks are direct transcriptions.⁷ Responses have not been standardized for English grammar.

In addition to Policy, four larger themes emerged from the responses: People; Resources; Culture and Environment; and Quality, Access, and Reuse. Many of the topics were mentioned in both the challenges and the opportunities questions, which may reflect the different stages of respondents on their institutional journeys with OER: if an institution does not have a policy, then respondents may be focused on developing one; however, if an institution already has a policy, then respondents are more likely to be working on implementation. This may impact their considerations of any individual topic as a challenge or benefit.

Across four of the themes—all but Quality, Access, and Reuse—the challenges outweighed the opportunities and benefits. The total number of instances across all responses is 377, which is composed of 214 challenges and 163 opportunities or benefits. The total for each theme is listed in the first line of the section. Numbers in parentheses indicate the total number of instances of the topics in the challenges and opportunities sections, respectively.

Due to the nature of qualitative analysis, many of the responses have been coded to multiple themes, so the total number of responses for all of the themes is larger than the number of individual responses. All responses are available in the accompanying dataset, along with a list of individual codes. If a topic has been mentioned in the “any further comments” area of the survey, it has been discussed within the associated topic section.

We have sought to summarise these responses but refer to them verbatim as much as possible due to the rich information they provide.

⁷ All responses that have been translated appear in their original language in footnotes.

P o l i c y

In terms of policy development (16 total instances: 12 challenges, 4 opportunities), the 12 institutions that cited it as a challenge reported difficulties on two levels: institutional and national. On the local level, respondents reported a “lack of cohesive organizational policy”, “lack of policies for the development and use of OER at institutional level”, “no official policy yet”, and “work in collaboration with university stakeholders to achieve an OE policy”.

The second level of challenges mentioned “national policy still under construction” and “lack of Open Education and Open Science Policies at national level”.

On the other hand, those respondents who considered policy to be an opportunity already have “approved institutional policies” and are part of a “Library [which] is engaged with the national development of policies”. As the field matures, more and more libraries will reap the benefits of having the backing of the organisational and national policies that they are currently working on.

P e o p l e

The main groups of people (92: 51 challenges, 41 opportunities) mentioned by respondents were teaching staff, students, library staff, and external partners. For teaching and library staff, there were more challenges than benefits mentioned, but respondents saw more opportunities and benefits with students and external partners.

Teaching staff (45: 29 challenges, 16 opportunities)

Within the challenges, the overwhelming majority of respondents were concerned with difficulties in influencing teaching staff: “engagement with academic/teaching staff”, “lack of awareness of OER amongst faculty”, “reaching all teaching staff”, “engage teachers [to] create OER”, “convince to teachers”, “willingness of teachers”, “frame to collaborate with academic units”, and “having OER on the agenda when creating new learning materials”.

Other areas mentioned included “lack of motivational infrastructure (i.e. policies, promotion among academic staff is geared almost exclusively to research outputs)”, “fears of low recognition”, “no contracts between teachers and university”, and “teachers do not have time to enhance open education”.

From the opportunities section, respondents saw benefits in “cooperation with teaching staff of the university”, “expanding active participation to resource creation by faculty”, “integration in learning and teaching”, “saving the work time of teachers”, “engagement with teaching staff”, “Improving teaching”, “to increase OER use in virtual classroom”, and “working towards the insertion of libraries’ teaching activities within the academic structure”.

Library staff (12: 11 challenges, one opportunity)

All but one of the respondents who mentioned library staff considered it a challenge: “lack of staff and time”, “not enough staff”, “staff levels”, and “need for more staff members dedicated to working on supporting Open Education”. A specific challenge related to library staff recruitment was “job creation with the right skill set”.

The only organization that considered library staff as a benefit declared “we now have an open scholarship librarian”. In one of the free-text responses, a respondent reported having several colleagues “involved in creating and distributing OER”, with one person who is responsible for the institutional OER policy.

Students (12: 2 challenges, 10 opportunities)

The only challenge listed was a lack of awareness among students (by two respondents).

