Concept Paper on Open Licensing for Ministries of Education in Low- and Middle-Income Countries

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The authors’ views expressed in this report do not necessarily reflect the views of the United States Agency for International Development or the United States Government.
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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC</td>
<td>Creative Commons</td>
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<tr>
<td>DfID</td>
<td>Department for International Development</td>
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<tr>
<td>GBA</td>
<td>Global Book Alliance</td>
</tr>
<tr>
<td>GDL</td>
<td>Global Digital Library</td>
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<td>GPE</td>
<td>Global Partnership for Education</td>
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<td>MOE</td>
<td>Ministry of Education</td>
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<td>NGO</td>
<td>Non-governmental organization</td>
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<td>OECD</td>
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<tr>
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<td>Open Educational Resource</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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Introduction

As of 2015, all educational resources developed under USAID-funded early grade reading programs must be openly licensed through the Creative Commons Attribution License (CC-BY) 4.0. In the past three years, RTI International has implemented five USAID-funded early grade reading programs with a Creative Commons requirement1. RTI has also issued, of its own initiative, a Creative Commons license to early reading materials developed under USAID-funded early reading programs in Nigeria and Uganda.

In the past three years RTI has learned that, while issuing a Creative Commons license is quite simple, open licensing raises many questions among ministries of education and national curriculum development agencies. These questions and concerns are understandable, given that the shift to open licensing may disrupt current practices for the development and distribution of reading materials. Furthermore, it may conflict with existing laws and policies in the country2.

However, open licensing is also a powerful tool for quickly and cost-efficiently increasing the supply of early reading materials in low- and middle-income countries, especially in those with high linguistic diversity and a mother tongue in education policy. The transformative potential of open licensing is among the reasons why USAID has introduced the Creative Commons requirement in its early grade reading programs, and why international development partners increasingly support open licensing.

This concept paper is targeted at Ministries of Education in developing countries, without an existing policy for Open Educational Resources (OERs)3, that are considering open licensing of early reading materials developed, in whole or in part, with USAID funding. The purpose of the paper is to: a) provide further background on the rationale for open licensing; b) explain what open licensing is and how Creative Commons licenses operate; and c) answer ministries’ most pressing questions about the implications of open licensing.

This paper addresses some of the most recurrent questions we have received so far, but it is not a comprehensive guide to open licensing of early grade reading materials in low- and middle-income countries. Many of the answers provided in this paper are based on basic tenets of copyright law and on the legal code of the Creative Commons licenses themselves. We encourage ministries of education to consult Creative Commons’ Frequently Asked Questions webpage4, which addresses many more questions from users all over the world. We also recommend that ministries consult their own legal teams to better understand the provisions in Creative Commons licenses and some of their consequences. The information contained in this document does not constitute legal advice.

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1 Nepal Early Grade Reading Project; Malawi Early Grade Reading Improvement Activity; Tanzania Tusome Pamoja; West Bank Early Grade Reading Project; Read Liberia
2 To date, RTI has only commissioned a review of national copyright legislation in Nepal. The results of the review did not indicate any conflicts of interest between open licensing and national laws and policies.
3 Open Educational Resources and other concepts and terms will be explained in this paper.
4 https://creativecommons.org/faq/#how-do-cc-licenses-operate
Background

The global book shortage

It is currently estimated that 387 million children around the world fail to learn to read (UNESCO Institute for Statistics, 2017). Many of them had difficult access, or no access at all, to textbooks and reading materials (UNESCO, 2016). If young learners do not have access to reading materials at school and at home, it is less likely that they will develop basic reading skills before the end of early primary. Yet, high-quality, age- and level-appropriate reading materials, especially in the languages that children speak at home, are critically scarce in low- and middle-income countries (RTI International, 2016).

The shortage of early reading materials in mother tongues results from a complex set of challenges that affect the book chain in low- and middle-income countries, especially those with high linguistic diversity. Among the key factors that explain the scarcity of early reading materials in mother tongues are:

- Government-led demand for supplementary reading materials—as opposed to textbooks—is low (Results for Development Institute, 2016).
- The demand for books in general is low due to factors like low purchasing power, high illiteracy rates, and a lack of reading habits among the population (Diallo, 2011).
- The unit cost of a producing book is quite high if it is not produced in large quantities. Consequently, it is expensive to produce books for languages with smaller populations, which curtails supply (Reiner, 2011; Results for Development Institute, 2016).
- There is limited authorship capacity in mother tongues, meaning that not enough authors or organizations have the skills to develop high-quality early reading materials; particularly, supplementary reading materials (Results for Development Institute, 2016).
- The existing supply of early reading materials in mother tongues cannot be leveraged and taken to a larger scale for two reasons:
  - The production of early reading materials in mother tongues is fragmented. For example, although NGOs are among the leading producers of early reading materials in mother tongues, the materials they produce were until very recently not shared beyond their own programs (RTI International, 2016; Results for Development Institute, 2016).
  - Existing content cannot easily be shared more widely due to copyright restrictions. Until recently, titles developed under donor-funded programs would cease to be distributed after the program ended because they could not be easily reproduced or adapted by third parties (Research for Development Institute, 2016).

The Global Book Alliance

Since 2012, several representatives of developing country governments; international donors, such as USAID and DfID; United Nations agencies, like Unicef and Unesco; and the GPE have joined efforts to address the scarcity of early reading materials in low- and middle-
income countries (Bender, 2016). Currently, these efforts are coordinated under the Global Book Alliance (GBA), which works to transform the way books are developed, procured, and distributed so that no child is without books. Among the key best practices that the GBA supports is the use of open licensing to rapidly increase the availability of early reading materials in underserved languages (Global Book Alliance, 2018).

