



United Nations
Educational, Scientific and
Cultural Organization



COMMONWEALTH of LEARNING

Survey on Governments' Open Educational Resources (OER) Policies



Prepared for the World OER Congress

June 2012

Survey on Governments' Open Educational Resources (OER) Policies

Prepared for the World OER Congress

———— June 2012 ————

Prepared by Sarah Hoosen of Neil Butcher & Associates
for the Commonwealth of Learning and UNESCO

The Commonwealth of Learning (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.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) was founded on 16 November 1945. UNESCO is a specialised United Nations agency promoting international co-operation among its Member States and Associate Members in the fields of education, science, culture and communication.

The designations employed and the presentation of material throughout this publication do not imply the expression of any opinion whatsoever on the part of UNESCO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The authors are responsible for the choice and the presentation of the facts contained in this book and for the opinions expressed therein, which are not necessarily those of UNESCO and do not commit the Organization.

This report was commissioned as part of the project Survey on Governments' Open Educational Resources (OER) Policies carried out by the Commonwealth of Learning and UNESCO and partially funded by the William and Flora Hewlett Foundation.



Commonwealth of Learning, 2012

© 2012 by the Commonwealth of Learning. Survey on Governments' Open Educational Resources (OER) Policies is made available under a Creative Commons Attribution-ShareAlike 3.0 Licence (international): <http://creativecommons.org/licenses/by-sa/3.0>.

For the avoidance of doubt, by applying this licence the Commonwealth of Learning does not waive any privileges or immunities from claims that it may be entitled to assert, nor does the Commonwealth of Learning submit itself to the jurisdiction, courts, legal processes or laws of any jurisdiction.

Survey on Governments' Open Educational Resources (OER) Policies

Prepared by Sarah Hoosen of Neil Butcher & Associates

ISBN: 978-1-894975-54-1

Published by:



Commonwealth of Learning

1055 West Hastings, Suite 1200
Vancouver, British Columbia
Canada V6E 2E9

Telephone: +1 604 775 8200

Fax: +1 604 775 8210

Web: www.col.org

Email: info@col.org



UNESCO

Section for Higher Education
7 place de Fontenoy
Paris 75352
France

Telephone: +33 1 45 68 10 00

Fax: +33 1 45 68 56 32

Web: www.unesco.org/education

Email: l.ruas@unesco.org

Contents

Foreword	v
Acknowledgements	vii
1 Introduction	1
1.1 Methodology	1
2 Findings	3
2.1 Nature and extent of OER activity per region	3
2.1.1 Africa.....	5
2.1.2 Arab States.....	6
2.1.3 Asia and the Pacific	6
2.1.4 Europe and North America.....	8
2.1.5 Latin America and the Caribbean	9
2.2 Nature and extent of existing policies	11
2.2.1 References to OER in other public policies	13
2.3 Funding	15
2.4 Studies and research on OER	17
2.5 Perceived benefits of OER	18
2.6 Obstacles to OER adoption	21
3 Conclusion	25
Annex 1	27

Foreword

It is a pleasure to present this analysis, by Sarah Hoosen of Neil Butcher & Associates, of the results of a questionnaire survey of the world's governments about their open educational resources (OER) policies. This is one element of the project *Fostering Governmental Support for OER Internationally*, a partnership between the Commonwealth of Learning and UNESCO with support from the William and Flora Hewlett Foundation.

On behalf of the project team, I express our warm thanks to the governments that responded to the survey either by completing the questionnaire or by sending letters. In order to prepare this report in time for the World OER Congress on 20–22 June 2012 we set a cut-off date of 16 April for this analysis. The jurisdictions that responded after that date and before this report went to press on 29 May are listed in Annex 1. Further responses are still welcome since policy development on OER is a dynamic process.

This report covers responses that were submitted to COL or UNESCO. We did not have access to the responses to a similar survey conducted by the OECD amongst its member states in 2011. The only responses to the OECD survey included in this analysis are those that countries resubmitted to COL or UNESCO in reply to the present survey.

Both COL and UNESCO believe that OER have great potential for widening access to education and improving its quality and cost-effectiveness. I am heartened, therefore, by the conclusion of this report which states that “there appears to be great interest in OER across all regions of the world with several countries embarking on notable OER initiatives.”

The report also shows that a continuing campaign of advocacy, information and capacity-building is still required since “there appears to be some confusion regarding an understanding of the concept and potential of OER.” Nevertheless, it is encouraging that “many projects are geared to allowing online access to digitised educational content” even if “the materials themselves do not appear to be explicitly stated as OER.”

No doubt, as the OER movement continues to gather pace, open licensing will steadily become more widespread. There are clearly opportunities for both COL and UNESCO to assist countries and institutions in taking full advantage of OER in achieving quality education for all.

I thank Sarah Hoosen and Neil Butcher & Associates for conducting this analysis and I am very pleased that this work was done in Africa, where the OER movement is developing strongly.

Sir John Daniel
Project Director
Commonwealth of Learning

Acknowledgements

I would like to thank COL and UNESCO for making this report possible. In particular, I would like to acknowledge Sir John Daniel and Stamenka Uvalić-Trumbić for their leadership. I would also like to thank Neil Butcher for his help and direction with this report. I am grateful to Patricia Schlicht, Annapola Coppola and Brenda Garcia who helped with the data capture and administration, and to Lesley Cameron for copy-editing the report.

Sarah Hoosen

Introduction

The Commonwealth of Learning (COL) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) have taken an active interest in the development of the open educational resources (OER) movement. As part of their joint project Fostering Governmental Support for Open Educational Resources Internationally, UNESCO and COL invited governments to provide information about their policies in relation to OER. The Organisation for Economic Co-operation and Development (OECD) conducted a similar survey of its member states between August and October 2011 but, because it could not share the detailed results, OECD countries were also included in this survey. This report provides an overview of the findings of the COL/UNESCO survey on OER policies and activity across all countries of the world.

1.1 Methodology

Questionnaires were developed by UNESCO and COL based on a simplified version of the OECD questionnaires. COL sent out the survey to Commonwealth Governments, as well as OECD Commonwealth countries and, since they have jurisdiction in education, the governments of the provinces, states and territories of Australia and Canada in October 2011. These questionnaires were sent out in English only to Ministers of Education and COL's country focal points. UNESCO sent the same questionnaire to all 195 UNESCO Member States through the usual official channels (i.e., the Permanent Delegations to UNESCO located in Paris and the National Commissions for UNESCO located in different ministries at a national level). UNESCO questionnaires were sent in English and French in January 2012.

