# Open Educational Resources in the Commonwealth 2021

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The Commonwealth of Learning (COL) is an intergovernmental organisation created by Commonwealth Heads of Government to promote the development and sharing of open learning and distance education knowledge, resources and technologies.

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4710 Kingsway, Suite 2500 Burnaby, British Columbia Canada V5H 4M2

Telephone: +1 604 775 8200

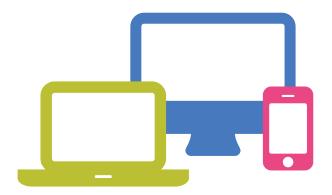
Fax: +1 604 775 8210 Web: www.col.org Email: info@col.org



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# **Foreword**



The Commonwealth of Learning (COL) is a leader in promoting open educational resources (OER). As an intergovernmental organisation with the mandate to promote the development and sharing of open and distance learning (ODL) knowledge and expertise, COL started collaborative course development and sharing way back in 1999 — even before the term OER was coined. Over the years, COL has been part of the international OER movement and organised several regional

workshops and consultations in all regions — from the Caribbean to Europe, Africa, Asia, and the Pacific. Notably, COL organised the World OER Congress in 2012 and 2017, in collaboration with UNESCO. COL was also instrumental in preparing the background documents for these international events through stakeholder surveys and consultations. COL's *OER Global Report 2017* identified the status of OER globally, leading to the Ljubljana OER Action Plan. Taking the action plan forward, the UNESCO General Conference in 2019 adopted the Recommendation on OER.

Access to relevant, quality learning resources is critical to learning. However, there are significant challenges to providing access. While the Covid-19 pandemic exacerbated the challenges of access due to lack of digital connectivity, the demand for and use of OER increased significantly. The need for curated content aligned to national and institutional curricula was highlighted in a survey conducted by COL and the OER Foundation in 2020. Another was to build the capacity of stakeholders to create, access, reuse, adapt and redistribute OER.

In COL's Strategic Plan 2021–2027, OER has a vital role to effect transformational change at the institutional level. Therefore, we must regularly assess the status of OER use and access in the Commonwealth. The present report analyses the progress towards mainstreaming the use of OER. The report shows several positive developments compared to the findings of previous OER surveys. For example, there is an increase in awareness of OER among stakeholders. There are more OER activities at all levels of education, with a significant increase in the tertiary education sector. The actual involvement of the respondents with OER-related activities is well above 20%, which is considered a tipping point for any innovation to become mainstream. Findings also show the increased need for skills training to leverage the power of OER. Respondents identified gaps in licensing and copyright-related skills rather than in finding OER. The lack of a policy environment for OER remains a crucial barrier.



COL believes that learning is the key to sustainable development and that it must lead to economic growth, social inclusion and environmental conservation. OER-based course materials have the potential to save time, improve quality and decrease costs. As the COL strategic plan is implemented, we are committed to supporting governments and educational institutions to develop appropriate policies and build their capacities. Using online and in-person training will be critical for increasing access to quality educational opportunities in the Commonwealth.

We believe that the report's findings will help Commonwealth Member States take note of the trends and develop appropriate strategies. We are thankful to our partner institutions for their collaboration and support. Our thanks are also due to The William and Flora Hewlett Foundation for consistently supporting the promotion of our OER work in the Commonwealth.

Professor Asha Kanwar

President and CEO

Commonwealth of Learning

Amahamar

# Executive Summary

In 2016 and 2017, COL conducted surveys on open educational resources (OER) to understand the landscape and provide a snapshot of the status of OER in the world community. The present survey used a modified version of the 2016 and 2017 questionnaires to collect data. This report presents the survey findings.

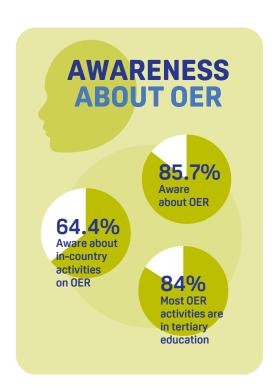
The results indicate 85.7% of respondents were aware of OER, while 64.4% of them were also aware of in-country activities about OER. Most of these activities (84%) are at the tertiary education level (ISCED 5–8), followed by the secondary education (ISCED 2 and 3) and primary education (ISCED 1) levels, at 75.8% and 74.4%, respectively. OER activity at the post-secondary/not tertiary (ISCED 4) level is at 70.3%. Awareness about in-country OER repositories and the use of available OER repositories worldwide is low. The most used repositories and platforms are: OER Commons (37.5%), COL Commons (36.2%), OpenLearn (29.8%), the Directory of Open Access Journals (27.8%) and MIT OpenCourseWare (25.9%).

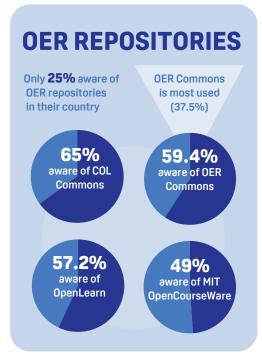
Respondents believed OER promoted open and flexible learning opportunities (63.6%) in their countries and would increase the quality of learning resources (56.3%), leading to improved access to quality materials (53.8%).

The survey results show the spread of OER in Commonwealth countries and indicate that most of the respondents had used COL's resources for capacity building in OER: 54.7% of the respondents had completed the Understanding Open Educational Resources online course, while 45.3% had had the opportunity to attend an in-person training on OER organised by COL.

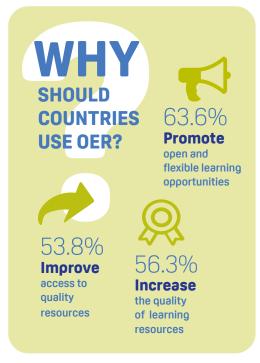
Access to teaching and learning material has worsened since 2017, as 43.82% of the respondents sometimes had difficulty obtaining relevant resources. However, they believed that OER could save time for teachers (88.5%) and lower the cost of learning materials (85.7%). Quality also remains a concern for stakeholders, as the respondents were almost equally divided between agreement and disagreement when asked about the quality of OER.











