



Open Educational Resources in the Commonwealth 2016

B. Phalachandra and Ishan Abeywardena

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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.



Commonwealth of Learning, 2016

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Design and Layout: Alex Hennig

ISBN: 978-1-894975-86-5

How to cite:

Phalachandra, B., & Abeywardena, I.S. (2016). *Open Educational Resources in the Commonwealth 2016*. S. Mishra & I.S. Abeywardena (Eds.). Burnaby, Canada: Commonwealth of Learning.

Acknowledgement

This project is funded as part of Grant #2015-2585, generously made by The William and Flora Hewlett Foundation, USA.

Published by



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Foreword



The Commonwealth of Learning (COL) is the only intergovernmental organisation with the mandate to promote the development and sharing of open and distance learning (ODL) knowledge and expertise. COL works in the 52 Member States of the Commonwealth, which span all regions of the globe — from the Caribbean to Europe, Africa, Asia and the Pacific. Its mission is to help Commonwealth Member States and institutions harness the potential of technologies for expanding access

to quality education and training. COL believes that learning is the key to sustainable development and that it must lead to economic growth, social inclusion and environmental conservation.

Access to relevant, quality learning resources is key to learning, yet the ability to provide access at the necessary scale is proving a challenge to many in the developing world. COL has identified the development of open educational resources (OER) as a potential answer to these challenges. OER provide governments, institutions, organisations and individuals with access to some of the best materials available globally, allow them to adapt the materials to fit local contexts, and reduce the costs associated with materials and course development. OER increase access to education for those who need it the most, such as the underprivileged and the marginalised. COL publishes its materials under open licences, and an increasing number of our partners are doing likewise.

Understanding the current status of the development, use and reuse of OER is critical in identifying the challenges of fostering use and informing efforts to promote openness. Within this context, the present study was conducted as part of COL's OER for Skills Development initiative, which is generously supported by The William and Flora Hewlett Foundation, to establish a baseline of OER activities in the Commonwealth. The study attempts to answer six key questions stemming from four recommendations of the 2012 Paris OER Declaration. COL believes that systematic capacity building, driven by appropriate policy frameworks at national, institutional and project levels, is a major driving force for the successful adoption of OER, as reiterated in this report.

COL's long-term vision is for institutions and organisations across the Commonwealth to develop and use OER-based courses and materials in order to provide access to quality education and training that lead to opportunities for sustainable livelihoods for all Commonwealth citizens. I thank the authors, editors and all respondents to our survey for contributing to this important study, which I hope will be an important milestone in our journey towards achieving lifelong learning for all by 2030.

Ankohaman Professor Asha Kanwar

President and Chief Executive Officer
Commonwealth of Learning

Key findings

The key findings are as follows:

Participation in OER-related training activities is high for faculty/teachers in vocational institutes (64%) and to a lesser extent in open universities (54%). However, respondents who had not participated in OER-related training programs were the highest users or **consumers of OER** (47%). Further probing revealed that 39% of those who had not received training had learned about OER through self-study, whilst 43% had learned about OER by working with colleagues on related activities.

Training does empower teachers to develop and help others develop OER, which **increases OER production**. However, OER workshops are short in most cases, with few hands-on activities. There are also **gaps in the development of OER** throughout the Commonwealth.

Sixty-five per cent of respondents indicated that they had **used OER** for *teaching and learning*, and 60% had used OER to *supplement existing lessons*.

Sixty-eight per cent of the respondents indicated that the use of OER results in cost savings for students.

The majority perceived OER to be a **good** solution to improve quality and minimise costs related to a course or programme; 82% found OER to be of good or excellent quality.

Fifty-six per cent of respondents preferred to **check the authenticity and credibility of a**

material before using it. OER originating from reputable institutions, which have established quality assurance mechanisms, were generally perceived as good-quality OER.

Ninety-four per cent of respondents emphasised that **open licensing is important when using a resource in their teaching**. In terms of the Creative Commons licences, respondents were most confident about explaining the CC BY (37%) licence, followed by the CC0 Public Domain licence (32.5%). They were not very comfortable with explaining the CC BY-NC-ND licence (36%). In general, the **confidence level about explaining the meaning of different types of licences was low**.

Seventy-two per cent of the **respondents don't openly share their teaching materials**. Only 12% allow reuse and revision of their teaching materials, whilst 15% don't allow reuse and revision, even though the materials are publicly available.

Lack of information on the quality of OER (46%) and the scarcity of OER in video and audio formats (44%) are **the biggest challenges in using OER**.

Respondents indicated that lack of time, lack of awareness and low Internet connectivity are the **main barriers to using OER**. Interestingly, they did not consider lack of rewards or recognition to be a major barrier.

Text materials are considered the easiest to adopt and reuse (76%), followed by lecture notes (54%) and slides (53%).

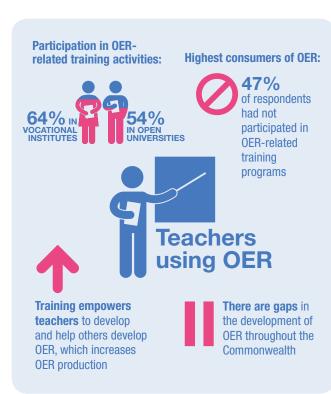
Sixty-two per cent of respondents considered "easy to download" to be the most important factor for adopting OER.

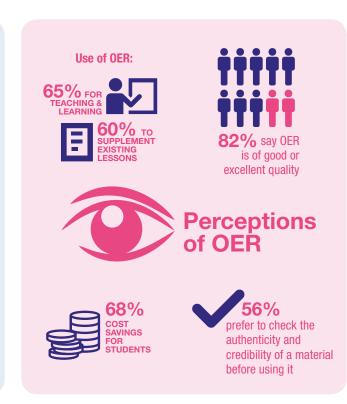
Respondents indicated that in terms of **ease of adaptation**, Word (85%), PDF (52%) and HTML (21%) formats are preferred.

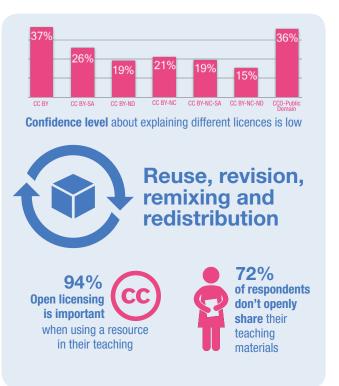
Seventy-eight per cent of respondents frequently used **search engines** to find OER, whilst only 22% used **repositories**. Amongst the search engines, Google was used more frequently (89%) than other search engines. The most commonly used repositories were: OER Commons (36%), Wikimedia Commons (32%) and COL's Directory of Open Educational Resources (COL-DOER, 23%).