Responses were received from 82 countries by the cut-off date of 16 April 2012 set for this report. Responses received after that date have not been included here. Due to the questionnaire likely being sent by COL and UNESCO to different contact people, there was sometimes more than one respondent per country. In addition, some respondents provided input via letters rather than specific responses to the questions posed. Such input has been incorporated into the qualitative analysis but was excluded from the quantitative analysis as responses for those questions were absent. It should be noted that receipt of more than one response per country may have slightly skewed the results per region. However, given that there was a maximum of four responses per country (and that not all respondents answered all questions, whilst, in some instances, respondents were from different states), all country responses have been included in the analysis.

Tables 1 and 2 provide a breakdown of responses received.

Table 1 Responses by region

Region	Number of survey responses	Number of countries	Number of letter responses ¹
Africa	24	20	0
Arab States	9	8	0
Asia and Pacific	23	19	4
Europe and North America	20	16	9 (8 from Canada)
Latin America and Caribbean	22	19	0
TOTAL	98	82	13

Table 2 Responses by countries²

Region	Countries
Africa	Botswana, Burkina Faso, Cameroon, Ghana, Kenya, Lesotho, Madagascar, Malawi, Mauritius (3), Mozambique, Namibia (2), Niger, Nigeria, Rwanda (2), Seychelles, South Africa, Swaziland, Tanzania, Zambia
Arab States	Algeria, Iraq, Kingdom of Bahrain, Lebanon, Morocco (2), Qatar, the Sultanate of Oman, Tunisia
Asia and Pacific	Australia (3), Brunei Darussalam, People's Republic of China, Cook Islands, Federally Administered Tribal Areas (FATA) Pakistan, Fiji, Indonesia (2), Iran, Malaysia, Mongolia, New Zealand, the Philippines (2), Republic of Kazakhstan, Republic of Korea, Sri Lanka, Thailand, Uzbekistan, Vanuatu, Vietnam
Europe and North America	Austria, Azerbaijan, Belgium, Bulgaria, Canada (4), Cyprus, Finland, Hungary, Italy (2), Latvia, Lithuania, Malta, the Netherlands, Poland, Republic of Armenia, Slovenia
Latin America and Caribbean	Antigua and Barbuda, Argentina, Bahamas, Belize, Brazil, Chile (2), Colombia, Costa Rica (2), El Salvador, C. A., Grenada, Guatemala, Jamaica, Mexico, Paraguay, Peru, Saint Vincent and the Grenadines, St. Kitts and Nevis, Trinidad and Tobago (2), Uruguay

Respondents either completed the questionnaire online or sent electronic or paper copies to COL and UNESCO. Responses submitted via email or in print were captured by COL/UNESCO staff into the online questionnaire tool (SurveyMonkey). The results contained in the online tool form the basis of this analysis.

¹ This only includes letters with relevant information and does not include letters of acknowledgement.

² Number in parentheses indicates the number of responses in instances where multiple questionnaire responses were received.

2 Findings

2.1 Nature and extent of OER activity per region

Countries appear active in the OER movement mainly through initiatives by institutions and engaged individuals and through specific projects or programmes with public funding. This appears to be consistent across all regions, with the exception of the Arab States where government initiatives appear to be more of a driving force. Notably, though, a third of respondents from Arab States and almost a third from Latin America and the Caribbean indicated that their country is not currently active in the OER movement. This is outlined in Table 3, which summarises responses about whether or not countries are active in the OER movement.

Table 3 Nature of OER activity per region

Response options	Africa	Arab States	Asia and Pacific	Europe and North America	Latin America and Caribbean	Total across all regions
Yes, through initiatives by institutions and engaged individuals	50%	11%	52%	40%	41%	43%
Yes, through specific projects or programmes with public funding	25%	11%	52%	55%	46%	41%
Yes, through specific projects or programmes with private funding	33%	0%	26%	10%	9%	18%
Yes, through government initiatives including specific measures and incentives	17%	22%	39%	35%	23%	28%
No	8%	33%	13%	5%	32%	16%
Yes, otherwise	33%	22%	17%	30%	5%	21%

Respondents were also asked to rate the intensity of OER activity for educational subsectors using the International Standard Classification of Education (ISCED). ISCED-defined levels of education are outlined in Table 4.

Table 4 ISCED-defined levels of education³

Level	Name of level	Main characteristics
0	Pre-primary education	Initial stage of organised instruction, designed primarily to introduce very young children to a school-type environment
1	Primary education or first stage of basic education	Normally starting between the ages of 5 and 7, designed to give a sound basic education in reading, writing and mathematics along with an elementary understanding of other subjects
2	Lower-secondary or second stage of basic education	Designed to complete basic education, usually with a more subject-oriented pattern
3	(Upper-) secondary education	More specialised education typically beginning at age 15 or 16 and/or the end of compulsory education
4	Post-secondary non-tertiary education	Includes programmes that straddle the boundary between upper- and post-secondary education from an international point of view (e.g., pre-university courses or short vocational programmes)
5	First stage of tertiary education	Tertiary programmes with an advanced educational content, cross-classified by field
6	Second stage of tertiary education	Tertiary programmes leading to the award of an advanced research qualification (e.g., PhD)

The overall results per ISCED level are presented in Table 5.

Table 5 Intensity of OER activity for different levels of education

	Primary (ISCED 1)	Lower secondary (ISCED 2)	Upper secondary (ISCED 3)	Post-secondary/ not tertiary (ISCED 4)	Tertiary (ISCED)
None	15.3%	8.2%	4.1%	8.2%	3.1%
Low	34.7%	36.7%	37.8%	31.6%	28.6%
High	14.3%	18.4%	19.4%	16.3%	22.4%
Very high	3.1%	2.0%	5.1%	3.1%	6.1%
No response	32.7%	34.7%	33.7%	40.8%	39.8%

OER activity is thus widely spread across the primary, secondary and tertiary sectors of education. However, some respondents experienced difficulty answering this question as they felt that rating scales are relative and it is difficult to measure intensity without using a benchmark. In some instances, respondents were not familiar with activities in all subsectors as they may have only been responsible for one subsector. Nevertheless, it appears that the highest levels of OER activity are in tertiary education, followed by upper-secondary, lower-secondary and primary education.

³ http://en.wikipedia.org/wiki/International_Standard_Classification_of_Education#ISCED_defined_levels_of_education.

2.1.1 Africa

In Africa, countries appear to be most active in tertiary education, with 29% of respondents noting most OER activity in that subsector. Several South African institutions are reportedly involved in OER projects. For example, the University of the Western Cape is a member of the OpenCourseWare (OCW) Consortium and runs its own OpenCourseWare projects, the South African Institute for Distance Education (Saide) runs the OER Africa initiative and the Department of Basic Education manages the education resource portal (Thutong) with free and open resources for schools.

In Namibia, there is no national OER strategy but the Namibian Open Learning Network Trust (NOLNET) is pursuing the development and expansion of OER following the second National Open and Distance Learning (ODL) Conference, whose theme was “OER and the opportunities for expanding ODL,” in October 2011. In addition, the Namibian College of Open Learning worked with COL to produce OER in five subject areas under the William and Flora Hewlett Foundation/COL OER for Open Schools project (OER4OS). These materials are due to be released in 2012.