# **OER CHALLENGES**

47.4% Poor skills to find, use and create OER

46.8% Lack of supporting

policy

46.8% Poor connectivity

# Three areas with low skills:

43.1% Understanding licences and how they work

45.9% Performing adaptations (remixing different

45.9% **Understanding** copyright

OERI

# **USE OF** OER

Only 15.6% have released original content as OER

22% have adapted/ remixed OER

62.7% do not use open licence

### **EASE OF USE:**

PDF 79.7%

> 77.9% HTML5 57.9%

### OER USER IN:

45.9% in classroom teaching

45.6% in online teaching

as additional reference material

Least used in assessment

# INFLUENCE OF OER IN TEACHING AND **LEARNING**



55.4% Improved sharing of resources by teachers

56.9% Improved teacher orofessional development

55.6% Improved quality of teaching and learning

# **OER USE DURING**

Word

46.4% Students found **OER** very useful to complete learning

Over 50% increase in the use of OER during the pandemic

Most used

**OER repositories: OER Africa and OER Commons** 

47.7% Finding relevant OER was easy

52% OER supported student learning during lockdown period

While 44.9% reported involvement in some OER activities/projects, 22% had remixed/adapted OER and 15.6% had released original content developed as OER, indicating that OER has reached the tipping point in the Commonwealth. OER are being used largely for classroom teaching (45.9%), followed by online learning (45.6%). There is a gap when it comes to promoting the use of OER for curricular planning and assessment. Over 40% of respondents had never used OER in augmented reality or virtual reality mode (AR/VR). This is an important point, as the availability of AR/VR OER is currently limited.

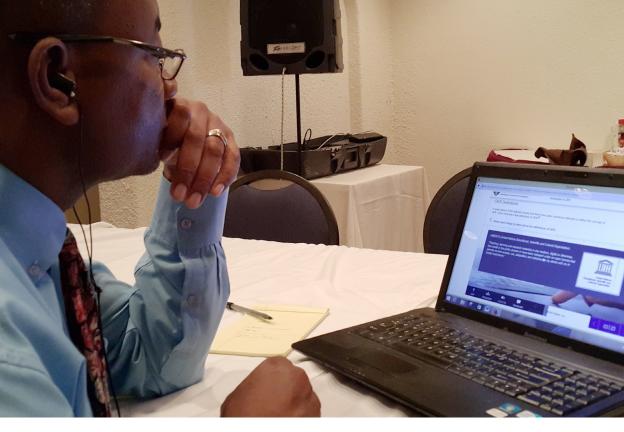
Use of an open licence to release OER is limited, as only 36.4% of respondents used Creative Commons licences for materials released as OER, while 0.9% used other licences, such as GNU's General Public License.

The use of OER in the respondents' institutions had influenced teacher professional development (56.8%), improved the quality of teaching and learning (55.6%) and enhanced sharing practices (55.4%).

OER supported student learning during Covid-19 lockdown periods (52%). The use of OER repositories and platforms during these times was limited, as only COL Commons and OER Africa were accessed (30% each) by the respondents. This is a key point for OER practitioners to note: the "if we build it, they will come" approach does not work. However, the data show there was an increase of over 50% in the use of OER during the pandemic.

In terms of barriers to mainstreaming OER at the national level, 86.9% of the respondents pointed to a lack of user capacity to access, reuse and share OER, followed by insufficient inclusive and equitable access to quality content (81.8%). Individually, lack of skills (47.4%), followed by lack of OER policies (46.8%) and lack of connectivity (46.8%) are the key barriers for mainstreaming OER. A skills gap remains when it comes to understanding copyright, licences and the remixing of OER. This report highlights the need to continue focusing on OER training as a key strategy for OER mainstreaming.





# **Q** Background

Access to quality educational resources is key to achieving Sustainable Development Goal 4 (SDG4): "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." However, textbook availability remains limited (UNESCO, 2016). In many countries, textbook costs are high, so students cannot afford to buy them, despite being fully aware that such a decision will hinder their learning (COL, 2017c; Nagle & Vitez, 2020). A country-wide survey in the USA showed 63 per cent of the respondents had chosen not to buy a necessary textbook due to high cost.

Recognising this challenge and aware of the technological affordances that could improve access to educational materials, UNESCO in 2002 organised a forum that coined the term open educational resources (OER). They defined OER as "[t]he open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes" (UNESCO, 2002, p. 24). Over the years, the definition and understanding of OER has evolved. The World OER Congress 2012, jointly organised by UNESCO and the Commonwealth of Learning (COL) with the support of The William and Flora Hewlett Foundation, described OER as:

teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions. Open licensing is built within the existing framework of intellectual property rights as defined by relevant international conventions and respects the authorship of the work.

As such, OER can be any educational item, such as a textbook, course materials, audio and video files, and so forth, available in digital or non-digital format. Ideally, OER are available for adaptation free of cost, under an open licence or in the public domain, allowing others to repurpose them for new uses.

In 2017, UNESCO organised the 2<sup>nd</sup> World OER Congress, which resulted in an outcome document called *The Ljubljana Action Plan*. Taking further action on this, the UNESCO General Conference in November 2019 adopted the Recommendation on OER, which explained OER as follows (UNESCO, 2019):

- Open educational resources (OER) are learning, teaching and research
  materials in any format and medium that reside in the public domain or are
  under copyright that have been released under an open licence that permits
  no-cost access, reuse, repurposing, adaptation and redistribution by others.
- Open licence refers to a licence that respects the intellectual property rights of the copyright owner and provides permissions granting the public the rights to access, reuse, repurpose, adapt and redistribute educational materials.