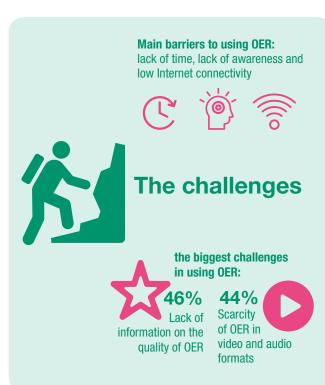
Respondents indicated that they experienced most difficulty with **finding appropriate** open textbooks (46%), course modules (40%) and videos (39%).

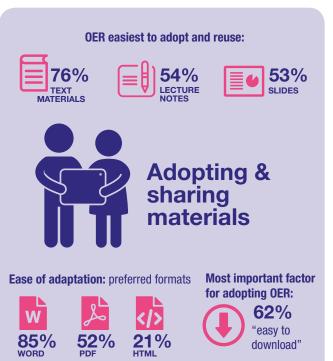
These findings are further elaborated in the report.

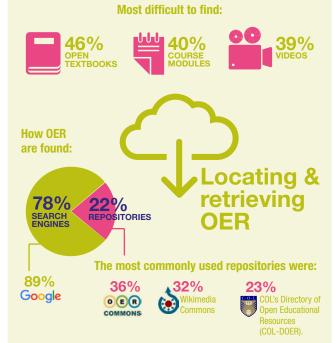














Acknowledgements

The Commonwealth of Learning wishes to thank Dr Jane-Frances Agbu (Nigeria), Mr Germain Anthony (Saint Lucia), Mr Dhiraj Bhartu (Fiji), Dr Karen Ferreira-Meyers (Swaziland), Mrs Vandanah Gooria (Mauritius), Mr Uduak Inyang-Udoh (Nigeria), Professor Mostafa Azad Kamal (Bangladesh), Dr Emma Kruse-Vaai (Samoa), Dr Sasikala Kugamoorthy (Sri Lanka), Professor Latifah Abdol Latif (Malaysia), Mr Zahid Majeed (Pakistan),

Professor Naveed Malik (Pakistan), Professor Cornelia Muganda (Tanzania), Dr Evode Mukama (Rwanda), Mr Masauko Nkolokosa (Malawi), Dr Marcia Stewart (Jamaica), Ms Katharina P. Taloka (Tuvalu), Mr Chawapa Thabo (Botswana), Mr R. Thyagarajan (India), Mr George Jonathan Mael Toka (Vanuatu) and Mrs Analupe Voi (Tonga) for assisting us in the data collection.

We also thank Mr Prakash Armugam (Malaysia), Dr Mohan Das (India), Ms Jasmine Emmanuel (Malaysia), Dr S.S. Jena (India), Professor Madhulika Kaushik (Malayisa), Ms Chng Lay Kee (Malaysia), Dr Mohan Menon (India), Dr Manas Ranjan Panigrahi (India), Professor R. Santhiram (Malaysia), Professor Rajaram Sharma (India) and Dr Sharad Sure (India) for peer-reviewing the survey instrument.

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Executive Summary

This study was conducted as part of the OER for Skills Development¹ project of the Commonwealth of Learning (COL), supported by The William and Flora Hewlett Foundation. The objective of the study was to collect baseline data from Commonwealth institutions with respect to: the development, use and reuse of OER; the availability of support; and the challenges of fostering the

use of OER. After a review of previous studies, six research questions were formed to analyse the status of OER in the Commonwealth, based on four recommendations in the 2012 Paris OER Declaration. A survey instrument was developed and peer-reviewed to collect data from the stakeholders.

As part of the data collection strategy, Fluid Survey was used and 20 champions were engaged to facilitate data collection across the Commonwealth. A total of 1,220 responses were received, of which 657 were complete. Of these 657 respondents, 374 were women (56.92%) and 282 were men (42.92%). They belonged to 214 institutions from 28 countries across the Commonwealth.

See https://www.col.org/programmes/open-educational-resources.



Introduction

Education systems globally are facing pressure to increase access to affordable quality education and training. Governments have endorsed international agreements in support of education as a fundamental human right, leading to the Education for All goal, which advocates for an inclusive approach to education and training. Sustainable Development Goal 4 (SDG4), adopted by the international community, strives to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" by 2030. However, many governments are finding it difficult to meet the obligations set out in these agreements. In particular, countries are facing challenges in providing quality skills training at scale to help citizens achieve sustainable

livelihoods and a better quality of life. The lack of access to relevant learning resources, especially for women, has further compounded the problem of under-educated citizens. The ability to access the right content in a timely manner is an important aspect of lifelong learning.

By 2012, 621 million young people in developing countries were not in education, employment or training (World Bank, 2012). Lack of skills and high rates of unemployment are major concerns for many Commonwealth countries. For example, over 20% of the youth population in sub-Saharan Africa, which is about 200 million, are either unemployed or in low-paid/precarious jobs (Afeti, 2014). This has put great pressure on

providers of education and training to expand their enrolment of young people. Without education and job-related skills, young people and adults cannot benefit from employment opportunities that offer a decent income. Another important component of this challenge is the lack of access to high-quality, relevant learning materials to support education and training. The International Telecommunication Union points out that "lack of content is the major barrier that governments need to tackle" (ITU, 2010).

The Commonwealth of Learning (COL) has identified the development of relevant open educational resources (OER) as a potential route for overcoming these impediments and has addressed

this in its six-year strategic plan (Commonwealth of Learning, 2015) by focusing on the skills sector. According to an OECD report titled Open Educational Resources: A Catalyst for Innovation (Orr, Rimini, & van Damme, 2015), OER can contribute to addressing six key educational challenges presently of concern to education systems: (i) fostering the use of new forms of learning for the 21st century; (ii) fostering teachers' professional development and engagement; (iii) containing the public and private costs of education; (iv) continually improving the quality of educational resources; (v) widening the distribution of high-quality educational resources; and (vi) reducing barriers to learning opportunities. The report concludes that policy support is necessary for OER to reach their full potential as social innovations. It further elaborates that policy makers should focus on the existence and discoverability of OER, the new role of teachers in the context of OER, new quality assurance procedures and more research. COL plays a major role in several ways: advocating for OER; supporting governments, institutions and organisations in developing policies in this area; identifying models for OER use; and supporting capacity building so that more institutions and organisations develop and use OER.