The clear beneficiaries of OER are the students, which is reflected in the number of positive responses: “encourage students to participate in the social networking environments that have been created around OER repositories”, “better learning results and possibility for flexible studying”, “student driven learning”, “provides a resource for students that supports learning and collaboration”, “broadening access chances for students”, “financial benefits for students”, and even “engaging students in open practice through the creation of open content”.

A highly relevant benefit for readers of this report is that the “library has constant connection with all students”.

External partners (23: 9 challenges, 14 opportunities)

Outside the institution, respondents had a more positive perspective on collaboration with external partners.

The challenges reported by respondents related to a lack of national policies, along with “increase collaboration with other OER libraries”. Wider challenges included the need to “encourage Open Science in the entire Science community” and “project the importance of Citizen Science in Research Units in order to involve the community”.

For respondents based in countries with a more developed OER infrastructure, library engagement with the national development of policies was reported as a benefit. Other benefits included “cooperation with relevant bodies outside the library”, “facilitate academic initiatives on open knowledge (such as Wikipedia)”, “international cooperation”, and simply, “community”.

Many respondents were also enthusiastic about “possibilities for collaboration in scientific communities” to “share best practices in OE”. Individual partners mentioned include National Forum for Teaching and Learning (Ireland), National Agency for Education (Finland), SURF and VSNU (the Netherlands), REBIUN (Spain), EUTOPIA (Erasmus +), MERLOT.org (USA), SPARC, and other universities.

Resources

The kinds of resources (86: 60 challenges, 26 opportunities) mentioned by respondents can be broadly grouped into financial, technical, materials, and library skills (which is distinct from “library staff” above). In three of the four topics, there were more challenges than opportunities listed, with Materials being evenly split between challenges and benefits.

Financial (28: 16 challenges, 12 opportunities)

Since OE is a developing area across Europe and OER are often cost-neutral to the end user, various resources are required to create them which may result in the financial concerns that preoccupied a number of respondents. Many simply wrote “lack of funding”, “lack of money”, “budget”, or “funding” in the challenge section. Other budgetary challenges included “funding for the development of collections” and “funding support services”.

Conversely, some respondents highlighted the monetary benefits to readers as opportunities: “low cost”, “OER can offer savings in the cost of materials”, “cutting expenses”, “reducing library spend on subscriptions”, “ability to offer alternative study materials taking into consideration that budget is very limited”, and “to descend the total cost of some subjects and programs”.

Benefits were also noted with regard to staff and OER: “financial benefits as teachers can learn from each other and share resources → no duplicate work” and “funding opportunities for innovative teaching” was an opportunity based on a national initiative by Ireland’s National Forum for Teaching and Learning.

Technical (19: 18 challenges, 1 opportunity)

Technical challenges included a need for developing better infrastructure, tools and platforms, tech support, and “technology” in general. Detailed challenges included “building interactive or playful online OER materials”, “implementation of contextualized attention metadata in combination with profiles of interest”, and “lack of understanding and confidence in relation to skills for co-creation technologies”.

A compound regret related to technical aspects of OER expressed by one respondent was “prior lack of innovation or attention to following national/international trends means a) we’re behind the curve, b) don’t have in-house expertise, and c) don’t have services or support in place”.

The only institution to mention technology as an opportunity or benefit cited “optimizing documentary support for academic activities on OA and spread open education platforms through reading lists”.

In the free-text section, one respondent mentioned “The Ministry of Education and Culture and the Finnish National Agency for Education are developing a national service for open educational resources (aoe.fi). It is intended for all levels of education. [...] Once the service will open, it will be easier to promote for the

university management and teachers the use OERs and publishing of their own teaching materials and courses openly”.

Another free-text section declared that the “biggest part of OER is video (around 79%), techniques like elastic search, speech to text, etc., will help in better searchability of this kind of materials. Maybe an idea to pay attention as well”.

Materials (12: 6 challenges, 6 opportunities)

While the responses were evenly split between challenges and opportunities, the main sentiment for the challenge was “lack of resources” and “providing resources”, including “sharing open educational material which is already available”.

Equally, the benefits included “expansion of collection” and “expand the range of resources that we provide”.

One respondent mentioned “We answered this survey taking into account that the MOOCs are OER” in the free-text box. This particular institution offers more than 30 MOOCs, and some of the material is available outside the timeframe of a given course instance; however, there is no licensing information on the material, so it is not technically within the definition of OER governing this survey.