There are different types of licences that facilitate the production and distribution of instructional materials, with each providing a certain degree of flexibility. The most common and widely used is the suite of Creative Commons (CC) licences, with over two billion resources currently licensed online. The legal framework of CC provides guidelines that ensure practitioners retain attribution to their work even while the work is shared; it also allows people to choose to restrict use for commercial activities. The umbrella word for these resources is "open," which is characterised by the 5Rs framework: Retain, Reuse, Revise, Remix, and Redistribute (Wiley, n.d.). The openness of the resources makes them potential tools for the transformation of education, which is generally perceived as a public good.

<sup>1</sup> https://creativecommons.org/licenses/

The UNESCO OER Recommendation identifies five areas of action for stakeholders:

- (i) building the capacity of stakeholders to create, access, reuse, adapt and redistribute OER
- (ii) developing supportive policies
- (iii) encouraging inclusive and equitable quality OER
- (iv) nurturing the creation of sustainability models for OER
- (v) facilitating international cooperation

It is important to monitor the progress of OER in Commonwealth Member States and support educational institutions to leverage the power of OER (COL, 2017a):

- *Improved access to textbooks*: Using available, openly licensed materials would significantly improve access.
- *Improved quality*: Adopting standard publishing practices would ensure the quality of OER. A COL study at Antigua State College showed OER use improves the quality of student learning (Emarge Ed, 2017).
- *Improved teacher professional practice*: As OER are materials that can be adapted and remixed by teachers, they provide an opportunity for teachers to improve their professional practice.
- Increased access to non-English language resources: OER have the potential to improve access to resources in local languages by promoting the creation of teaching and learning materials in mother tongues and the translation of materials from other languages.
- *Cost savings for learners*: Learners and parents could save huge sums of money through using OER.
- Support for lifelong learning: As OER are openly available in increasing numbers of subject areas, anyone can learn using these materials anytime and anywhere, making lifelong learning possible.
- *Cultural diversity*: The use of OER improves learners' understanding of cultural diversity via various formats.

COL has been a front runner in creating enabling environments for the sharing of educational resources. Even before the term OER was created, COL facilitated STAMP 2000+, a free resource to train schoolteachers, developed collaboratively by teachers in eight Southern African countries (Kanwar, 2016). In 2011, COL became the first intergovernmental organisation to adopt an OER policy for its resources. COL focuses on building the capacities of Commonwealth countries to create, curate and share OER for development. Supporting appropriate national and institutional policy development, creating repositories and fostering collaboration at national, regional and international levels are part of COL's strategies to increase access to quality learning materials.

With the closure of schools due to Covid-19, Azevedo et al. (2021) estimate that the current generation of students now risks losing \$17 trillion in lifetime earnings, or the equivalent of 14 per cent of today's global GDP. Realising the significance of school closures, COL has, since the early days of the pandemic, increased its focus on OER and support for teachers through various initiatives and online courses. A curated list<sup>2</sup> of resources for training on distance and online learning was immediately created, followed by the establishment of a network<sup>3</sup> of international partners to share courses. COL's OER4Covid<sup>4</sup> initiative with the OER Foundation facilitated a support community during Covid-19 and provided several online learning opportunities. COL also released several massive open online courses (MOOCs) on OER for online learning to help the rapid transition to online learning. In 2021, COL launched the COL Commons,<sup>5</sup> a short-course platform to provide just-in-time training opportunities. Where sufficient bandwidth is a problem, COL uses Aptus,<sup>6</sup> a low-cost server, to provide last-mile equitable access to OER.



- 2 https://www.col.org/keeping-the-doors-of-learning-open-covid-19/
- 3 https://opendoor.col.org/
- 4 https://oer4covid.oeru.org/
- 5 https://colcommons.org/
- 6 https://aptus.col.org/



# PREVIOUS SURVEYS

In the past, COL has conducted surveys on OER to understand the landscape and provide a snapshot of the status of OER in the world community. The 2012 survey of OER prior to the World OER Congress showed 45% of countries indicating they had a policy/strategy on OER, while in reality, "few such policies exist[ed], as many policies [were] still in the process of being drafted." Copyright and connectivity issues emerged as key obstacles to OER adoption (Hoosen, 2012). In 2016, with the support of The William and Flora Hewlett Foundation, COL conducted a status review of OER in the Commonwealth. This survey revealed lack of time, lack of awareness and poor Internet connectivity to be the main barriers for teachers wishing to use OER. Finding appropriate open textbooks (46%), course modules (40%) and videos (39%) were the most challenging issues (Phalachandra & Abeywardena, 2016). A global survey was conducted in 2017, prior to the 2<sup>nd</sup> World OER Congress, involving governments and stakeholders. By this time, the support for OER policies had increased to 55%. Most of these policies (41%) were reportedly national, followed by institutional (22%) and project (9%). The major barriers to OER mainstreaming revealed by the government survey were lack of user capacity to access, reuse and share OER; lack of appropriate policy solutions; and insufficient inclusive and equitable access to quality content. Stakeholders, on the other hand, felt that the most important barriers to personal use and adaptation of OER were the lack of a reward system for staff members devoting time and energy to OER initiatives. They also considered lack of institutional policy to be a barrier for OER mainstreaming (COL, 2017b).

# THE PRESENT SURVEY

The present survey used a modified version of the 2016 and 2017 questionnaires to collect data. A web survey campaign was launched, and the surveys were shared with COL's Focal Points in all 54 Member States and with key contacts for various initiatives. We received 327 usable responses from 38 Commonwealth countries (see Annex 1). The split between male and female respondents was 49% each. The majority of them had either a doctoral or a master's degree. Age-wise, 31.5% of the respondents were 36–45 years old, while 29.3% fell in the 46–55 age range. Over 36% of the respondents had over 20 years of experience, mainly in teaching (60.9%), and 43.3% were employed in a tertiary teaching institution, at the mid-career level (40.4%). The detailed demographic data for the respondents are in Annex 2.