Zambia is participating in the OER4OS project. This experience has allowed the country to develop most of its school-level materials in an electronic format and make them available as OER. Zambia identifies this initiative as responding to the challenge of supplying material to schools and other educational institutions.

Countries such as Mauritius, Botswana and Seychelles appear to be involved in the OER movement through projects such as the OER4OS project and the Virtual University of Small States of the Commonwealth (VUSSC) programme. Other OER projects mentioned are run through donor funding, as well as one ministry-supported teacher-level project in Seychelles.

Other countries responding to the questionnaire are not yet active in the OER movement or appear to be in the early stages of OER adoption. For example, in Rwanda, OER are largely the initiative of individuals who use them to enhance educational materials at the higher education level. In Nigeria, the National Teachers' Institute presented a memorandum entitled *Promoting the Use of OER for Quality HE Delivery* in 2011, and it was expected that this will be ratified in 2012. However, some countries that are not yet active expressed great interest in OER. For example, Tanzania noted that it would consider adopting an OER strategy or policy.

2.1.2 Arab States

Of the Arab States that responded to the questionnaire, Morocco appears to be most active in the OER movement. The Ministry of National Education created the National Laboratory of Digital Resources, which produces and collates digital educational resources, some of which are OER. There are also several other projects in this field in Morocco. For example, the Korea International Cooperation Industry project produces digital resources that are free to access and use for scientific disciplines at the secondary education level in partnership with Al Akhawayn University in Morocco. There is also a Unit for the Promotion of Software and Open Educational Resources at the Moroccan-Korean Centre of ICT Training, which was created with the main objective of promoting the use of software and OER to support the national policy of widespread use of these technologies through the GENERALization of Information Technologies and Communication in Education (GENIE) programme by offering very low-cost, and often free, ICT solutions. The Kingdom of Bahrain also has a digital learning repository hosting OER that encourages content-sharing and collaboration and reports on using CC licences. Lebanon is developing a strategy called One Tablet per Child that could be extended to include OER.

Given the few responses from this region by the cut-off date and the varied focuses, it is not possible to draw conclusions about where the main OER activity per educational subsector lies in the Arab States.

2.1.3 Asia and the Pacific

In the Asia-Pacific region, OER activity appears to be most prevalent in the tertiary education subsector. Australia appears to be very active in this region, and, although there are no national or state-level OER policies, there are various OER activities. Several cultural and educational institutions have made content available on a “free for education” (FFE) basis, which generally permits free use but not reuse, remixing or redistribution, as would typically be expected under an OER model. In 2010, a national repository of several thousand digital teaching resources (the National Digital Learning Resource Network, or the Learning Federation resources), owned collectively by Australian Government Education departments, was transitioned from an FFE model to an OER model using a Creative Commons Attribution-ShareAlike licence (CC BY-SA). This has allowed increased access to education for the learning community (students and parents can access material from anywhere). Scootle, the national repository of digital learning resources accessible by teachers across Australia, is a joint initiative of Australian state governments to create and share open teaching/learning resources for ISCED 1-3.

At the state level, the Government of South Australia’s Department for Education is currently developing resources that will be distributed under

Creative Commons licences (CC-BY-NC and CC-BY-SA). The New South Wales (NSW) Department of Education has developed several specific interactive teaching resources and released them under a CC licence. The decisions to generate/use OER are made on an ad hoc basis, generally at the level of individual institutions or (occasionally) in relation to specific content collections. The Australian Capital Territory (ACT) Directorate of Education and Training makes decisions about the licensing of materials on a case-by-case basis, depending on how resources will be used. For example, materials published on the Internet are available under a CC-BY-SA licence. The Western Australian Department of Education actively counsels teachers to find and use OER through their preferred search engines, and is currently investigating the issue of applying open licences to materials developed with public funds.

In the higher education subsector, Australian universities have been slower in adopting OER. However, there is recognition of the value of OER. The Australian government has provided funding for a university consortium to develop a feasibility protocol to facilitate the adoption, use and management of OER for teaching and learning in Australia. The findings of this project will inform discussions relating to the adoption of an OER approach in higher education in Australia. The Australian government has also funded the Australasian Council on Open, Distance and E-learning to promote the uptake of OER produced by some teaching and learning initiatives.

There are also significant developments in New Zealand. The Ministry of Education is in contact with the OER university project, and participates in OER through its Tertiary e-Learning Reference Group, which comprises e-learning experts. Otago Polytechnic has adopted an OER policy, and other institutions are showing similar interest. The Ministry has also funded a small-scale project (OERNZ) to develop an OER commons for the school sector in New Zealand. One of the focuses of the project is to “seed” OER content development for use in New Zealand schools. Thus far, two school boards have adopted an OER policy, with additional schools showing interest. Teachers are also adding OER to WikiEducator, a COL-supported initiative. Many OER activities come from advocates who work in the sector. For example, the OER Foundation provides free training workshops on OER, copyright and Creative Commons licences.

In addition to these country initiatives, the Philippines has created OER and plans to articulate and formulate an OER policy for tertiary education. Indonesia notes that it is developing OER. In Uzbekistan, OER use began relatively recently and Ziyonet, the education portal, includes OER. Iran notes that it is active in the tertiary education sector, particularly through Payame Noor University. In Vietnam, it also appears that universities are involved in a number of OCW initiatives and partnerships with foreign institutions.

2.1.4 Europe and North America

In Europe and North America, most OER activity appears to centre around the upper-secondary (ISCED 3) level, although this may be a reflection of where government support lies as universities in some of these countries are autonomous (and may therefore have their own OER projects). In addition, it is difficult to estimate the level of individual support for OER.

Austria has numerous OER activities supported by several departments of the Federal Ministry for Education, Arts and Culture. Examples of these include a platform for creating and sharing content in Austrian schools and freely accessible mathematics exercises as applications via GeoGebra (an interactive geometry, algebra and calculus application). In the tertiary sector, several universities are active in OER, and there is also an open access (OA) movement:

- University of Vienna: Phaidra (Permanent Archiving and Indexing of Digital Resources and Assets) is an open access database with a number of university members.
- The Academy of Science developed its own OA database.
- The Austrian Science Fund (FWF) finances the OA publishing of each research project it has funded.
- The University of Vienna is the Austrian contact point for OPEN DOAR (the OA initiative of the EU.)