Library skills (27: 20 challenges, 7 opportunities)

The vast majority of respondents suffered from a lack of skills: “lack of understanding and confidence”, “not enough skills”, “improve the open science knowledge and skills of library staff”,⁸ “getting staff properly training and knowledge about OE”, “professionalisation of support”, and “number of skilled staff members in the library”.

Among the opportunities mentioned were “new skills development in libraries”, “knowledge on repositories and metadata”, “public engagement”, “knowledge exchange”, and “library staff have and can share their knowledge to academic staff related to creating, long-term preservation, and access education materials”.

In the free-text box, one respondent reported that there are no longer postgraduate librarianship qualifications in their country: “This is currently an obstacle. It’s not just important to have highly trained librarians/information specialists who have an overview of our own collections – it’s also important for them to have an eye on external collections (OER repositories, for example) in order to offer advice or develop services involving retrieval, use, etc. of those resources. OER literacy.”

⁸ Original: “mejorar los conocimientos y habilidades en ciencia abierta del personal bibliotecario”

Culture and environment

The culture and environment theme (109: 65 challenges, 44 opportunities) comprises changing culture, institutional leadership, library leadership, advocacy, and cooperation between services. This theme has the highest number of instances of all of the themes, which demonstrates that organisational concerns are significant for the majority of survey respondents. In two of the topics—institutional leadership and advocacy—the challenges far outweighed the opportunities; however, in library leadership, there were zero challenges reported. The other two topics were both balanced evenly between challenges and benefits.

Changing culture (11: 5 challenges, 6 opportunities)

Changing the culture among teaching staff and students was seen as both a challenge and an opportunity. Some respondents felt the “open and sharing culture is developing very slowly”, and others were challenged by “changing teaching and learning environments”, “changing institutional culture to develop a system of incentive, including reward and recognition in learning and teaching”, and “to change the mindset of academics”.

Conversely, other respondents saw “the culture of openness”, “better organisation and to be ready to change the way of teaching-learning”, and “to have changed a little bit the behaviour (as for designing courses) of some teachers” as benefits.

Institutional leadership (22: 18 challenges, 4 opportunities)

The low number of institutional OER policies is reflected in the high number of respondents who cited a lack of an institutional leadership as a challenge: “institutional policy to support Open Education”, “lack of university’s initiative to cooperate and involve the library”, and “in our university, no one is interested in open resources, in an organizational sense, although many employees and students use them”.

“Convincing” and “encouraging” the board, the faculties, the organisation, and university authorities about “the benefits of OER” and that “OE is a good choice”, and “to create a team creating open educational resources” appeared in a number of responses as a challenge.

Another angle on the lack of institutional leadership was the challenge that can arise from ambiguity around Open Science: “not enough organizational support. Open Science efforts focus on open publishing and education is neglected”.

In contrast, one respondent reported an opportunity regarding the “emphasis locally on openness in scholarship (i.e. ‘Open’ as part of four values of new University strategy)”.

Other opportunities cited include “approved institutional policies”, “Open Science Policy”, and “strategy”, which demonstrates how important it is that an institution have a policy on OER to turn institutional leadership into an opportunity rather than

a challenge. No respondents mentioned “task forces” in either the challenges or opportunities.

Library leadership (17: zero challenges, 17 opportunities)

In direct contrast to the “Institutional leadership” section, none of the respondents who referred to leadership in a library context did so in the challenges section: everyone considered library leadership to be a benefit or opportunity.

The responses in this section were encouraging for the enterprise of OER: “The Open Education Initiative helps to complete one of the library’s basic missions: knowledge for everybody anywhere and anytime”. Other positive examples of library leadership include: “rise of the importance of the library”, “OER are in line with our open access / open science agenda of the library”, “demonstrating leadership and innovation by using OERs”, “positioning the Library as the home of open scholarship at the institution”, “take a leading role in the university”, and “greater visibility for the library”.