COL strongly believes that OER gives governments, institutions and organisations broader access to the best globally available materials. In turn, these materials can be repurposed locally to reduce the costs associated with materials development, resulting in better opportunities for youths to develop their skills.

Open Educational Resources

In 2002, the UNESCO forum defined open educational resources as

the 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)

The World OER Congress 2012, organised jointly by COL and UNESCO with the support of The William and Flora Hewlett Foundation, published the 2012 Paris OER Declaration, which makes ten recommendations in four areas for promoting the use of OER. These areas are advocacy and awareness generation, OER policies, capacity development and research.

The UNESCO Paris OER Declaration defines 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. (UNESCO, 2012)

Even with this definition, what constitutes an OER can still be subject to interpretation, and OER are sometimes confused with other learning resources. However, a more practical description of OER was provided by Hoosen, Moore and Butcher (2016),

giving a clearer indication of the range of possibilities under this definition:

They are educational materials and resources that are offered freely, are openly available to anyone and, under some licences, allow others to reuse, adapt and redistribute them with few or no restrictions. OER can include lecture notes and slides, lesson plans, textbooks, handouts given to students, videos, online tutorials, podcasts, diagrams, entire courses, and any other material designed to be used in teaching and learning. Thus, the scale of OER can vary significantly. They can be as large as a textbook or as small as a single photograph. They can make up an entire course or curriculum or can be used to enhance existing textbooks. (Hoosen, Moore, & Butcher, 2016, p. 2)

Butcher (2015) has explained the meaning of OER in simpler terms:

the concept of Open Educational Resources (OER) describes any educational resources (including curriculum maps, course materials, textbooks, streaming videos, multimedia applications, podcasts, and any other materials that have been designed for use in teaching and learning) that are openly available for use by educators and students, without an accompanying need to pay royalties or licence fees. (Butcher, 2015, p. 5)

According to Weller (2010), OER can be classified as "big" and "little." The former contain explicit teaching aims, are produced institutionally, are usually of high quality, can often be used without adaptation but are translated into other languages. Conversely, little OER are produced individually with low-cost resources, have low production quality and are shared through a range of third-party sites. Little OER are usually adapted because they can easily be used in different contexts.

Kurelovic (2016) has claimed that OER improve the quality of education, accelerate the flow of knowledge and increase the number of people involved in educational processes such as informal and lifelong learning. Another main value of OER is that "they can be used worldwide independently of the system of education and national curricula frameworks" (Grodecka & Śliwowski, 2014, p. 30). Caswell, Henson, Jenson and Wiley (2008) have claimed that the move towards the use of OER can significantly reduce the costs of learning. Thus, OER have the potential to broaden access and provide equity in education. This is especially important for developing countries within the Commonwealth.

The Study

The study was conducted as part of COL's OER for Skills Development initiative, supported by The William and Flora Hewlett Foundation. The objective was to collect baseline data from Commonwealth institutions with respect to the development, use and reuse of OER, the availability of support for OER, and the challenges that education practitioners face in fostering the use of OER.

TABLE 1. RESEARCH OUESTIONS

RECOMMENDATIONS FROM THE PARIS OER DECLARATION	RESEARCH QUESTIONS
Foster awareness and use of OER.	To what extent are teachers trained in reusing, revising, remixing and redistributing OER?
Support capacity building for	
the sustainable development of quality learning materials.	2. What are teachers' perceptions with respect to the quality and cost-efficiency of OER, and what are the various quality assurance mechanisms used?
Promote the understanding and use of open licensing frameworks.	3. What is the level of facilitation in the reuse, revision, remixing and redistribution of educational materials across the Commonwealth through open licensing?
manieworks.	4. What are the opportunities and challenges faced when developing, using, evaluating and re-contextualising OER?
	5. How have institutions taken advantage of evolving technology to create opportunities for sharing materials which have been released under an open licence in diverse media?
Facilitate the finding, retrieving and sharing of OER.	6. What are the tools used to locate and retrieve OER that are specific and relevant to particular needs?

The UNESCO Paris OER Declaration provides ten recommendations on how to foster and promote OER in a global context. To analyse the status of OER within the Commonwealth, we formed six research questions based on the Declaration's four recommendations and our review of past studies (Table 1).

DEVELOPMENT OF THE SURVEY INSTRUMENT

We developed a survey instrument to collect data after reviewing several studies and documents available in the field. These included: *Quality*

Assurance Guidelines for Open Educational Resources: TIPS Framework (Kawachi, 2014), Exploring Faculty Use of Open Educational Resources at British Columbia Post-secondary Institutions (Jhangiani, Pitt, Hendricks, Key, & Lalonde, 2016), and A Study of the Current State of Play in the Use of Open Educational Resources in the Asian Region (OER Asia, 2012). After the tool was drafted, it was sent to 12 experts in the field for review. The tool was finalised after we incorporated the suggestions and feedback received from the reviewers. The finalised tool is provided in the Appendix.

SAMPLE AND DATA COLLECTION

As part of the data collection strategy, 20 champions were engaged to represent the Commonwealth. The champions were responsible for collecting data from their respective institutions and other targeted institutions in their countries. The online survey, which was hosted on Fluid Surveys,² was open to respondents from 1 to 25 May 2016.

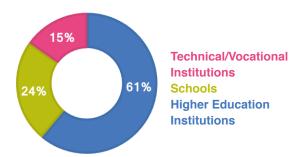


FIGURE 1. RESPONDENTS BY THE NATURE OF THEIR HOME INSTITUTIONS

A total of 1,220 people responded to the online survey, resulting in 657 complete responses. Of these, 374 respondents were women (56.92%), 282 were men (42.92 %) and one chose not to select a gender category. They belonged to 214 institutions from 28 countries across the Commonwealth regions, as shown in Figure 1 and Table 2.

TABLE 2. NUMBER OF PARTICIPATING INSTITUTIONS

REGION	COUNTRY	NUMBER OF INSTITUTIONS
Africa	Botswana	3
(11 Countries, 93 Institutions)	Kenya	42
_	Malawi	9
_	Mauritius	8
_	Namibia	2
_	Nigeria	9
_	Rwanda	11
_	South Africa	3
_	Swaziland	1
_	Tanzania	4
_	Zambia	1
Asia	Bangladesh	3
(5 Countries, 57 Institutions)	India	18
_	Malaysia	20
_	Pakistan	14
_	Sri Lanka	2
Caribbean	Jamaica	9
(2 Countries, 24 Institutions)	Saint Lucia	15
Pacific	Australia	4
(7 Countries, 32 Institutions)	Fiji	5
_	Kiribati	1
_	Samoa	5
_	Tonga	6
_	Tuvalu	5
	Vanuatu	4
Europe (1 Country, 6 Institutions)	UK	6
Americas	Belize	1
(2 Countries, 4 Institutions)	Canada	3
Total:	28 Countries	214 Institutions

² See http://fluidsurveys.com/.