The present report is the outcome of a repeat study on the status of OER in the Commonwealth conducted in 2016. Considering the importance of OER in the context of the challenges posed by Covid-19, the survey was modified to understand the status of OER in the Member States. The overall objective is to help countries in the Commonwealth understand the status of OER, especially the significant role played by OER during the Covid-19 pandemic and develop appropriate strategies to adopt the 2019 UNESCO Recommendation on OER.

# **KEY FINDINGS**

# **AWARENESS OF OER**

Figure 1 shows that an overwhelming proportion (85.7%) of the respondents are aware of OER. They are also aware of in-country activities about OER (64.4%), which indicates the spread of OER in the Commonwealth.

Table 1 presents a comparative analysis of OER activities according to educational sub-sectors and based on the International Standard Classification of Education (ISCED). Results suggest that most activities (84%) are at the tertiary education level (ISCED 5–8), followed by secondary education (ISCED 2 and 3) and primary education (ISCED 1) levels at 75.8% and 74.4%, respectively. OER activity at the post-secondary/not tertiary (ISCED 4) level is at 70.3%.



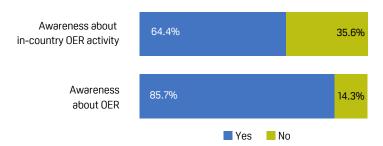


Figure 1. Awareness about OER.

Comparison with the 2017 Open Educational Resources Global Report data indicates there have been great improvements in degrees of OER activity at the primary, secondary and post-secondary levels (see Table 1). The data at Level 1 increased in the "to a greater extent" category from 5% in 2017 to 17.3% in 2021; in Levels 2 and 3, activities improved from 8% in 2017 to 19.7% in 2021; and Levels 5–8 witnessed an improvement from 19% in 2017 to 42.6% in 2021.

Table 1, OER activities at different International Standard Classification of Education levels

Level	None (%)	To some extent (%)	To a great extent (%)	Do not know (%)
Primary education (ISCED 1)	16	57.1	17.3	9.6
Secondary education (ISCED 2 and 3)	9.6	56.1	19.7	14.6
Post-secondary/not tertiary (ISCED 4)	10.3	56.1	14.2	19.4
Tertiary (ISCED 5–8)	2.5	41.4	42.6	13.6

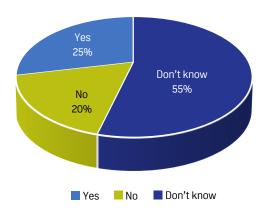


Figure 2. Repository in respondent country/institution.

Figure 2 indicates the occurrence of repositories in respondent countries and institutions. A majority of the respondents (55%) did not know whether an OER repository existed in their country. On the other hand, 25% of them said they were aware of one, while 20% said there was no repository in their country/institution.

Figure 3 shows respondents' awareness of various OER repositories or platforms. The majority of the respondents had not used the repositories. OER Commons (37.5%), followed by COL Commons (36.2%) — a platform recently launched by COL — received the highest percentage of use ratings. OpenLearn (29.8%), the Directory of Open Access Journals (27.8%) and MIT OpenCourseWare (25.9%) were also used by over a quarter of the respondents. Many indicated their awareness of some of the repositories/platforms but had not used them. Those

with a high awareness level among respondents were the Directory of Open Access Books (29.9%), COL Commons (28.8%), the Directory of Open Access Journals (27.4%), OpenLearn (27.4%), College Open Textbooks (26.4%) and the Directory of OER (26.4%).

The 2017 OER Global Report showed MIT OpenCourseWare (39%), followed by the Directory of Open Access Journals (33%), to be the most used by the respondents (COL, 2017b).

Most of the respondents in the 2021 survey were not aware such repositories exist. This indicates the need for greater user sensitisation at the country level on the existence of these repositories and the advisability of exploring them for teaching and learning.

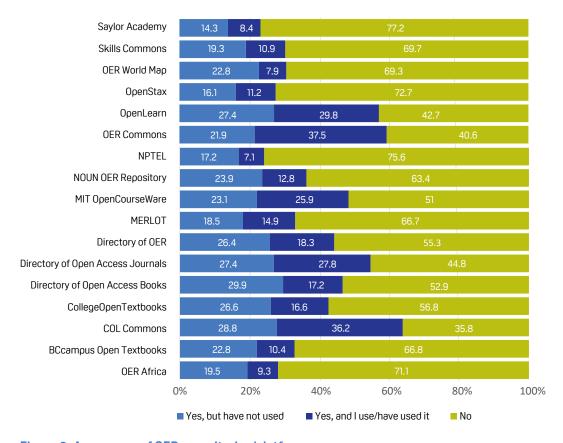


Figure 3. Awareness of OER repositories/platforms.

Figure 4 indicates respondents' beliefs about why countries need to be actively involved in OER. The majority of the respondents (63.6%) believed using OER will promote open and flexible learning opportunities; 56.3% of them also believed that OER will increase the efficiency and quality of learning resources, leading to improved access to quality materials (53.8%). Some of the other reasons outlined by the respondents include better learning outcomes and self-paced learning; contributing to the international community; low-cost, low-risk innovation; adding value to already developed materials; and making research and learning very accessible to students/teachers. These show the increased understanding of the role OER could play in national development.



Figure 4. Reasons for countries to use OER.

Figure 5 shows that a large number of respondents had completed OER training supported by COL. A majority of the respondents (54.7%) had completed the Understanding Open Educational Resources online course, while 45.3% of the respondents said they had attended a COL-supported training on OER through a face-to-face programme. These data seem to indicate that most respondents were aware of and understood OER.