In Finland, there are government initiatives to promote open access to publicly funded electronic learning materials (produced in government projects) through the national education portal and other electronic content repositories, as well as to scientific and scholarly publications at the higher education level. In the Netherlands, the Dutch Minister of Education introduced the Wikiwijs initiative as a tool to promote the development and use of OER. Whilst Slovenia does not officially participate in the OER movement, the Ministry of Education, Science, Culture and Sport promotes pedagogical e-content, and since 2006 e-content has been developed under a CC licence for various subjects. The Ministry has invested significant funds for this purpose.

Although Monaco does not have an OER policy, the government funds and favours the provision of digital education materials to schoolteachers. The Teacher Training Centre (CFP), a service attached to the Directorate of National Education, Youth and Sport, aggregates OER of neighbouring countries such as France, making them available to teachers by facilitating access to the resources and training teachers on their use.

Lithuania has participated in various international EU-funded projects (co-financed by its government) that are aimed at the creation of OER. These projects were implemented with European Schoolnet whilst developing a European Learning Resource Exchange service for schools.

In Canada, there are many activities centred on the provision of digital resources, but these are not all necessarily OER initiatives. Several institutions and non-governmental organisations are active in the OER movement, although there is no formal Canadian OER policy or position with regards to expanding the scope of OER. In Alberta, although there are collaborative projects to develop and share digital resources and to provide free resources, these resources are not necessarily OER. Similarly, Ontario has a password-protected provincial learning object repository, which allows elementary and secondary educators to share their resources with others in the province whilst retaining full ownership of these materials. Although there is interest in sharing, it does not currently extend beyond Ontario's borders. However, in Quebec, the higher education sector of the Ministry of Education, Recreation and Sports supports projects in the OER movement, including the shared collegiate platform DECclic.

In British Columbia, the Ministry of Advanced Education sponsors the BC campus initiative in support of education and training initiatives that promote the use and reuse of open resources. The Ministry has provided over CAD 9 million in direct funding since 2003 to provide openly licensed education resources for post-secondary institutions and students through the Online Programme Development Fund. This investment has resulted in the development of reusable instructional materials, including 355 courses, 12 workshops, 19 websites/Web tools and 396 course components. Many of these materials are licensed under a Creative Commons licence, whilst others are licensed through the British Columbia Commons. BCcampus, along with the University of Ottawa and Athabasca University, was recently approached by Creative Commons to work together on the formation and promotion of Creative Commons Canada.

In addition, the collective of Ministers and Deputy Ministers working within the Council of Ministers of Education, Canada has discussed OER and is ultimately moving towards developing OER policies.

2.1.5 Latin America and the Caribbean

OER activity in Latin America and the Caribbean is spread across the primary, secondary and tertiary sectors of education. Costa Rica noted that it runs OER projects, whilst Jamaica is making strides towards OER, particularly through C@RIBNET (the Caribbean Research and Education Network). The recently formed Jamaica Research and Education Network (JREN) is a community of institutions that collaborate to share resources collectively and to access the resources of C@RIBNET. Jamaica's Central Repository of Educational Material (CREM) component is also planned to be a part of JREN.

In Paraguay, the Community of Free Software drives the use of free software and licences applicable to educational materials and other materials, like the

General Public Licence (GPL)⁴ and Creative Commons. Uruguay's Education Portal EDUCA provides access to OER for teachers. In addition, la Universidad de la República has called for proposals based on the use of ICT and OER. Furthermore, a series of videos about popular science topics has been created and aired on Uruguay National Television and YouTube.

Trinidad and Tobago is involved in the OER movement through the VUSSC and OER for Open Schooling initiatives. This has now extended to other subject areas and other levels of education. For example, the Distance Learning Secretariat of the Ministry established an initiative in 2008 called Electronic Collaboration for Learning, Access, Information, and Research (ECLAIR), which is a mechanism to drive national capacity-building activities related to e-learning and the development and use of OER for the tertiary education sector.

Brazil has a number of OER initiatives:

- The Bank for International Educational Objects (BIOE) stores open access objects produced by the Ministry and by partners around the world. Most of them are released under Creative Commons licences.
- Portal do Professor allows teachers to create and suggest content that can be freely accessed and distributed. There are incentives for that content to be reprinted by other teachers and republished in the portal as new content.
- TV Escola creates and licenses free and open multimedia material directed at teachers and students, although it is not possible to edit these materials.
- Condigital focuses on the production of digital content for secondary schools. Content is licensed under the Creative Commons as required by Public Notice, which permits editing, translation and distribution. The Ministry has a distribution policy that benefits both private and public systems as the content is stored on open platforms.

Mexico has developed several ICT-related projects, including the production of digital learning resources. However, it is not clear whether these resources are shared under open licences.

⁴ The General Public License (GPL) is what is known as a "copyleft" licence. This is a free licence that can be used to modify copyrights for works such as computer software, documents, music and art. It removes restrictions on distributing copies and modified versions of a work for others, and requires that the same freedoms be preserved in modified versions. The licence requires derived works to be available under the same copyleft. It uses copyleft to ensure the freedoms are preserved, even when the work is changed or added to. When someone distributes their GPL licensed work plus their own modifications, the requirements for distributing the whole work cannot be any greater than the requirements that are in the GPL. One of the features of the GPL is that GPL software must be conveyed with its source code (see www.gnu.org/licenses/gpl.html).

2.2 Nature and extent of existing policies

The nature and extent of OER policies vary across countries, with more countries in Asia-Pacific and Europe and North America reporting that they have such policies. This is summarised in Table 6.

Table 6 Presence of a strategy or policy on OER

	Africa	Arab States	Asia and Pacific	Europe and North America	Latin America and Caribbean	Total across all responses
Yes	25%	44%	57%	55%	46%	45%
No	71%	56%	43%	45%	50%	53%
No response	4%	0%	0%	0%	4%	2%

Whilst 45% of respondents indicated in their quantitative response that they have a policy/strategy on OER, qualitative responses suggest that few such policies exist, as many policies are still in the process of being drafted.

Countries that have a policy include China, South Africa, Indonesia and the Bahamas. The Ministry of Education of the People’s Republic of China has a policy on OER, and China has developed several governmental OER action plans involving Chinese universities, such as the Video Open Courseware Project and the Open Digital Learning Resources for Continuing Education Project.

In South Africa, the Department of Higher Education and Training has included the development of an ODL policy framework in its strategic plan for 2010–2014, which will include OER. In addition, there is also a policy decision, through the process of the Integrated Strategic Planning Framework for Teacher Education Development, that all educational resources developed through funded projects have to be released under a CC licence.

Indonesia has committed to OER as part of its strategy of serving the educational needs of a population of nearly 250 million spread over 17,000 islands and three time zones. At the regulatory level there is a Ministerial Regulation on OER, whilst at the operational level, the Indonesian Higher Education Network (INHERENT) was established in 2007 for resource-sharing in education and research, in which all development of resources will be based on open source and open access principles. There is also a national repository for publications. Likewise, the Bahamas’ ICT in Education Strategy makes provision for the inclusion of OER.