Profile of Survey Respondents

Figure 2 indicates the Commonwealth regions' perspective. The highest number of respondents were from the African region (11 countries), followed by Asia (five countries) and the Pacific (seven countries). This is partly because there were variations in the number of countries and institutions that participated in these regions, as indicated in Table 2.

FIGURE 2.
RESPONDENTS BY
COMMONWEALTH
REGIONS

256

14%

7%

11%

5

Africa Asia Europe Pacific Americas Caribbean

The respondents' ages varied from 20 to 60+ years. Figure 3 shows that almost 67% were in the 30–49 age group, which is probably the most critical period for this profession, corresponding to the establishment and maintenance stages in Super's theory on the Stages of Career Development (Gordon & Steele, 2015).

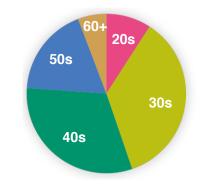


FIGURE 3. AGE DISTRIBUTION OF RESPONDENTS

As Figure 4 indicates, the majority (51%) of respondents held a master's degree and 24% held a PhD, together constituting 75% of the respondents.

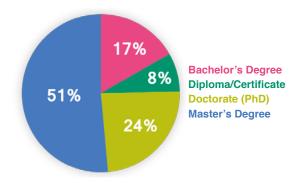


FIGURE 4. RESPONDENTS' LEVEL OF QUALIFICATION

Sixty-eight per cent of the respondents were teachers, working at different levels of educational institutions. Researchers, administrators, curriculum developers and instructional designers constituted almost 25%; this category represents the essential support staff of educational institutions (Figure 5).

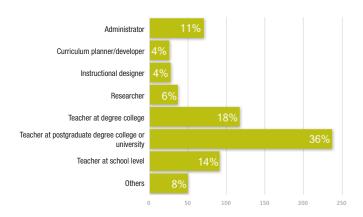


FIGURE 5. RESPONDENTS' JOB POSITION

Fifty-five per cent of respondents indicated that their main job involved delivering courses in a face-to-face environment, 43% presented courses in a blended environment, and 36% delivered their courses online. Additionally, 39% were involved in conducting workshops and training programmes (Figure 6).

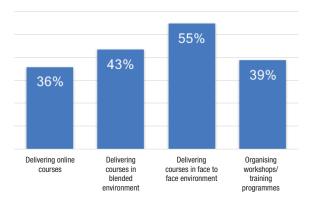


FIGURE 6. THE NATURE OF THE WORK BEING CARRIED OUT BY RESPONDENTS

Figure 3 shows that 67% of the respondents were in the 30–49 age group, whilst another 18% were in the 50–59 age group. Hence, almost 57% of the respondents had more than nine years of teaching experience, whilst about 17% had between six and eight years (Figure 7).

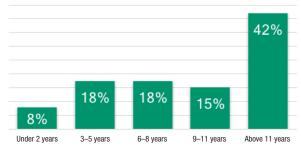
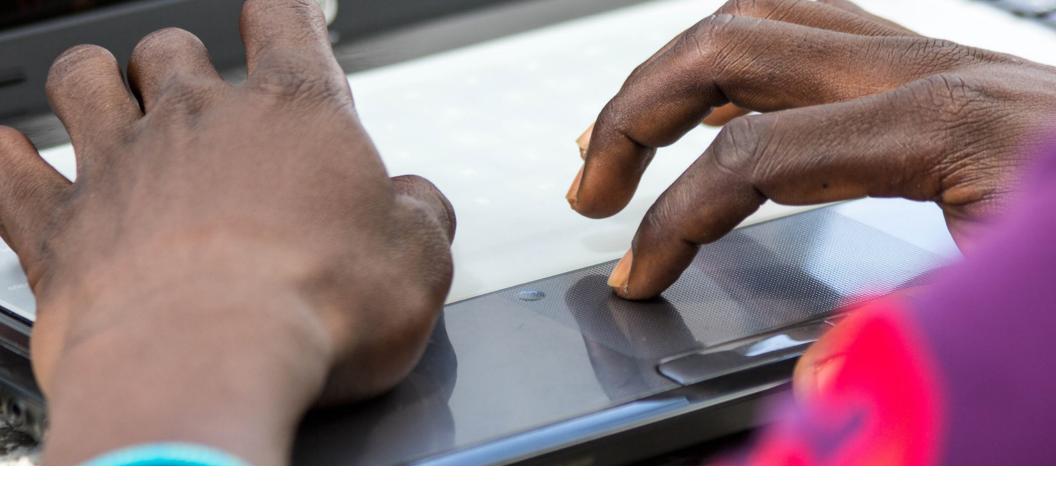


FIGURE 7. RESPONDENTS' TEACHING EXPERIENCE

The profiles of the respondents indicated that a large percentage of them were experienced and highly qualified. We therefore believe that their perceptions and responses are indicative of the present status of OER in the targeted institutions of the Commonwealth.



Key Findings

Table 1 outlines the research questions of the study with reference to four of the ten recommendations made in the 2012 Paris OER Declaration (UNESCO, 2012). In this section, we attempt to answer the research questions based on the survey findings, with a view to assessing the extent of the four recommendations' implementation.

QUESTION 1: To what extent are teachers trained in reusing, revising, remixing and redistributing OER?

With respect to the percentage of participation of teachers/faculty in OER-related training activities (Figure 8), the participation of the staff in vocational institutes is highest (64%), followed by staff in open universities (54%).

As Figure 8 indicates, the percentage of respondents who had participated in OER-related training varied amongst the institutions. However, from Figure 9 we see that the respondents who had not participated in OER-related training programmes were the highest users or consumers of OER, at 47%. Further probing showed that 39% of this cohort had learned about OER through self-study, whilst 43% had learned about OER by working with other colleagues on related activities.

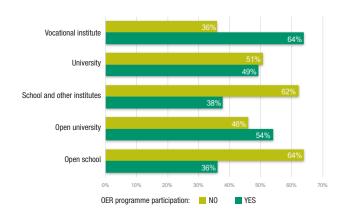


FIGURE 8. PARTICIPATION IN OER TRAINING ACTIVITIES



With respect to contributions to OER, Figure 9 shows that training does empower teachers to develop and help others develop OER. We also found that most of the workshops were short and emphasised only the basics, with few hands-on activities.