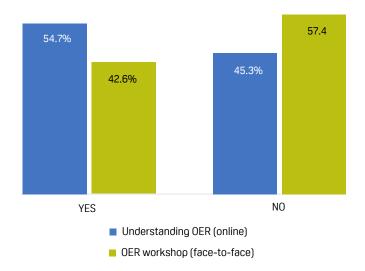


Figure 5. Completion of training on OER supported by COL.

The majority of the respondents indicated that they sometimes had difficulty getting access to teaching and learning materials (43.82%). In comparison to the 2017 OER Global Report, this is a deterioration, as at that time, only about 32% of the stakeholders had some difficulty accessing relevant teaching and learning materials. However, about 50% of the present respondents indicated they had access to either most or all of the materials they need.

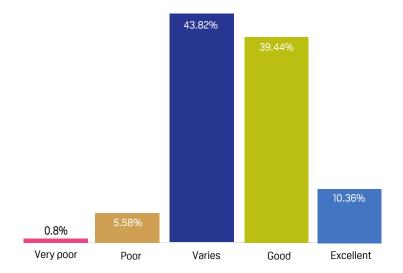


Figure 6. Access to teaching and learning materials.

Respondents were asked about several statements related to OER, to ascertain their perceptions and understanding about OER. Figure 7 shows high agreement with statements about saving time (88.5%), followed by lowering the cost of learning materials (85.7%). Respondents believed that OER help developing countries access quality learning materials (84.5%), and that the open licensing of OER supports continuous quality improvement (80.6%), but many respondents (53.7%) thought lack of peer review of OER makes them susceptible to poor quality. As such, they are not confident about the quality of OER in general, since almost equal percentages of respondents agreed as disagreed that the quality of available OER is poor (Figure 8). There was improvement in positive perceptions about OER compared to the 2017 OER Global Report. However, there was a significant downturn in perceptions of OER quality compared to the 2016 report, where 82% of respondents considered OER to be good or very good quality (Phalachandra & Abeywardena, 2016). This may be due to increased awareness and understanding of OER.





Figure 7. Stakeholders' positive perceptions about OER.

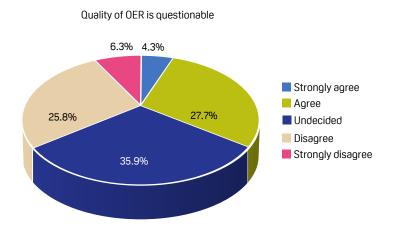


Figure 8. Quality of OER.

# **OER IN TEACHING AND LEARNING**

Figure 9 shows that the majority of the respondents were not involved in OER-related work. Only 44.9% reported being engaged in OER activities.

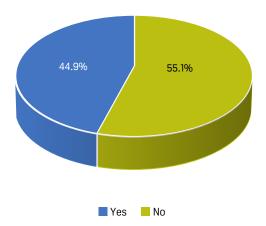


Figure 9. Involvement in OER-related work.

Figure 10 shows how the respondents were using OER. While only 27.5% had used OER in teaching and learning, 22% indicated they had remixed/adapted OER, and 15.6% had released original content developed as OER. According to Rogers (1983), the diffusion of any innovation accelerates after 15–20% adoption. Thus, the use of OER in teaching and learning is currently at the tipping point.

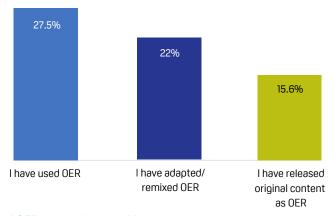


Figure 10. Use of OER in teaching and learning.

Figure 11 indicates the respondents' purposes for using OER. Classroom use tops the list at 45.9%, followed by use of OER in online learning (45.6%); 43.7% also mentioned that using OER as additional reference materials for teaching and learning. Only 24.5% indicated using OER as a textbook, which may be related to the availability of open textbooks. Use of OER for curriculum planning and assessment had the lowest responses at 22.6% and 19.9%, respectively.

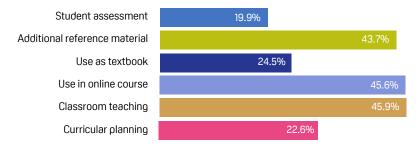


Figure 11. Purpose for using OER.

Figure 12 presents respondents' experiences with using various types of OER, showing that those who had used OER found their availability in different formats useful. Only a small percentage of respondents rated their experiences as poor. It is interesting to note that over 40% of respondents indicated they had never used OER in AR/VR. This is an important point, since the availability of AR/VR as OER is currently limited. Respondents' experiences with audio and HTML5 files were poor or unsatisfactory in comparison to with PDF or DOC/DOCX files. While HTML5 has emerged as the de facto standard for sharing and reusing OER, users need advanced digital skills to adapt/remix audio and video OER.

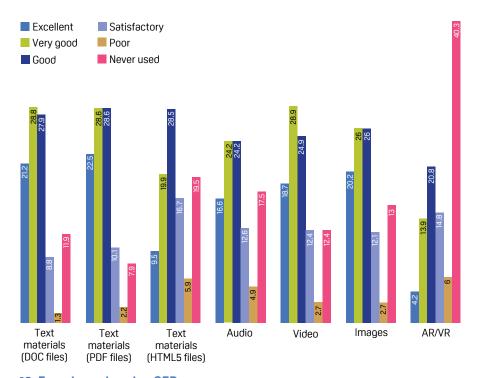


Figure 12. Experience in using OER.

Figure 13 indicates that even when learning materials are released with the intention they be used as OER, most are not accompanied with a clear open licence. Only 36.4% of the respondents used Creative Commons licences when releasing materials as OER, while 0.9% used other kinds, such as GNU's General Public License.<sup>7</sup>

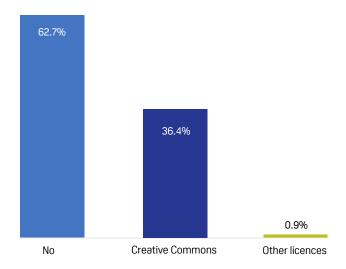


Figure 13. Use of licences for material released as OER.