Interestingly, the three institutions who brought up the topic in the free text section were all struggling with their role in relation to OER:

- “Open Education is not something the library discusses or has the capacity to support within the organisation, it may be happening within academic departments; however, the library staff have no awareness of this”
- “Our main OER activity is outside of the Library, it would be great to have the library more involved”
- “We cannot say that we lead the development of Open Education in our institution and more broadly, but we do all the best what we can with resources available to us, to pave the way for Open Education”

It is important for individual librarians not to feel isolated in their efforts. One respondent noted “This survey was really helpful for seeing what specifically is missing from our services, organization, etc. and for inspiring new ideas”, which is encouraging.

Advocacy (35: 30 challenges, 5 opportunities)

Raising awareness and increasing engagement with teaching staff and sometimes the overall institution was a prominent issue for many respondents. Along with the common “raising awareness of existing resources”, “promotion”, and “disseminating information about OER”, one person saw “creating a sense of urgency for OE” as a challenge, which is in line with “convincing potential participants to dedicate time and effort to stuff that they see beneficial only to an institution that is not perceived as particularly rewarding”.

Other responses for the challenges of advocacy sought “more research on added value of OER, and impact on learning”, “breaking established patterns of thought”, and “how to promote open education materials among professors so that they would be ready to use it in their teaching”.

Similar comments were recorded as opportunities by other institutions: “raising awareness of the scientific community” and “promoting open practice within the university”.

Cooperation within the institution (24: 12 challenges, 12 opportunities)

Working with other services and departments within the same institution was seen equally as both a challenge and an opportunity by different respondents.

Challenges encountered were “lack of overview of the organization structure”, “lack of communication between system and tool developers and educators”, “getting all involved parties on the same page”, and “frame to collaborate with academic units”. Other challenges were “recognition of scholar community needs”, and the domino effect that “librarians should work more closely with learning technologists who work with faculty to create OERs”.

The benefits included the chance for the library to “deepen cooperation with teachers” and “expand active participation to resource creation by faculty”. The most common parties that respondents targeted for collaboration were teaching and education staff members, but they also mentioned learning technologists, repository staff, the “teacher training academy”, and “the different agents of OER in our university”.

Quality, access, and reuse

The final theme of quality, access, and reuse (74: 26 challenges, 48 opportunities) comprises copyright and licencing, sharing and reuse, discoverability, accessibility, and quality. Benefits and opportunities outweigh the challenges in four of the five topics in this theme, which is unlike any of the other themes in this survey.

Copyright and licencing (14: 8 challenges, 6 opportunities)

Copyright and licencing is the only topic that had more challenges than opportunities in this theme. Different institutions saw copyright and licencing as both an opportunity and a challenge for the same reasons. Some cited the challenges of a “lack of understanding and confidence in relation to skills for co-creating: technologies, licencing” and that “teachers are hesitant to share their work because they are afraid of copyright infringement”. Most of the respondents wrote much shorter answers, including “licencing”, “copyright and legal issues”, “dealing with copyright restrictions”, and “knowledge about copyright”.

The costs of copyright came up a few times on both sides, but there was very little contextual information: “awareness of copyright costs” was a challenge, and “cutting copyright costs” was an opportunity. It may be the case that “awareness of copyright costs” relates to the challenge of increasing awareness of copyright costs with teaching staff which might have the effect of galvanising them to adopt and create OER; however, given the brevity of the responses, it is not possible to speculate without further qualitative investigation.

With regard to opportunities, one institution is “an obvious partner when it comes to copyright and licensing”, while another has “faculty [who] are aware of licensing models that they can later transfer to other activities, e.g. publishing”.

Sharing and reuse (15: 5 challenges, 10 opportunities)

Among the challenges for sharing and reuse were “international collaboration in sharing OER, connecting repository/interoperability of OER” and “share best practices in OE”. In another context, these might be considered opportunities; however, the participants both chose to enter them as challenges (and had different answers in the opportunities fields), so their choices are definitive, if not entirely transparent.

The majority of responses involving sharing were presented as opportunities, with a wide range of potential beneficiaries mentioned: “sharing OER on information literacy with our colleagues in our country” and “I can share with others (family, friends)”.

Respondents are also confident that “I can share it with others without fear about legal aspects”, along with “better shareability”, “legal reuse of third party materials”, “time/cost saving due to sharing/reuse of material”, and “reuse of learning and teaching materials”.