We further realised that there are gaps in the development of OER throughout the Commonwealth (see Figure 10).

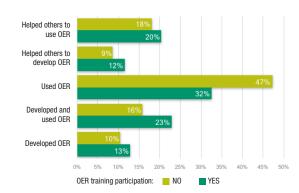


FIGURE 9. PARTICIPATION IN OER ACTIVITIES

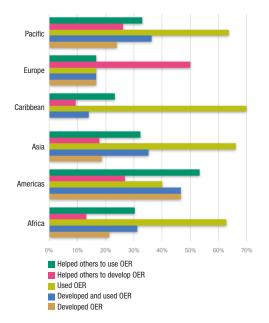


FIGURE 10. PARTICIPATION IN OER ACTIVITIES
BY REGION

Question 2: What are the perceptions of the quality and cost-efficiency of OER, and what are the various quality assurance mechanisms used?

In response to the question "For which of the following purposes have you used OER in the context of your teaching/training," 65% of respondents indicated that they did so for teaching and for learning, and 60% for supplementing existing lessons. Only 22% used OER to download a course, as shown in Figure 11. Further probing found that 68% of the respondents felt using OER results in cost savings for students, 5.7% felt this was not the case and 26.3% did not know.

Figure 12 shows us that the respondents perceived OER to be a good solution for improving quality and minimising costs related to a course or programme. Figure 13 shows that 82% found OER to be of good or excellent quality.

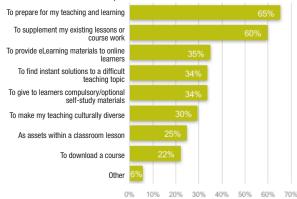


FIGURE 11, PURPOSES FOR USING OFR



In terms of the perceived quality of OER, the participants preferred to check the authenticity and credibility of a resource first (see Figure 14). OER originating from a reputable institution with established quality assurance mechanisms were generally perceived as good OER. Surprisingly, only 26% checked whether a resource had previously been used by others.

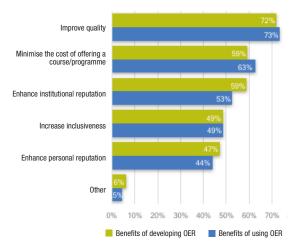


FIGURE 12. PERCEIVED BENEFITS OF DEVELOPING AND USING OER

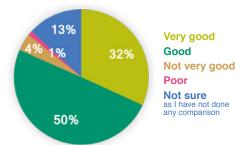


FIGURE 13. PERCEIVED QUALITY OF OER

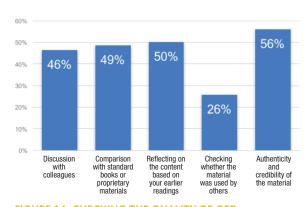
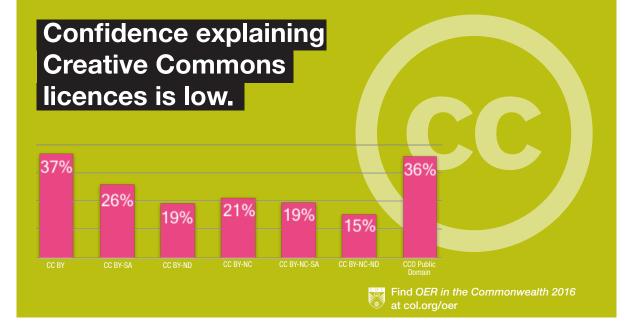


FIGURE 14. CHECKING THE QUALITY OF OER

Question 3: What is the level of facilitation in the reuse, revision, remixing and redistribution of educational materials across the Commonwealth through open licensing?

With respect to open licensing, we found that 94% felt it was important when using a resource in their teaching. In terms of Creative Commons licences, we found that the respondents were most confident in explaining the CC BY (37%) and CCO Public Domain (36%) licences. They were not very comfortable (15%) with explaining the CC BY-NC-ND licence (see Figure 15).

In general, the confidence level in explaining the meaning of different types of licences was low. Our findings are further confirmed through Figure 16, which shows that 72% of the respondents did not openly share their teaching materials publicly. Only 12% allowed reuse and revision of their teaching materials, whilst 15% did not allow



reuse and revision, even though the materials were publicly available.

The following are some of the reasons mentioned by the respondents for not sharing their teaching materials publicly:

- » "I don't know how to share OER."
- "I lack the knowledge to integrate them in the system."

- "Personal work and effort should not be copied; only resources can be shared."
- "I don't know how to make a document viewable by the public."
- » "I have received no training on how to share them."
- "I am not confident."

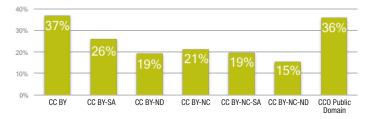


FIGURE 15. CONFIDENCE IN DEFINING AND EXPLAINING LICENCE TYPES

Do you share any of your teaching materials publicly?

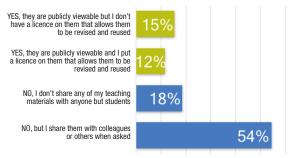


FIGURE 16. SHARING OF TEACHING MATERIALS AS OER

Question 4: What are the opportunities and challenges faced when developing, using, evaluating and recontextualising OER?

Respondents indicated that "not having information about the quality of OER" (46%) and "not having enough OER in video and audio format" (44%) were the biggest challenges they faced in using OER, as shown in Figure 17.

As Figure 18 indicates, lack of time, lack of awareness and low Internet connectivity were the main barriers to using OER. However, lack of software, hardware or rewards and recognition were not considered major barriers.

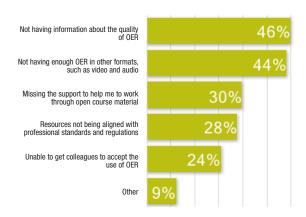


FIGURE 17. CHALLENGES FACED IN USING OER



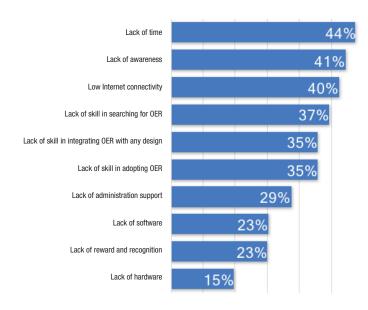


FIGURE 18. BARRIERS TO USING OER

Question 5: How have institutions taken advantage of evolving technology to create opportunities for sharing materials which have been released under an open licence in diverse media?