In Latin America, Colombia notes that the Ministry of Education has prepared a document with national and institutional guidelines to promote and strengthen the production and management of OER. Uruguay’s Plan CEIBAL (Conectividad Educativa de Informática Básica para el Aprendizaje en Línea) (Educational Connectivity of Basic Informatics for Online Learning) includes development and use of OER to support classroom activities and independent learning.

Other countries — including Burkina Faso, Paraguay and Chile — may not have a policy that deals with OER, but have a free access policy. For example, in Burkina Faso, all public and private elementary schools have free access to all textbooks and teaching guides required for basic education. The copyright of this learning material belongs to the government.

Several other countries do not have policies yet, but are in the process of developing them as part of ODL initiatives. Examples of these include Lesotho, where the Lesotho Chapter of Distance Education Association of Southern Africa (DEASA) is working on a strategy that will promote the use of OER within its member institutions and throughout the education sector. Lesotho has developed a draft ODL policy that emphasises the importance of OER. Malawi also notes that it is finalising its ODL policy, but it is not clear whether this will specifically include OER. Thailand’s Distance Learning Foundation is also engaging with an OER strategy.

In some instances, OER are incorporated into other policies. For example, in Nova Scotia, Canada, several policies reflect OER principles, such as the Network Acceptable Use Policy and Software Evaluation Process. In Lithuania, the topic of OER is part of the broader Lithuanian Strategy on ICT Implementation in General and Vocational Education for 2008–2012.

New Zealand has introduced a data reuse strategy that aims to standardise the licensing of government copyright works for reuse by using the most open of the available CC licences. This means that key educational documents such as the curriculum and OER produced on behalf of the sector by government agencies are likely to be freely available.

Regarding licensing, most countries do not specify which open licences are used in their OER policy. Table 7 indicates the percentage of countries per region that do not specify their open licence.

Table 7 Percentage of countries per region that do not specify the open licence to be used in their OER policy

Region	Percentage
Africa	63%
Arab States	78%
Asia and Pacific	26%
Europe and North America	40%
Latin America and Caribbean	50%

The Creative Commons licensing framework appears to be the most popular open licence used. Furthermore, some respondents noted specific CC licences. For example, Thailand uses CC-BY-NC-ND, whilst the Austrian Ministry of Education’s open source projects usually carry a CC-SA licence. In the Netherlands, higher education OER are mostly published under a CC-BY-NC-SA

licence, whilst learning materials in Wikiwijs are usually published under a CC-BY or CC-BY-SA licence. In Slovenia, OER are usually licensed under a CC-BY-ND-SA licence, whilst Costa Rica notes that it uses a CC-NC-SA licence. Brazil notes that, whilst CC licensing is required in the production of content funded by the Ministry, this is not yet “official.”

2.2.1 References to OER in other public policies

In Africa, the Southern African Development Community is currently developing an ODL policy and strategic plan that will see the region sharing learning materials at all levels of education. In several African countries, reference is made to OER in educational strategies. These include:

- South Africa’s e-Education white paper,
- Rwanda’s National Information and Communication Infrastructure Plan (The National Digital Library Project),
- Lesotho’s ODL draft policy, and
- Mauritius’s draft National Policy on OD and Education Strategic Plan 2008–2020.

Similarly, in the Arab region several countries have noted references to OER in public policies:

- Algeria: e-Education strategy
- Qatar: Education and Training Sector Strategy (ETSS)
- Morocco: GENIE programme, which incorporates OER, and the strategy adopted by the National Laboratory of Digital Resources of the Ministry of Education, where a reference to OER is presented in draft ministerial notes regarding validation and certification of digital resources that are in development

In Asia and the Pacific, several countries note the incorporation of OER into national policies:

- Thailand: education policy makes reference to OER
- Indonesia: National Education Development Strategy 2010–2014
- China: several documents related to OER are available on the MoE website (www.moe.edu.cn)
- The Republic of Korea: KOCW Information Strategy Plan
- New Zealand: Government Open Access and Licensing framework (NZGOAL), established by the government in 2010, which provides guidance for agencies to follow when releasing copyright works and non-copyright material for reuse by others

The Australian government is in the early stages of opening access to public data and resources. Specifically, this is being explored through the Australian government’s Open Access and Licensing (AusGOAL) Framework.

The framework incorporates CC licences, as well as additional licensing models. Australian state governments are actively supporting the open licensing of public sector information, and Queensland has been leading the development of a process for applying Creative Commons licensing to its content. Queensland's commitment to open government is reflected in the open availability of government documents (except where this is not in the public interest). In Victoria, the Department of Education and Early Childhood Development, Victoria (DEECD) is steadily adopting licensing practices that align with OER. Its licensing framework on its website allows users to copy or use materials for personal use, but does not permit modifications. The Department has also developed its own copyright matrix, which outlines terms of use for various materials. Some allow users to modify materials, whilst others do not. In addition, they have released a range of guides and resources under CC licences.

In Europe and North America, Austria and British Columbia in Canada provided detail on reference to OER in public policies:

- Austria has an Open Access Policy for Austrian Science Fund (FWF) funded projects. In addition, whilst the Technology and Innovation Strategy makes no explicit reference to OER, it notes that the results of publicly financed or co-financed research projects must be accessible for the public in an appropriate manner.
- In Canada, the British Columbia government has undertaken open government initiatives that provide public access to government information and data, giving citizens opportunities to collaborate on matters such as policy and service delivery. Its open government licence enables use and reuse of government information and data.

In Latin America, Brazil notes that federal units have legal autonomy to formulate their programmes and strategies for OER. Trinidad and Tobago's ICT in Education policy makes reference to the use of open platforms and resources. In addition, its draft ODL policy framework and draft tertiary education legislation make reference to the identification and communication of best practices in intellectual property agreements that facilitate sharing of digital content whilst recognising owner/developer rights.

2.3 Funding

Respondents were asked to indicate the extent to which learning materials are produced or paid for by public funds. Almost two thirds of the respondents noted that, to a large extent, learning materials were publicly funded, although this was less so in Europe and North America.

Table 8 Extent of public funding of learning materials

	Africa	Arab States	Asia and Pacific	Europe and North America	Latin America and Caribbean	Total across all responses
Exclusively	8.3%	44.4%	8.7%	0.0%	0.0%	8%
To a large extent	62.5%	33.3%	65.2%	55.0%	81.8%	63%
To a minor extent	16.7%	11.1%	4.3%	35.0%	13.6%	16%
Not at all	0.0%	11.1%	0.0%	0.0%	0.0%	1%
Do not know	4.2%	0.0%	8.7%	5.0%	0.0%	4%
No response	8.3%	0.0%	13.0%	5.0%	4.5%	7%

However, this depends on the level of education, with materials at the primary education level most commonly being publicly funded, and tertiary education least funded. For example:

At the basic and secondary levels, textbooks are provided free by Government. Post-secondary and tertiary students pay for their textbooks. (Ghana)

The learning materials for primary and secondary are produced to a large extent with public funding and to some extent for tertiary education. (The Philippines)

Funding also differs according to whether institutions are in the public or private sector, with schools in the private sector being funded to a lesser extent than those in the public sector.