Discoverability (12; 3 challenges, 9 opportunities)

The main challenges of discoverability were “get more visibility to the collection of OER learning objects in the repository” and “improve visibility and impact”⁹.

Discovery and visibility were mentioned mostly in an opportunity context, such as “easy to find”, “to have better visibility and positioning”,¹⁰ “raising the profile of [the institution’s] research-based teaching”, “making some OERs findable internally”, and simply “visibility” (twice).

Accessibility (18: 6 challenges, 12 opportunities)

The challenges associated with accessibility, such as “delivery”, “distribution”, “usability”, “availability”, and “improve accessibility to knowledge”¹¹, were directly countered by the opportunities, including “improved accessibility of content for students”, “to eliminate barriers to high quality education”, and “broadening access chances for students”. As with some of the other issues brought up in the survey, this may be attributable to the institution’s stage on the OER journey—accessibility can be challenging until it is addressed appropriately, after which point it becomes a benefit.

Several respondents went beyond student bodies to consider benefits for wider user groups as well: “free access to full text for every one”, “many users can benefit from

⁹ Original: “mejorar la visibilidad e impacto”.

¹⁰ Original: “tener mayor visibilidad y posicionamiento”

¹¹ Original: “mejorar la accesibilidad al conocimiento”

their easy access to knowledge”, “better access to educational resources”, “no barrier restrictions”, “access to current scientific information”, and “more information diffusion”.

Quality (15: 4 challenges, 11 opportunities)

Only one third of respondents who mentioned quality thought it was a challenging issue: “persuading parties about quality of resources”, “quality assurance”, “access to high quality, relevant teaching and learning materials”, and “finding suitable study materials for open education”.

The most comprehensive comment regarding quality was “the culture of learning will open up and equality in the society will increase as university teaching resources will be open for all public. Open Education improves the continuing education of professionals and benefits the whole society when professionals have up-to-date knowledge”.

Another participant was confident that “open education will increase the quality of education as education is open for public reviewing in the same way as research publications are”. Reinforcing that perspective included “improving quality of resources”, “overall uniformity in educational standards at all [specialist institutions] due to sharing/reuse of material”, “high quality material already available OER”, “up to date content, especially via Open Textbooks, when scientific domain is changing rapidly”, “more validated information, better science”, and “rise of students’ knowledge on information literacy and access to quality materials”. Finally, through OER, “everyone in the world should have access to high-quality educational experiences and resources”.

Appendix D: Survey questions

See overleaf



Survey: Open Education in European Libraries of Higher Education

Introduction

You are invited to participate in a survey of European academic libraries commissioned by SPARC Europe. This survey was developed by SPARC Europe in consultation with members of the European Open Education Librarian Network.

Having shown consistent leadership in opening up their research, developing policy and practice in Open Access, Open Scholarship and Open Science for years now; libraries are natural Open Education (OE) partners. We define OE as resources, tools and practices that are free of legal, financial and technical barriers and can be fully used, shared and adapted in the digital environment.

Whilst some Higher Education libraries have taken on the OE challenge, others are still to do so. This survey intends to shine a light on the development of OE in academic libraries in Europe. Results will help inform how we can work together to strengthen Open Education and Open Education Resources in our institutions across Europe. The ultimate goal is to increase Open Education and OER support in Higher Education institutions and their libraries. We recognise that many who participate in the survey will not be active on the full range of issues covered. Please do not be discouraged if some questions do not correspond with your current ways of working: all answers will help us paint a picture of OE in Europe.

The survey requests information on total staff and student numbers and a short summary of your OE policy, if your organisation has one. It may be useful to have this information and document to hand prior to starting the survey.

Completing the survey will take approximately 30 minutes. A PDF is available [here](#). You don't need to complete the survey in one sitting. You can close it and return later to the page where you left off. Leaving the survey via the exit button on the top right of the page saves your progress. Return to the survey, using the link and the device you started on. Although we would like you to answer every question, only those marked with an asterisk * are mandatory. This survey should be completed by the main individual responsible for OE in your library, e.g. OE Librarian, Teaching & Learning Librarian, or if absent, the Library Director. You may wish to discuss who will be the most suitable respondent.