Table 2 indicates the influence of OER on teaching and learning in the respondents' institutions. About one third of the respondents did not answer this question. The use of OER was felt to have influenced teacher professional development to some extent (56.8%) and to have improved the quality of teaching and learning (55.6%). About 55.4% of the respondents also reported that OER improved the sharing of resources by teachers in their institutions. Compared to the 2017 report, we find that OER had less influence on professional development for teachers, quality improvement and resource sharing.

<sup>7</sup> https://www.gnu.org/licenses/gpl-3.0.en.html



Table 2. Influence of OER in teaching and learning

Influence of OER in teaching and learning	Strongly agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly disagree (%)	Not applicable (%)
Improved quality of teaching and learning	17.4	38.2	9.8	1.5	0	33
Improved teacher professional development	18.7	38.2	8.9	0.6	0.6	33
Improved student success and grades	12.5	32.1	17.4	2.8	0.6	34.6
Improved collaboration among learners	12.2	36.4	14.1	1.5	0.3	35.5
Improved sharing of resources by teachers	19.9	35.5	8.3	2.1	0.6	33.6

Table 3 breaks down the challenges of translating OER into the local language(s). The findings indicate that a majority of the respondents (86.7%) saw cost and lack of skills as the greatest challenges. Similarly, 85.7% saw lack of technology as another major challenge. The qualitative responses pointed to "rigid national policies guiding education; domesticating video content; the risk of losing the meaning of the content; cultural differences between creators; and lack of twinning with European governments." The findings were similar to those in the 2017 OER Global Report, so these issues need to be addressed as matters of priority.

Table 3. Challenges of translating OER into the local language(s)

Challenges of translating OER	Very important (%)	Important (%)	Moderately important (%)	Slightly important (%)	Not important (%)
Cost	53.8	32.9	8.6	1.9	2.9
Lack of skills	48.6	38.1	6.7	2.9	3.8
Lack of technology	55.7	30	7.6	2.4	4.3

Table 4 indicate the issues considered while developing OER. A majority of the respondents (78.8%) reported that they consider ensuring the quality of OER they develop. Another 70.9% said they consider mobile-friendly access to OER, while 54.4% said they consider providing adequate access to persons with disabilities. The data seem to indicate that respondents were taking into consideration many factors when developing OER resources.



Table 4. Issues considered while developing OER

Issues	Almost always (%)	Often (%)	Sometimes (%)	Seldom (%)	Never (%)
Providing adequate access to persons with disabilities	28.2	26.7	23.8	12.6	8.7
Assuring quality of OER	44.2	34.5	13.6	2.8	4.9
Mobile-friendly access to OER	37.4	33.5	20.4	2.9	5.8

### **USE OF OER DURING COVID-19**

Figure 14 shows the respondents' level of agreement with statements related to the use of OER during Covid-19. Nearly 40% skipped responding to these questions. There was 52% agreement with the statement "OER supported student learning during the lockdown period." The other statements elicited responses below 50%. This could be because few of the respondents actually used OER during the Covid-19 period. Nevertheless, other available data indicate that OER were reasonably useful during Covid-19 to improve access to teaching and learning materials.



Figure 14. OER during Covid-19





Where did the respondents find their teaching and learning materials during Covid-19? Figure 15 shows the platforms/repositories most accessed during the period. It is interesting to note that the use of the repositories during Covid-19 was also limited. Respondents used only COL Commons and/or OER Africa (30% each). COL Commons was launched in the first half of 2021 and contained only five courses at the time of the survey. Despite this, the high percentage could be due to the relevance of the platform to OER practitioners and the novelty effect, supported by COL's social media campaign. The latter could demonstrate to other repositories and platforms the usefulness of communicating with stakeholders so they can make the most out of available resources. This underscores that the "if we build it, they will come" approach does not work (Zemsky & Massey, 2004).

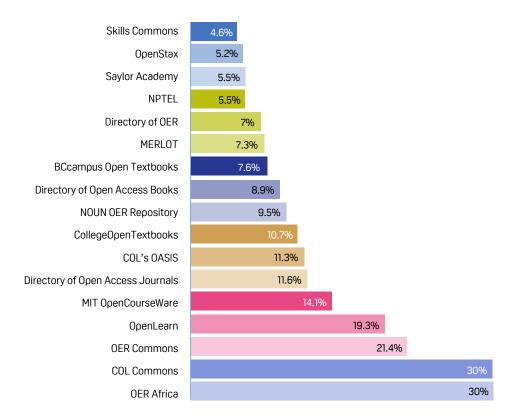
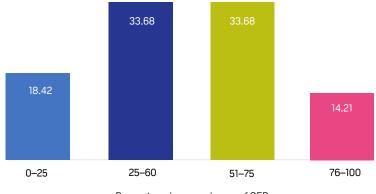


Figure 15. Repositories used during Covid-19.

Only 190 respondents indicated percentages of change in the use of OER in their institutions during Covid-19 compared with before the pandemic. Figure 16 presents these results. Respondents were asked to rate on a scale of 0 to 100 the changes observed in the use of OER in their institutions. Of those who responded to the question, 18.42% provided a percentage score ranging from 0 to 25, while 33.68% responded 26–50% and the same number chose 51–75%. Only 14.21% of respondents selected the 76–100% range. On average, the data show an increase of over 50% in the use of OER during the pandemic.



Percentage increase in use of OER

Figure 16. Changes in the use of OER during Covid-19.