In other instances, such as Australia, the level of funding is reportedly difficult to estimate as different learning materials are paid for or produced in different ways — at a national level, state level, school level, teacher level (teachers produce some learning materials for use by their students and sometimes make them available to other teachers and students) and student level (students directly purchase licences or subscriptions for some learning materials).

In the Netherlands, the government does not subscribe to, buy or produce learning materials; this is largely left to the discretion of the school/institution. In post-secondary and tertiary education, students have to obtain or purchase those learning materials that are prescribed. However, the Wikiwijs Programme is publicly funded to transform the current situation by mainstreaming OER across the entire educational system.

Respondents were also asked to estimate the percentage of publicly funded materials that are available in digital format. Almost half (48%) did not know the answer to this question. Across all regions, respondents estimated that just over a third (34%) of publicly funded learning resources were available in digital format.

Table 9 Extent of publicly funded learning resources available in digital format

	Africa	Arab States	Asia and Pacific	Europe and North America	Latin America and Caribbean	Total across all responses
Average (Mean)	13%	23%	46%	48%	30%	34%
Do not know	58%	33%	52%	45%	41%	48%

The percentages differed considerably between regions, with an average of just 13% for Africa compared with 48% for Europe and North America. This may be exacerbated by infrastructure constraints, as was highlighted by the Tanzanian respondent. As with the previous question, some respondents also noted that this depends on the level of education or the subject matter. For example:

There are important differences between educational levels. This figure of 75% corresponds to pre-university levels. At university level the figure drops dramatically to 5%. (Uruguay)

[There] are differences between the sectors... [For example,] in the field of agricultural studies the use of digital learning materials is significantly higher. (The Netherlands)

Respondents were then asked to estimate the percentage of digital materials that are available as OER. Of those digital materials in the public domain, an estimated 37% are available as OER across the regions. Asia and the Pacific region appear to be leading the way (52%), followed by Latin America and the Caribbean (37%) and Europe and North America (32%). However, it should be noted that almost half of the respondents did not know the percentage of publicly funded digital learning materials that are offered as OER.

Table 10 Percentage of publicly funded digital materials offered as OER

	Africa	Arab States	Asia and Pacific	Europe and North America	Latin America and Caribbean	Total across all responses
Average (Mean)	10%	10%	52%	32%	37%	37%
Do not know	58%	33%	52%	45%	41%	48%

These figures do not necessarily include the efforts of individuals, though. For example:

There are also digital learning materials which are developed by individual teachers for use in their own lessons only. One of the goals of Wikiwijs is to stimulate those teachers to publish and share these materials. Also publishers sometimes put incomplete digital learning materials on the web for promotional purposes. (The Netherlands)

2.4 Studies and research on OER

Across all regions, most respondents indicated that they were not aware of research or studies on the contribution of OER to improving education, particularly on an official level. A few respondents noted that universities or institutions in their country had conducted studies or that they had presented findings at conferences and meetings, but little detail on these initiatives was provided. Some respondents provided URLs for the research, although in some instances locating these research papers was made difficult by language barriers. Nevertheless, some examples of research conducted are as follows:

- The Virtual Centre for Innovative Learning Technology of the University of Mauritius conducted a study entitled “OERs in Context — Case Study of Innovation and Sustainability of Educational Practices at the University of Mauritius,” published in *EURODL* (the *European Journal of Open, Distance and E-Learning*); see www.eurodl.org/?p=current&article=419.
- Australia’s AusGOAL’s research and innovation sector partner published a cost/benefit study on open access to data; see <http://ands.org.au/resource/cost-benefit.html>. In addition, Education Services Australia (a national body owned by the State Ministers) has education-specific data generated from tertiary research.
- The Ministry of Science and Higher Education in Poland contracted Warsaw University to conduct a study on implementing open access to educational and scientific content. The report describes both international practice focusing on a governmental level and also European Union policy. It also illustrates the issue of open access in Poland; see www.nauka.gov.pl/fileadmin/user_upload/Nauka/Polityka_naukowa_panstwa/Analizy_raporty_statystyki/20120208_EKSPERTYZA__OA__ICM.pdf.
- In Colombia, the Ministry of National Education produced a document on state-of-the-art national and international OA (2005–2010), and a document outlining open digital educational resources in Colombia.
- The Association of Lithuanian Scientific Libraries conducted a study on Lithuanian research in open access journals; see www.lmba.lt/sites/default/files/OA_tyrimo%20ataskaita.pdf.

- In 2010, Mongolia conducted a feasibility assessment for establishing an open learning system/open university in Mongolia, with financial support from UNESCO.

2.5 Perceived benefits of OER

In order to assess the perceived benefits of OER, respondents were asked why their country decided to be active in the OER movement. The results are summarised in Table 11.

Table 11 Motivation to be active in the OER movement

	Africa	Arab States	Asia and Pacific	Europe and North America	Latin America and Caribbean	Total across all responses
Open and flexible learning opportunities	67%	44%	57%	45%	64%	57%
Increased efficiency and quality of learning resources	58%	44%	52%	45%	41%	49%
Cost-efficiency of OER	50%	44%	48%	35%	46%	45%
The innovative potential of OER	63%	33%	48%	35%	46%	47%

As the table shows, there are multiple reasons prompting countries to be active in the OER movement (no single reason appears to dominate), although open and flexible learning opportunities are the most common motivating factor. Several countries reiterated this position, noting the movement’s value in increasing opportunities and access to education:

The approach improves access to education opportunities in at least all levels of the education system to those who cannot make it through normal processes due to limited space in various learning institutions. (Malawi)

We believe that there are obvious benefits in our efforts to provide life-long learning opportunities for all which aligns with our strategic plan. It also offers the opportunity to provide access to educational opportunities, particularly for those in more isolated communities. (The Cook Islands)

Through the use of OER, the department can increase and improve access to education resources for all citizens irrespective of race, location, age, disability and economic status. (South Africa)

Related to this is the view that the availability of OER will help to reduce the lack of resources:

We have a big challenge in the supply of material to our learning institutions and therefore open educational resources would be an answer. (Zambia)

The cost and quality benefits were also noted:

It can provide more affordable options for tertiary study for learners by using OER courses combined with an assessment-only model. This could allow a reduction in fees of as much as 80 percent according to the OER Tertiary Education Network participants ... It could improve quality. Shared and transparent development of OER courses provides opportunities to improve the quality of e-learning for all participating institutions. (New Zealand)

In addition, respondents also highlighted the value of networking and sharing, allowing institutions and users to share their expertise, avoid duplication in their efforts and contribute to reducing the digital divide.