Ethics and data protection policy The survey is managed by SPARC Europe. You may supply your name and contact details to be informed of the outcomes of this study and to answer any follow-up questions. No personal information is required to submit a response.

The survey deadline is Friday, 20 Dec 2019



Survey: Open Education in European Libraries of Higher Education

ABOUT YOUR ORGANISATION

* 1. What is the name of your organisation?

2. Which of the following best describes your organisation?

3. Please describe the size of your organisation - how many FTE (full time equivalent) staff members are there?

Please provide a total of all staff members in your organisation.

- | | |
|--------------------------------------|---------------------------------------|
| <input type="radio"/> 0 - 1,000 | <input type="radio"/> 10,001 - 15,000 |
| <input type="radio"/> 1,001 - 5,000 | <input type="radio"/> > 15,000 |
| <input type="radio"/> 5,001 - 10,000 | <input type="radio"/> N/A |

4. Please describe the size of your organisation - how many students are there?

Please provide the total for enrolled students ISCED 5-7 (short-cycle, bachelors and masters or equivalents).

- | | |
|---------------------------------------|---------------------------------------|
| <input type="radio"/> 0 - 1,000 | <input type="radio"/> 15,001 - 20,000 |
| <input type="radio"/> 1,001 - 5,000 | <input type="radio"/> > 20,000 |
| <input type="radio"/> 5,001 - 10,000 | <input type="radio"/> N/A |
| <input type="radio"/> 10,001 - 15,000 | |

5. In what country is your organisation based?

POLICY

We refer to policy as a written document that stipulates the expectations related to Open Education for an institution or country. Its goal is to lead to the creation, increased use and/or support for improving Open Educational Resources (OER). Beyond an institutional policy document, laws, rules, green papers white papers, roadmaps, declarations, and funding programmes are included in policy.

6. Does your organisation have an Open Education policy?

Yes

No



Survey: Open Education in European Libraries of Higher Education

POLICY

7. Is your Open Education policy part of a larger, overarching policy, or is it a standalone policy dedicated to Open Education?

- Part of a larger, overarching policy
- Standalone policy dedicated to Open Education

8. Was your library involved in the policy conception?

- Yes
- No

9. Please summarise the key points of your policy.

10. Please provide the name and, if available, a link to your Open Education policy.

Policy name

Link to policy

Survey: Open Education in European Libraries of Higher Education

LIBRARY ENGAGEMENT WITH OPEN EDUCATION

11. Does your library take the lead in advancing Open Education or Open Educational Resources (OER) in your organisation?

- Yes
 No

12. On what level do you collaborate with each of the following bodies in your advancement of Open Education / OER?

Please provide details of any additional bodies in the 'other' textbox.

	Regular	Ad-hoc	No
Academic Departments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alumni Association	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assistive Technology or Disability Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Campus Store	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communications Office	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E-Learning/Distance Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Faculty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Faculty Champion(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Faculty Board(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information Technology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Legal Department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other Student Group(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Senior Administration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student Union	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Student Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teaching and Learning Centre	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vice-rectorate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

13. Does your organisation have a formal task force, committee or other entity with an Open Education focus?

- Yes
 No



Survey: Open Education in European Libraries of Higher Education

LIBRARY ENGAGEMENT WITH OPEN EDUCATION

14. At what level does this task force, committee or other entity operate?

- Organisation-wide
- Library
- Other (please specify)

15. Which library department, if any, takes the lead in Open Education / OER efforts?

If none or other, please specify in the 'other' textbox.

- Collection management
- Innovation
- Open Education department
- Scholarly communications
- Senior management
- Student services
- Teaching and learning support
- Other (please specify)

Survey: Open Education in European Libraries of Higher Education

OPEN EDUCATION ADVOCACY

16. As a library, how do you advocate for Open Education / OER?

You may select more than one answer.

- Events
- Faculty meetings
- Graduate professional development programmes
- Libguide
- Library events
- Newsletter or blog
- Publications
- Presentations
- Social media channel
- Teacher training programmes
- Undergraduate professional development
- Other training
- Website
- Other (please specify)

17. Who do you inform about Open Education / OER?

You may select more than one answer.