Amongst the different OER types available, the respondents believed that text materials were the easiest to adopt and reuse (76%), followed by lecture notes (54%) and slides (53%), as shown in Figure 19.

We also found that 62% considered "easy to download" to be the most important factor for adopting OER (Figure 20). Surprisingly, only 32%



felt that positive user ratings or comments about the resource were important. Further, the Word format was identified as the easiest to adopt, at 85%, followed by PDF at 52% and HTML at 21%, making it the least favourite.

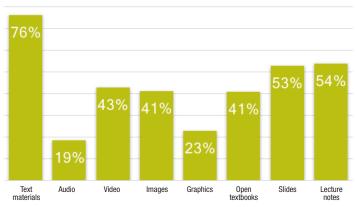


FIGURE 19. TYPES OF OER THAT ARE EASY TO ADOPT AND REUSE

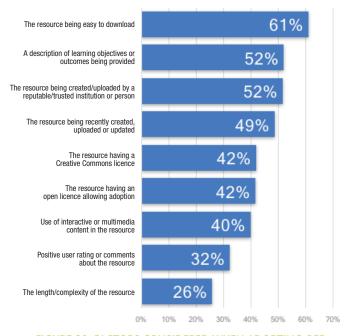


FIGURE 20. FACTORS CONSIDERED WHEN ADOPTING OER

Question 6: What are the tools used to locate and retrieve OER that are specific and relevant to particular needs?

Seventy-eight per cent of respondents frequently used search engines to locate OER, whilst only 22% used repositories. Amongst the search engines, the participants used Google more frequently (89%) than other search engines, as shown in Figure 21.

Amongst the repositories, the most commonly used was OER Commons (36%), followed by Wikimedia Commons (32%) and COL-DOER (23%), as shown in Figure 22.

Based on their experience, respondents felt that open textbooks (46%), course modules (40%) and videos (39%) were the most difficult to find (Figure 23).

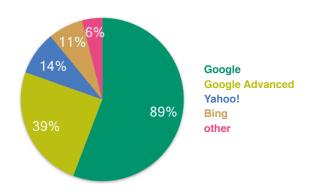
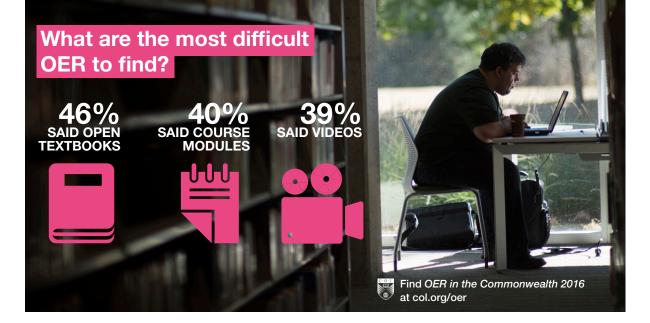


FIGURE 21. SEARCH ENGINES USED



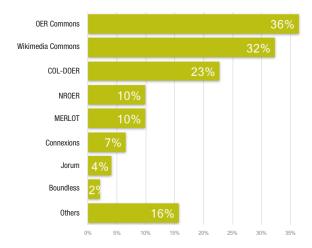


FIGURE 22. OER REPOSITORIES COMMONLY USED

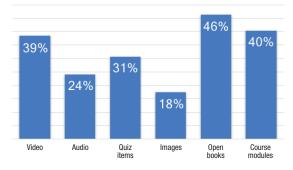


FIGURE 23. OER MATERIALS THAT ARE HARD TO FIND



Summary

This Open Educational Resources in the Commonwealth 2016 report provides the current status of the development, use and reuse of OER, the availability of support for education practitioners, and the challenges to fostering the use of OER in the Commonwealth. The key findings from the 657 completed responses from 28 countries, across 214 institutions, portray the OER landscape in these regions and highlight the shortcomings that need to be addressed through future COL interventions. The findings show that training and capacity building in OER increase OER production. However, gaps remain in the development of OER within the Commonwealth.

It is encouraging to see that faculty/teachers are using OER for their teaching and learning. Furthermore, they perceive OER to be of good quality and view them as a means of reducing costs related to courses and programmes. Respondents consider that the biggest challenge to OER use is not having information about the resources' quality. The participants prefer to use OER from reputable institutions that have some form of established quality assurance mechanism. The findings also show that the general understanding of open licensing is low, which in turn has contributed to teachers not sharing their material publicly. Lack of time, lack of awareness

and low Internet connectivity are the main barriers to using OER. Interestingly, lack of rewards or recognition is not considered a major barrier. Ease of download is considered to be the most important factor for adopting OER. In this context, search engines are used more than repositories to locate the necessary resources. Based on their experience, the respondents felt that open textbooks, course modules and videos were the most difficult OER to find. Text materials in Word format are preferred above others when it comes to adopting OER.

References

- Afeti, G. (2014, August 27). Skilling Africa: The paradigm shift to technical and vocational skills development. Association for the Development of Education in Africa. Retrieved from http://www.adeanet.org/en/blogs/skilling-africa-the-paradigm-shift-to-technical-and-vocational-skills-development
- Butcher, N. (2015). A basic guide to open educational resources (OER). Vancouver, Canada:

 Commonwealth of Learning & UNESCO.

 Retrieved from http://oasis.col.org/
 handle/11599/36
- Caswell, T., Henson, S., Jensen, M., & Wiley, D. (2008). Open educational resources: Enabling universal education. *The International Review of Research in Open and Distributed Learning, 9*(1). Retrieved from http://www.irrodl.org/index. php/irrodl/article/view/469/1001
- Commonwealth of Learning. (2015). Commonwealth of Learning strategic plan 2015–2021.

 Vancouver, Canada: Author. Retrieved from http://oasis.col.org/handle/11599/826
- Gordon, V. N., & Steele, G. E. (2015). The undecided college student: An academic and career advising challenge (4th ed.). Springfield, IL: Charles C. Thomas.
- Grodecka, K., & Śliwowski, K. (2014). *Open*educational resources mythbusting. Open
 Educational Resources Policy in Europe.

- Retrieved from http://mythbusting.oerpolicy. eu/wp-content/uploads/2014/11/OER_ Mythbusting.pdf
- Hoosen, S., Moore, D., & Butcher, N. (2016). Open educational resources (OER) guide for students in post-secondary and higher education.
 Vancouver, Canada: Commonwealth of Learning. Retrieved from http://oasis.col.org/handle/11599/2093
- ITU. (2010). World telecommunication/ICT development report 2010. Geneva, Switzerland: Author.