[OER] encourage(s) participants to contribute and share knowledge [and] encourage(s) networking with the international OCW/OER communities. (Vietnam)

This will help with resource and information sharing among participating countries. As part of the sub-region of the OECS and the Caribbean region, such information sharing will further strengthen and add to ongoing integration initiatives. At the same time, involvement in the use of OER and the OER movement can accrue benefits to the education sector and the population as a whole, with end-users (teachers, students, life-long learners and even educational planners) gaining access to open resources. (Grenada)

In my view the main advantage is linked to the freedom to share and the ability to improve material through the collaboration of interested people. (Paraguay)

OERs will help small countries to reduce their dependence on developed countries' licensed materials that are overly costly and help them to leap frog in educational expansion and innovation. The OERs present a wonderful opportunity to enhance international collaboration for educational advancement. (Botswana)

Furthermore, the benefit of being able to adapt and reuse materials to meet local needs was noted. Another interesting benefit that was highlighted related to the sustainability of OER, as this approach lends itself to feedback and collaboration, resulting in continuous development and improvement of resources, harnessing the innovation and creativity of multiple content developers. For students, OER provide access to supplementary materials, allow them to assess study course materials before deciding to enrol and help them to maintain intellectual ties to their institution after graduation.

The majority of countries appear keen to develop and use OER in the future, particularly by developing a dedicated governmental action plan (40%), by explicitly stimulating initiatives in this field (38%) and, to a lesser extent, by introducing subsidy programmes or project funding (29%). Several countries, including Seychelles, Rwanda and Malaysia, noted that they are in the process of developing plans around this. For example:

The Government of Rwanda is very willing to develop ODeL to make education more accessible ... The department in charge of ICT in Education and ODeL [was] established a few months ago ... OERs will definitely be used by this department for cost-effective quality education ... There is also a plan to develop a national digital library and OERs will be a significant component of this library ... In [the] Rwanda Education Sector Strategic Plan (<http://mineduc.gov.rw/IMG/pdf/ESSP.pdf>) there is a plan to develop ODeL for capacity building in the country. OERs as digital content might play a significant role in this ODeL development. (Rwanda)

At present, the concept of open-sharing has been confined within ... institution(s) based ... merely on needs. Ministry of Higher Education Malaysia will initiate the step towards setting up a working group comprising of experts and academic representatives to work towards the setting up of policy in relation to Open Educational Resources. (Malaysia)

Vietnam detailed plans for getting more involved in OER.

Policy makers want:

- *To provide a solid infrastructure and appropriate tools as well as technical support and training for the development of OER in Vietnam;*
- *To develop high quality course content based on available OER from leading universities in the world;*
- *To provide the OER community with courses that have Vietnam-specific content that considers the Vietnamese culture;*
- *To provide new methods for the development of sample course materials;*
- *To establish a Vietnamese OER users' community and encourage participants to contribute and share knowledge; and*
- *To encourage networking with the international OER communities. (Vietnam)*

2.6 Obstacles to OER adoption

Respondents were asked to define, from a preselected list, obstacles to OER adoption. The results are summarised in Table 12.

Table 12 Obstacles to OER adoption

	Africa	Arab States	Asia and Pacific	Europe and North America	Latin America and Caribbean	Total across all responses
Language and cultural diversity	4%	33%	4%	5%	9%	8.2%
Connectivity	33%	11%	17%	0	14%	16.3%
Quality	4%	22%	4%	10%	5%	7.1%
Copyright and publishers	21%	33%	26%	10%	14%	19.4%
Sustainability	8%	22%	9%	5%	18%	11.2%

These results indicate that copyright and publishers are the greatest obstacle overall, followed by connectivity and then sustainability. However, results varied across regions, with connectivity being the largest obstacle in Africa, compared with language and cultural diversity, and copyright and publishers in the Arab States, copyright and publishers in Asia and the Pacific, and sustainability in Latin America and the Caribbean.

With the option of explaining their responses, respondents from Africa noted the challenges of infrastructure and connectivity, coupled with the additional challenges of funding, lack of capacity and equipment, and lack of information and advocacy about the benefits of OER. Respondents highlighted the need for connectivity and greater awareness and acceptance of OER as precursors to becoming more active.

This movement needs adequate ICT facilities and training for capacity building and awareness creation among stakeholders. (Tanzania)

Language is part of the problem but also due to lack of knowledge about it and respective benefits. Access to technology is another problem as well as connectivity. (Mozambique)

Lack of awareness of OER, digital illiteracy, lack of OER skills (for production and use) and poor ICT infrastructure. (Nigeria)

Other challenges highlighted were:

- the creation of an OER culture at all levels of education,
- a lack of capacity (digital illiteracy),
- a lack of ICT equipment in schools, and
- a lack of funds to undertake the production of OER.

In the Arab States it was noted that there is not sufficient open content in the Arabic language. In addition, the lack of political strategies or action plans from the Ministry was noted as an obstacle to OER adoption.

In the Asia-Pacific region, Fiji noted that OER have not been the topic of much discussion at meetings. New Zealand noted that, even though it has various OER initiatives, the overall penetration of OER into the sector is low. In Australia, different states experience different obstacles. For example:

- There is a need to provide professional development training to incorporate OER into the curriculum.
- OER awareness is low in some states.
- Some states are in the early stages of exploring and developing OER, and it is expected that the movement will gain momentum over time as there is a culture change from “mine” to “ours” and as older resources are reviewed and any missing copyright information and attribution information is added.
- Dealing with Australian copyright law, which includes a compulsory statutory licence for educational institutions, enabling them to copy a reasonable portion of various works in return for remuneration is a challenge. Issues relating to the scope, administration and fees payable under this licence have commanded much attention in copyright debates. This focus on a remunerated statutory licence may explain, in some part, delays in development of OER and other alternative models in the NSW education system.
- OER may not be regarded as an urgent priority in Australia, compared to developing countries, as it has a highly developed and reasonably well-funded education sector and therefore may not face the need for free and open resources.
- In East Melbourne, the DEECD has increasingly not sought copyright ownership when commissioning materials, but has sought a licence for materials to be used for educational purposes, as this is a cheaper option. However, if the DEECD’s rights to use the materials have been limited, this can limit its capacity to make the materials available to others.
- Clearing copyright problems with embedded materials, where content providers/creators (including students and teachers) incorporate materials with restricted licensing terms, can be challenging.

In Latin America and the Caribbean, as in Africa, the challenge of connectivity and low awareness was also highlighted.