- Senior institutional management
- Faculty management
- Faculty administration
- Graduates
- ICT staff
- Library staff
- Undergraduates
- Student services
- Teaching staff
- Other (please specify)

Survey: Open Education in European Libraries of Higher Education

SERVICES

18. To what extent does your library provide Open Education / OER services? Please provide information on whether you take the lead or have a supportive role.

Please add any additional services in the 'other' textbox.

	Lead role	Supportive role	N/A
Advice on copyright and licensing when publishing material	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collection management / dealing with education publishers and aggregators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Course pack provision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data curation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discovery services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digitisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information literacy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowledge exchange	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
OER co-creation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participatory design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reading list provision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scholarly communication knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Storage services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training / Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

19. To what extent does your library have the skills it needs to support Open Education?
 You may add any additional skills you feel support Open Education in the 'other' textbox.

	Full skill set	Many skills	Minimal skills	No skills	N/A
Advice on copyright and licensing when publishing material	<input type="radio"/>				
Collection management / dealing with education publishers and aggregators	<input type="radio"/>				
Course pack provision	<input type="radio"/>				
Data curation	<input type="radio"/>				
Discovery services	<input type="radio"/>				
Digitisation	<input type="radio"/>				
Information literacy	<input type="radio"/>				
Knowledge exchange	<input type="radio"/>				
Participatory design	<input type="radio"/>				
Reading list provision	<input type="radio"/>				
Scholarly communication knowledge	<input type="radio"/>				
Storage services	<input type="radio"/>				
Technical support	<input type="radio"/>				
Training / Education	<input type="radio"/>				

Other (please specify)

20. Do you actively work together with persons involved in Open Access or Open Science / Scholarship or use resources common to both when providing Open Education support?

Please add any additional services in the 'other' textbox.

	Yes	No	N/A
Advice on copyright and licensing when publishing material	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collection management / dealing with education publishers and aggregators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Course pack provision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data curation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discovery services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Digitisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information literacy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowledge exchange	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participatory design	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reading list provision	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scholarly communication knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Storage services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Technical support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Training / Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other (please specify)

Survey: Open Education in European Libraries of Higher Education

FUNDING

21. What are the average annual undergraduate tuition fees for higher education at your organisation?
(EUR)

- 1 - 100
- 101 - 1,000
- 1,001 - 3,000
- > 3,000
- N/A

22. What is the percentage split between parties responsible for payment for educational resources?
Please ensure your answers total 100%.

Percentage split

Student	<input type="text"/>
Organisation	<input type="text"/>
Other	<input type="text"/>

Other (please specify)

23. As a library, did you acquire seed funding for Open Educational work?

- Yes
- No

Survey: Open Education in European Libraries of Higher Education

FUNDING

24. Where did you obtain seed funding from?

- Senior institutional management
- Faculty
- IT services
- Student services
- Library
- External project funding
- Other (please specify)

25. Does your library have a budget for Open Education?

- Yes
- No

26. How many FTE (full time equivalent) staff members are dedicated to working on Open Education in your library?

- 0
- 0-1
- 2-5
- 6-9
- 10+

27. Does your organisation have a granting programme to promote the creation of OERs?

- Yes
- No



Survey: Open Education in European Libraries of Higher Education

CHALLENGES AND BENEFITS

28. What are your top three key challenges in supporting Open Education in your library?
Your responses may be up to 500 characters per challenge.

Key challenge 1

Key challenge 2

Key challenge 3

29. What top three opportunities or benefits have you identified in supporting Open Education in your library?

Your responses may be up to 500 characters per opportunity/benefit.

Opportunity / Benefit 1

Opportunity / Benefit 2

Opportunity / Benefit 3

30. If you would like to add any further comments to your survey response, please include these below.



Survey: Open Education in European Libraries of Higher Education

YOUR DETAILS

31. Your details

This is an optional question. SPARC Europe will only use these details should you consent for them to contact you to share results and to request further information, if necessary.

Name

Function in organisation

Email address

* 32. Do you consent to be contacted by SPARC Europe in order for us to share the results with you, and to request further information regarding your responses, if necessary?

Yes

No