 Retrieved from http://www.itu.int/ITU-D/ict/publications/wtdr_10/material/WTDR2010_Cover_e.pdf
- Jhangiani, R., Pitt, R., Hendricks, C., Key, J., & Lalonde, C. (2016). Exploring faculty use of open educational resources at British Columbia post-secondary institutions. BCcampus Research Report. Victoria, Canada: BCcampus.
- Kawachi, P. (2014). Quality assurance guidelines for open educational resources: TIPS framework. CEMCA. Retrieved from http://oasis.col.org/ handle/11599/562
- Kurelovic, E. K. (2016). Advantages and limitations of usage of open educational resources in small countries. *International Journal of Research in Education and Science*, *2*(1), 136–142.

- OER Asia. (2012). A study of the current state of play in the use of open educational resources in the Asian region. Retrieved from https://oerasia.org/index.php?option=com_content&view=article&id=9&Itemid=11
- Orr, D., Rimini, M., & van Damme, D. (2015).

 Open educational resources: A catalyst for innovation. Paris, France: OECD Publishing. doi:10.1787/9789264247543-en
- UNESCO. (2002). Forum on the impact of open courseware for higher education in developing countries: Final Report. Paris, France: Author.
- UNESCO. (2012). 2012 Paris OER Declaration. Paris, France: World OER Congress. Retrieved from http://www.unesco.org/new/fileadmin/ MULTIMEDIA/HQ/CI/CI/pdf/Events/Paris%20 OER%20Declaration_01.pdf
- Weller, M. (2010). Big and little OER. In *Open Ed 2010 Proceedings*. Barcelona, Spain: UOC, OU & BYU. Retrieved from http://openaccess.uoc. edu/webapps/o2/bitstream/10609/4851/6/Weller.pdf
- World Bank. (2012). *World development report 2013*. Washington, DC: Author.



Appendix: Survey Questionnaire

Baseline Survey Study of the Capacities of Teachers with Respect to the Development, Use and Reuse of Open Educational Resources (OER) within Targeted Institutions of the Commonwealth

Welcome to this baseline survey study on open educational resources, conducted by the Commonwealth of Learning (COL).

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.

Hosted by the Government of Canada and headquartered in Burnaby, British Columbia, Canada, COL is the world's only intergovernmental organisation solely concerned with the promotion and development of distance education and open learning. COL is helping developing nations improve access to quality education and training.

The expected outcome of this survey study is to understand the current state of education/higher education institutions, open schools, technical and vocational education and training (TVET) institutions, and open universities across the Commonwealth with respect to OER development, use and reuse issues, challenges and available support systems.

We thank you in advance for taking the time to complete this survey. The survey will take about 30 minutes to complete. Your responses are voluntary and will be confidential. Responses will not be identified by individual. All responses will be compiled together and analysed as a group.

Your feedback will contribute to enhancing the understanding of OER practices and is likely to provide input for potential future collaborations between COL and your institution.

Please complete the survey by 20 May 2016. If you have any questions or concerns, please contact Dr Ishan Abeywardena, Adviser, Open Educational Resources, at the Commonwealth of Learning, at +1 604 775 8263 or iabeywardena@col.org.

I look forward to your cooperation and support.

Regards,

Professor B. Phalachandra
Consultant to the Commonwealth of Learning

About You	Your highest educational qualification
Name:	☐ Diploma/Certificate
Designation/Position:	☐ Bachelor's degree
Qualifications (academic and professional). Please list all:	☐ Master's degree
Institution:	□ Doctorate (PhD)
City:	☐ Other, please specify
Country:	Which of the following apply to you?
Address for correspondence:	☐ Working in open school/institution
	☐ Working in vocational school/institute
Email address:	☐ Working in open university
Phone number with country code:	☐ Other, please specify
Age	Which of the following apply to you?
□ 20-29	Please choose all that apply
□ 30-39	☐ Teacher at school level
□ 40-49	☐ Teacher at degree college
□ 50-59	☐ Teacher at postgraduate degree college or university
☐ 60 and above	☐ Researcher
Gender	☐ Administrator
□ Male	☐ Curriculum planner/developer
□ Female	☐ Instructional designer
□ Other	☐ Other, please specify

For how many years have you been in this profession?	Did you attend any programmes (seminars/workshops) relating to OER?	
□ Under 2 years	□ Yes	
□ 3-5 years	□ No	
☐ 6-8 years	*If your response is "No" for the question above, how did you acquire knowledge about OER?	
□ 9-11 years	□ Self-study	
☐ Above 11 years	,	
Did you attend any programmes (seminars/workshops) relating to OER	☐ Working with colleagues on OER-related activities	
organised by the Commonwealth of Learning?	☐ Other, please specify	
□ Yes		
□ No	Your experience of OER searching	
*If your response is "Yes," please answer the following questions.	While searching for OER, which of the following would you use more frequently?	
Which local institution organised the programme?	☐ Search engines	
When was it (month and year) organised?	□ OER repository	
Programme duration:	From your experience of searching for OER for study/teaching, which	
Where was it conducted (place/location)?	types of materials are very hard to find?	
What were the inputs/issues discussed?	Please choose all that apply.	
Were there any hands-on activities in the programme?	□ Videos	
□ Yes	□ Audios	
□ No	□ Quiz items	
	□ Images	
	□ Open books	
	□ Course modules	

Which of the following search engines do you usually use?	Your Use of OER		
□ Google	Which of the following apply to you?		
☐ Google advanced search	Please choose all that apply.		
□ Yahoo!	☐ Developed OER		
□ Bing	☐ Developed and used OER		
□ Other, please specify	□ Used OER		
Which of the following OER repositories do you usually use?	☐ Helped others to develop OER		
Please choose all that apply.	☐ Helped others to use OER		
□ Connexions	In which of these situations have you used OER?		
□ MERLOT	☐ Teaching (classroom/tutorial)		
□ Jorum	☐ Course development		
□ Boundless	□ Training		
□ Wikipedia Commons	☐ Research/Publication		
□ OER Commons	□ Others, please specify		
☐ COL Directory of Open Educational Resources (DOER)	In which of these ways, if any, have you created OER?		
□ National Repository of Open Educational Resources (NROER)	Please choose all that apply.		
□ Others, please specify	☐ Created open educational resources for students' study or teaching		
	☐ Created resources and published them on an open licence		
	☐ Added a resource to a repository		
	\Box Added comments to a repository regarding the quality of a resource		
	☐ Added comments to a repository suggesting ways of using a resource		
	☐ Organising workshops/training programmes		
	☐ Have not created any open educational resources		
	□ Other, please specify		