Basically the low amount of OER, coupled with the low Internet access at home and educational institutions limit the use of OER. (Paraguay)

The movement is still fairly new, [and] as such the awareness is very low in my country. Over time it is anticipated that there will be more active participation in the OER movement. (Trinidad and Tobago)

Real awareness of stake-holders and policy-makers: It's not a matter of ignorance, but I think there's a lack of deeper understanding of what the real advantages and potential of OER can contribute, not only to educational users, but to the whole educational eco-system. This lack of understanding also brings up risks related to an opposing model to the installed commercial/private model, unwilling to see if they can co-exist. (Chile)

Other challenges include difficulty in understanding what the subject entails and the need for training and “cultural change” to encourage collaboration and to make use of OER. For example, Chile notes that its main learning repository has restricted terms of use. In addition, the absence of ICT structures within ministries, the need to develop general ICT proficiency and the support required to develop OER were also noted as obstacles.

Teachers who are inclined to engage in developing OERs require support in developing these resources. (Antigua and Barbuda)

In St. Vincent and the Grenadines, teachers are just transitioning into the incorporation of Information Communication Technology in the pedagogical process. This shift will take some time. (St. Vincent and the Grenadines)

Nevertheless, several countries in this region explicitly noted their interest in becoming active in the OER movement.

Respondents from Europe and North America did not appear to face the same obstacles as their counterparts in other regions (and hence most did not complete the extra comments section). The exception was Canada, where respondents highlighted the following challenges:

- There is no pan-Canadian agreement on the sharing of educational resources.
- There are no pan-Canadian studies on the existing OER landscape and its effectiveness, and thus provinces/territories currently say that they do not have access to sufficient data that would allow for properly assessing the economic benefits and potential impacts of OER for all partners and stakeholders involved in the development and procurement of learning resources.
- Although OER could lead to overall savings in the production of educational resources, costs for securing the right to incorporate copyright materials in OER would increase. Third-party copyright material incorporated into those resources would have to be cleared for worldwide use, which costs more than clearing for use in a province or country. The amount of the increase remains unknown as no extensive pan-Canadian research on the amount of copyright royalties paid for the production of educational resources has yet been undertaken.
- There are concerns around the “integrity” of materials should they be altered and adapted, as departments will not be able to guarantee the accuracy of materials.

- It will be difficult to ensure that materials produced are OER, as learning resources are typically developed by publishers and third-party content is used in everything from textbooks to exams. Immense resources would therefore be required to ensure that no fully copyrighted third-party content is distributed inappropriately.
- There are also concerns around “accountability” and the use of public funds for the explicit development of resources used outside the jurisdiction.

Although not explicitly noted as an obstacle by respondents, understanding the concept of OER appears to be a challenge. For example, one country wrote about its ICT policy when asked about its OER policy, but the ICT policy referenced makes no reference to OER. A number of respondents made reference to the provision of access to free digital material. However, upon examination of the referred website, it was noted that the terms of use stipulate all rights reserved copyright and therefore the resources cannot be classified as OER. Furthermore, a number of examples provided mention digitising curriculum resources, using software tools and, when describing digital resources, using a “Microsoft licence” with references to “paid software.” This also extended to an understanding of licensing options, where some of the licensing options specified are not open. Thus, it appears that there may be confusion over the respective meanings of digital material, free-to-access material, ODL, open software and OER.

3

Conclusion

There appears to be great interest in OER across all regions of the world, with several countries embarking on notable OER initiatives. Indeed, the survey itself raised interest and awareness of OER in countries that may not have had much prior exposure to the concept. However, different regions face different obstacles to OER adoption, whilst few explicit OER policies exist and there appears to be some confusion regarding an understanding of the concept and potential of OER. Many projects are geared to allowing online access to digitised educational content, but the materials themselves do not appear to be explicitly stated as OER. Where licences are open, the Creative Commons framework appears to be the most widely used licensing framework, but licensing options vary between countries.

One of the limitations in writing this report has been the lack of detail provided by respondents. Several active countries' initiatives of which the authors are aware have not been included in this analysis, either because the country did not respond to the survey or because it submitted a response after the deadline. In addition, countries that have detailed and commendable OER policies may not have been given prominence in this report as it relies purely on data accessed via the survey. In instances where there was more than one respondent from a country, responses varied and sometimes contained conflicting information, indicating that some respondents may be more aware than others of OER initiatives.

Given the findings of this report and the observations made above, the following recommendations are worth considering regarding further work in this area:

- There may be value in conducting a more in-depth analysis on OER policies and practices, which could include responses received after the cut-off date, verification of whether materials noted as OER are actually OER and a detailed desktop search to highlight notable achievements that may have been documented elsewhere. With more detail, it is likely that best practices in terms of policy and initiatives will become clearer.
- Several countries have expressed explicitly their desire to become more involved in the OER movement and to develop OER policies. Consequently, it will be valuable to stimulate this interest further (particularly when momentum is high), possibly emphasising activity in countries that allow users to freely use and access materials.
- It may be worthwhile to conduct studies on the OER landscape in various regions, particularly noting its effectiveness, cost-effectiveness and impact to motivate and encourage countries to adopt policies and practices. It may also be useful to set up a repository of OER research to enable policy makers to view the findings.

- Given the confusion apparent in some responses, there is clearly an ongoing need for further advocacy and information-sharing to motivate countries and institutions to harness OER. It may also be worth targeting regional higher education bodies or ODL regional organisations that have also embarked on OER strategies. Amongst other activities, efforts may focus on:
 - widely circulating the *Basic Guide to OER* prepared by COL and UNESCO to countries, institutions and regional education bodies; and
 - raising awareness and clear understanding of the concept of OER, plainly and simply in multiple languages. This would need to include clarifying that OER is about learning materials and not specifically about open software and open access journals (although these are related), as well as clearly defining the differences between OER, ODL and e-learning.

Annex 1

The first responses to the survey from the following countries/jurisdictions arrived in the period between the cut-off date for analysis and the press date for this report (16 April 2012 and 18 May 2012). They are not included in this report, which only analysed replies received before 16 April from those countries/jurisdictions listed in Table 2.

Africa:

Liberia

Arab States:

Jordan

Sudan

Yemen

Asia & Pacific:

Nauru

Tokelau

Samoa

Kiribati

Solomon Islands

Tonga

Tuvalu

Europe & North America:

Slovakia

Ukraine

USA

Latin America & Caribbean:

Cayman Islands

Guyana

As part of their joint project Fostering Governmental Support for Open Educational Resources Internationally, UNESCO and the Commonwealth of Learning (COL) invited all governments to provide information about their policies in relation to open educational resources (OER) to assess the current and potential uses of this approach to learning and teaching. This report provides an overview of the findings of the COL/UNESCO survey on OER policies and activity across all countries of the world, and puts forward some suggestions for promoting the use and development of OER and overcoming current obstacles to its implementation.