### **BARRIERS TO MAINSTREAMING OER**

Table 5 shows the most important challenges to mainstreaming OER in the Commonwealth. In order of priority, 86.9% of the respondents pointed to users lacking the capacity to access, reuse and share OER, followed by 81.8% indicating insufficient inclusive and equitable access to quality content. This shows the need to (i) provide ongoing opportunities for training on OER; (ii) ensure that OER are accessible to persons with disabilities as well as those without sustainable and/or dependable access to the Internet; and (iii) ensure the quality of OER. Lack of appropriate policy solutions (81.6%) is the third important challenge to mainstreaming OER. With the 2019 UNESCO Recommendation on OER, governments are expected to ensure the development of enabling policy environments to support OER mainstreaming. Other identified challenges were ensuring that OER are contextualised for the linguistic and cultural contexts where they are used, selected by 74.8%, and changing business models to safeguard the sustainability of OER projects, identified by 70.8% of the respondents.

In the 2017 Global Report, lack of appropriate OER policy was at the top, selected by 70% of those respondents. While policy went down in the ranking of challenges, more respondents indicated the need for policy. As awareness about OER has increased and is poised to take off, addressing users' lack of skills to find, use and share OER could be the key to mainstreaming OER.

Table 5. Barriers to mainstreaming OER

Barriers	Very important (%)	Important (%)	Moderately important (%)	Slightly important (%)	Not important (%)
Lack of users' capacity to access, reuse and share OER	44.4	42.5	8.7	1.9	2.4
Language and cultural barriers	33	41.8	10.7	9.7	4.8
Insufficient inclusive and equitable access to quality content	43.3	38.5	14.9	2.4	1
Changing business models	25.4	45.4	19	7.3	2.9
Lack of appropriate policy solutions	39.6	42	9.2	6.3	2.9

What are the barriers respondents face individually to adopting OER? Figure 17 shows what they perceived to be the most important barriers. Lack of skills (47.4%) emerged at the top of the list, corroborating the findings throughout this study. This is followed by the lack of OER policy at their institutions (46.8%). Lack of connectivity is another key barrier (46.8%). This was particularly true during Covid-19, when two thirds of children and young people aged 25 years or under had no Internet access at home (UNICEF & ITU, 2020). Other barriers mentioned by the respondents include lack of software (44.1%), no support from management (43.7%) and lack of access to hardware (43.4%). Interestingly, lack of incentives (41.9%), quality concerns (40.7%) and time available for OER work (37.7%) were identified by fewer. However, the percentages for these are still slightly below or above 40% and demand serious attention if OER mainstreaming is to occur. Interestingly, in the 2016 Commonwealth survey, lack of time was the top barrier (44%) to mainstreaming OER. The data in Figure 17 also support respondents' emphasis upon users having insufficient skills for finding, using and sharing OER, as presented in Table 5. Thus, OER skills are important at the personal level as well as the national.

To understand the level of OER skills, the survey asked respondents to self-rate their current abilities in a range of OER skills. The findings are presented in Table 6, which shows that a majority (54%) indicated having skills in evaluating the usefulness and determining the value and quality of OER. Broadly, their ICT skills are better than their abilities to find and adopt OER, as in the 2017 Global Report. In particular, respondents' skill level in understanding licences is lower (43.1%) than their ability to find OER. A matter of concern is the high rate of no

response to this question, which should be taken as a lack of skills in this area. It is therefore important to continue focusing on OER training as a key strategy for mainstreaming OER.

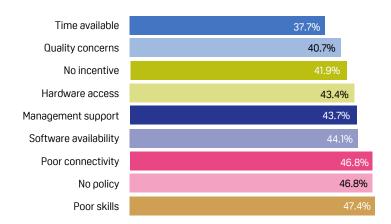
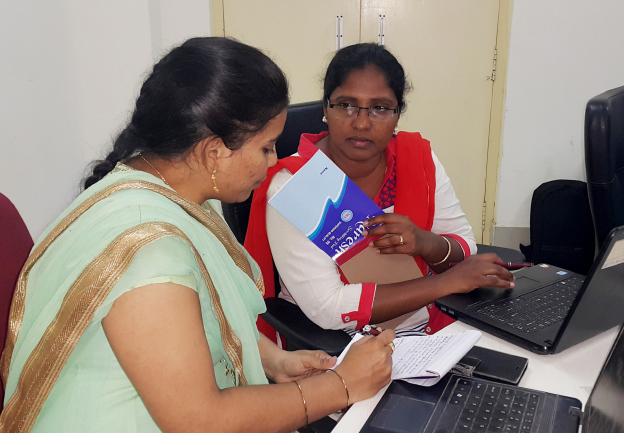


Figure 17. Most important barriers to using and adapting OER.

Table 6. Respondent OER skills level

OER skills rating	Excellent (%)	Very good (%)	Good (%)	Satisfac- tory (%)	Poor (%)	Not applicable/ no response (%)
How to find OER	11.9	21.1	18.3	6.7	4.6	37.3
Evaluating the usefulness and determining the value and quality of OER	12.5	23.2	18.3	6.4	1.8	37.6
Performing adaptations (remixing different OER)	10.4	15.9	19.6	9.5	6.4	38.2
Understanding licences and how they work	9.8	15.9	17.4	12.2	6.4	38.2
Understanding copyright	11	15.9	19	11.3	4.6	38.2
ICT skills	17.7	20.5	15.3	8.6	0.9	37
Distributing OER, developing mechanism(s) to provide OER to students	11.3	15.3	19.6	9.5	5.2	39.1



# CONCLUSIONS

This *Open Educational Resources in the Commonwealth 2021* report provides a snapshot of OER activities and priorities. Based on data collected from 38 countries, it highlights the importance of capacity building and policy support for OER mainstreaming. These two activities are key areas of support that COL, as an intergovernmental organisation, provides to Commonwealth governments and educational institutions. As a stock-taking exercise, the report is a key step that will help governments prioritise action in light of the UNESCO Recommendation on OER.