Which of the following are barriers in developing and using OER?		Which of the following apply to you?		
Please choose all that apply.		Please choose all that apply.		
☐ Lack of time		☐ Delivering online courses		
☐ Lack of awareness		☐ Delivering courses in a blended environment		
☐ Lack of skills in searching for OER		☐ Delivering courses in a face-to-face environment		
☐ Lack of skills in adopting OER		☐ Organising workshops/training programmes		
☐ Lack of skills in integrating OER with my design		What benefits do you envisage in developing OER?		
☐ Low Internet connectivity		Please choose all that apply.		
☐ Lack of hardware		☐ Enhance personal reputation		
☐ Lack of software		☐ Enhance institutional reputation		
☐ Lack of reward and recognition		☐ Minimise the cost of offering a course/programme		
☐ Lack of administrative support		☐ Improve quality		
Which, if any, of the following types of OER have you used for teaching/training/course development?		☐ Increase inclusiveness		
		□ Others, please specify		
Please choose all that apply.		What benefits do you envisage in using OER?		
☐ Curriculum/Syllabus	☐ Lecture notes	Please choose all that apply.		
☐ Assessment	☐ Lesson plans	☐ Enhance personal reputation		
☐ Open textbooks	☐ Tutorials	☐ Enhance institutional reputation		
☐ Whole course	☐ Quizzes	☐ Minimise the cost of offering a course/programme		
☐ Elements of a module or a course	☐ E-books	☐ Improve quality		
□ Videos	☐ Data sets	☐ Increase inclusiveness		
☐ Audio podcasts	 Learning tools, instruments and plug-ins 	☐ Others, please specify		
☐ Images	☐ Others, please specify			
☐ Infographics	= Garets, prease speemy			
☐ Interactive games				

Your Experience with OER Based on your experience, which of the following are easier to adopt and reuse? From your experience of using OER, how difficult are they to adopt (use/ reuse)? Please choose all that apply ☐ Difficult ☐ Text materials ☐ Not difficult ☐ Audio ☐ Don't know as I have not used/reused □ Videos For which of the following purposes have you used OER in the context of ☐ Images your teaching/training? ☐ Graphics Please choose all that apply. ☐ Open textbooks ☐ To prepare for my teaching/training Slides To supplement my existing lessons or coursework ☐ Lecture notes As "assets" (e.g., images or text extracts) within a classroom lesson Based on your experience, which of the following formats are easier to To give to learners as compulsory/optional self-study materials use/adopt and reuse? To provide eLearning materials to online learners Please choose all that apply To download a course □ Word □ PDF To make my teaching more culturally diverse To find an instant solution to a difficult teaching topic □ HTML ☐ Others, please specify _____ ☐ Others, please specify _____ Before using OER, what steps do you follow to check their quality? Which challenges, if any, did you face in using OER? Please choose all that apply Please choose all that apply. ☐ Discussion with colleagues ☐ Resources not being aligned with professional standards or regulations Comparison with standard books or proprietary materials Unable to get colleagues to accept the use of open educational resources Reflecting on the content based on your earlier readings Missing the support to help me work through open course materials Checking whether the materials have been used by others Not having information about the quality of OER Authenticity and credibility of materials Not having enough OER in other formats, such as video and audio ☐ Others, please specify _____

Which of the following factors would make you more likely to select a How important is open licensing to you when using resources in your particular resource while searching for open educational content? teaching? Please choose all that apply. ☐ Very important ☐ The resource being recently created, uploaded or updated ☐ Important ☐ The resource being easy to download ☐ Unimportant ☐ A description of learning objectives or outcomes being provided In the context of your role as an educator (teacher/researcher/course developer), what barriers, if any, have you encountered when using OER in The resource being created/uploaded by a reputable/trusted institution or person your institution? The resource having a Creative Commons licence Please write your answer here: The resource having an open licence allowing adaptation The length/complexity of the resource Use of interactive or multi-media content (e.g., video or quiz) in the resource ☐ Positive user ratings or comments about the resource Do you share any of your teaching materials publicly? Which of the following Creative Commons licences are you confident in Please choose all that apply. defining and/or explaining? □ No, but I share them with colleagues or others when asked. Please choose all that apply. □ No, I don't share any of my teaching materials with anyone but students. □ CC BY ☐ Yes, they are publicly viewable, and I put a licence on them that allows them to be ☐ CC BY-SA revised and reused. ☐ CC BY-ND ☐ Yes, they are publicly viewable, but I don't have a licence on them that allows them to be revised and reused. ☐ CC BY-NC ☐ Other, please specify _____ ☐ CC BY-NC-SA If you have answered "Yes" to the question above, please explain the reasons behind ☐ CC BY-NC-ND your answer here: ☐ CC0 Public Domain

Based on your experiences, how would you rate the quality of OER when	Institutional Policies Concerning OER		
compared with traditional, proprietary materials?	Does your institution have an OER policy?		
□ Very good	☐ Yes		
Good	□ No		
□ Not very good	☐ Being developed		
□ Poor	Did your institution organise any programme to orient faculty about OER?		
☐ Not sure as I have not done any comparison	□ Yes		
While delivering offline/online courses, what kind of materials do you use?	□ No		
☐ Developed by self	If your response is "Yes," list the content/title of the programme.		
☐ Developed in the institution	ii your responde to rest, not are content, and or are programmer		
□ Downloaded from OER repository	What are the different policies and practices, if any, your institution has in		
□ Downloaded from the Internet	relation to OER?		
☐ Others, please specify	Please write your answer here:		
Did you share the OER developed by you with others?			
□ Yes			
□ No	In the context of your role as an educator, what kinds of policies would		
If your response is "No," what were your reasons for not sharing?	help you to be more open? Please write your answer here:		
The Impact of Using OER			
Do you believe that your students have saved money by using OER?	Would you be willing to provide more information related to your work on OER, if contacted?		
□ Yes	□ Yes		
□ No	□ No		
□ Don't know			

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November 2016

This study was conducted as part of the OER for Skills Development project of COL, supported by The William and Flora Hewlett Foundation. The objective of the study was to collect baseline data from Commonwealth institutions with respect to the development, use and reuse of OER; the availability of support; and challenges faced in fostering the use of OER. Six research questions were formed, after reviewing previous studies, to analyse the status of OER in the Commonwealth, based on four recommendations of the 2012 Paris OER Declaration.