In comparison to the findings of previous OER reports, there are several positive developments. For example, there is increased awareness of OER among stakeholders, and there are more OER activities at all levels of education, with a significant increase at the level of ISCED 5–8, the tertiary education sector. Actual involvement of the respondents with OER-related activities is now above 20%, so it is at a tipping point. Respondents in the study also believed that OER work is having a greater influence at the teacher professional development level, which is a signal of teachers becoming reflective practitioners. During the Covid-19 lockdown period, OER played a reasonably useful role in improving access to teaching and learning, particularly in supporting students.

The findings largely point towards the need for increased skills training to leverage the power of OER. Respondents consider lack of OER skills in general among stakeholders to be low. Interestingly, over 50% of the respondents had completed COL's online course on Understanding Open Educational Resources, and about 45% also had attended in-person training organised by COL in several countries. In terms of specific skills areas, respondents were less skilled in licensing and copyright than in finding OER. The lack of a policy environment for OER consistently emerged as another key barrier. There is also greater acceptance of OER as part of professional work, as only 37.5% of respondents indicated time availability as a barrier for mainstreaming OER, in comparison to 44% in the 2016 study.

The report also highlights some important aspects related to mainstreaming OER, which would strengthen the OER movement in general. For example, the OER in many repositories are not adequately used. While there could be many reasons for their limited use, this finding indicates a greater need for communicating about repository contents and making repositories more discoverable via commonly used search engines. This also points to the need for curated resources and the use of open textbooks that are curriculum aligned. Covid-19 highlighted digital inequities among students, making it necessary for OER-supporting organisations to rethink their delivery strategy by adopting to use of printed OER or providing offline access to digital OER using micro-SD cards or devices like COL's Aptus. Another important aspect of OER is quality assurance, and the report highlights a mixed response to OER quality. It is important to focus on developing quality OER using a framework like OER TIPS (Kawachi, 2014). Insufficient availability of inclusive and equitable quality content is a key concern for mainstreaming OER. Thus, greater focus needs to be placed on developing accessible OER using principles of universal design for learning, and ensuring quality using workflow mechanisms that are followed by commercial publishers and many open universities around the Commonwealth.

In summary, the findings of this study indicate that while much has been done to increase awareness about OER, and there is more use of OER by stakeholders, they may not be using licences appropriately or sharing OER to make them widely available and discoverable. The focus now should be more on boosting stakeholder confidence about OER quality and making OER availability a key component of instructional processes.



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# **ANNEX 1: COUNTRIES OF SURVEY RESPONDENTS**

Country	Responses
Antigua and Barbuda	2
Australia	3
Bangladesh	11
Belize	1
Botswana	1
Cameroon	1
Canada	1
Eswatini	1
Fiji	26
Gambia, The	4
Ghana	38
Grenada	1
Guyana	1
India	24
Jamaica	1
Kenya	13
Kiribati	14
Malaysia	3
Malta	1
Mauritius	30

Total	327
Zambia	9
United Kingdom	2
Uganda	6
Tuvalu	1
Trinidad and Tobago	3
Tanzania	2
Sri Lanka	11
South Africa	1
Sierra Leone	9
Seychelles	20
Rwanda	2
Papua New Guinea	4
Pakistan	1
Nigeria	71
New Zealand	2
Nauru	1
Namibia	2
Mozambique	3

# **ANNEX 2: DEMOGRAPHIC PROFILE OF THE RESPONDENTS**

Categories	Percentage
Gender	1 or contago
Female	49.2
Male	49.2
Prefer not to answer	1.5
Total	100.0
Qualification	
PhD	27.4
Master's degree	27.4
Bachelor's degree	24.9
Diploma	11.2
Others	9.0
Total	100.0
Discipline	
Humanities	16.0
Social Sciences	42.3
Life Sciences	4.9
Health Sciences	0.9
Computer Sciences	8.6
Physical Sciences	6.2
Engineering and Technology	4.3
Law	0.9
Management and Commerce	7.4
Library, Archives, and Information Studies	1.2
Music and Arts	2.2
Others	4.9
Total	100.0
Age	
Under 26	7.7
26–35	20.7
36–45	31.5
46–55	29.3
56–65	9.0
Over 65	1.9
Total	100.0

Work experience	
No work experience	5.6
1–5	15.8
6–10	11.2
11–15	18.3
16–20	12.7
Over 20	36.3
Total	100.0
Main area of experience	
Teaching	60.9
Research	9.6
Administration and Management	14.0
Library Services	2.2
ICT Services	6.2
Others	7.1
Total	100.0
Organisation	
Secondary school	12.4
Vocational and technical training institution	4.3
College or university	43.3
Industrial or commercial organisation (including publishers)	0.6
Government department or ministry	13.9
Research institute	2.5
Non-governmental organisation	5.6
Independent consultant	1.5
Other	15.8
Total	100.0
Career level	
Entry level	15.1
Mid-level	40.4
Senior management (directors or similar)	25.3
Chief executive or president	2.8
Self-employed	3.7
Other	12.7
Total	100.0

# LEARNING FOR SUSTAINABLE DEVELOPMENT

COL is an intergovernmental organisation created by Commonwealth Heads of Government to encourage the development and sharing of open learning and distance education knowledge, resources and technologies.

VISION: To be the foremost global agency that promotes learning for sustainable development

MISSION: To help governments and institutions to expand the scale, efficiency and quality of learning by using open, distance and technology-based approaches



# COOL COMMONWEALTH OF LEARNING

4710 Kingsway, Suite 2500 Burnaby, BC V5H 4M2 Canada Phone + 1 604 775 8200 / Fax + 1 604 775 8210

info@col.org

www.col.org

♥ ecol4d

facebook.com/COL4D/

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