Among the GBA’s strategic actions for 2018-2020 is to develop and launch a Global Digital Library (GDL), an online repository of openly licensed reading materials that can be translated and adapted across programs. The GDL’s goal is to house at least 50,000 new titles in 100 languages by 2020. The GBA is also committed to supporting the creation of at least 50 culturally and linguistically appropriate children’s book titles for each year of literacy development in 500 languages. The books in the library will be aligned with each year of literacy development for children ages 3-11, prioritizing languages where there are few to no reading materials available (Global Book Alliance, 2018).

The rationale for open licensing

Why “open”?

Because of the digital revolution, today there is an unlimited amount of information available to anyone, anywhere, at any time. However, access to many copyrighted materials remains limited to those who can pay for them and reach the market where they are sold. To address the gap in access to copyrighted materials, there is a growing global movement, or set of movements, that advocate for eliminating the barriers that restrict access to scientific research and educational content. These movements have introduced alternate models for producing and sharing copyrighted materials. Among these movements are Open Access, which supports making peer-reviewed scholarly research freely available to the public online (Open Society Foundations, 2014; Suber, 2012), and Open Educational Resources (OER), which are “any educational resources […] that are openly available for use by educators and students, without an accompanying need to pay royalties or licence fees” (Butcher, A Basic Guide to Open Educational Resources (OER), 2015).

The proponents of open publishing models—e.g., Open Access and OER—argue that traditional publishing models have failed to promote equitable access to—and equitable participation in—the generation of knowledge and educational content. Furthermore, they argue that resources that are developed with public funding should be available to the public free of cost because the public has already paid for them through their taxes.

How widespread are open publishing models?

Countries around the world, as well as international organizations, are increasingly adopting open publishing models. In June 2012, UNESCO issued the Paris OER Declaration (Unesco, 2012).
2012), which is aimed at encouraging governments to contribute to the awareness and the use of OER and to develop strategies and policies to integrate OER in education.

Some other examples of the countries and organizations that have adopted Open Access and OER are:

- World Bank, UNESCO, and OECD publications and data are Open Access.
- According to Creative Commons (Creative Commons, n.d.), the organization that developed the most widely used tools for open licensing, the following twenty-five countries have, or are developing, OER policies: Argentina, Australia, Brazil, Canada, Colombia, France, Ghana, India, Indonesia, Kenya, Lithuania, Mauritius, Mexico, Netherlands, New Zealand, Poland, Romania, Scotland, Slovak Republic, Slovenia, South Africa, Spain, United Kingdom, United States of America, and Wales.
- In addition, several other countries have OER policies embedded in their education sector strategic plans, such as China and Morocco (Yang & Kinshuk, 2017).
- According to UNESCO’s Survey on Governments’ Open Educational Resources (OER) Policies (Hoosen, 2012), the use of OER is currently more widespread in tertiary education than in other education levels. Nonetheless, OERs are being used at all education levels.

USAID’s policy for open licensing

In line with the international trend toward increased support for Open Access and OER, USAID requires that all resources—among them, early reading materials—developed with US public funds should be available to the public at no cost (USAID, n.d.). The rationale behind this policy is that taxpayers should not have to pay a second time for resources that were developed with their tax dollars.

Potential benefits of OERs for addressing the global book shortage

Open educational content offers the possibility of offsetting some of the factors that curtail the supply of early reading materials and restrict access to available materials, especially in underserved languages.

Because OERs can be easily reused or adapted, they can significantly reduce the time, effort, and monetary investment required to develop high-quality early reading materials from scratch. Several organizations in developing countries are already leveraging the opportunities that OERs can create for making more high-quality titles available quickly and at a lower cost. Pratham’s Storyweaver⁷ and the African Storybook Project⁸ are online platforms that allow users to create, translate, and adapt high-quality early reading materials at no cost. They also allow users to print one, a dozen, or thousands of copies of the title they choose. The original and the adapted versions can be stored directly on

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⁷ https://storyweaver.org.in/
⁸ http://africanstorybook.org/
the platform, which rapidly increases the availability of new titles, all of which can be found in one place.

The Storyweaver platform currently hosts 6,910 stories in 104 languages (Pratham Books Storyweaver, n.d.). According to statistics from 2015, more than 80 percent of the titles available on the platform were adaptations of the original titles (Singh and Shah, 2015 as cited in Butcher, Hoosen, Levey, & Moore, 2016). Similarly, the African Storybook Project currently hosts 883 original stories in 127 languages; an additional 4,009 titles are translations of the originals (African Storybook Project, n.d.).

Openly licensed educational resources help ensure the long-term efficiency of the funds invested in developing them. For example, in 2015, RTI International issued a Creative Commons license to the materials it tested and developed in a research pilot in two states in northern Nigeria. The materials developed were basic early reading instruction tools (student textbook, teacher’s guide, and a read aloud storybook) in Hausa, a Nigerian language spoken by 33.5 million people (Simons & Fennig, 2018). Although RTI initially distributed to few more than 15,000 students as part of the pilot, today the materials have reached more than one million children through re-prints of the materials led by other implementing agencies. Other stakeholders were able to reproduce materials originally developed by RTI with USAID funding at no cost, and quickly take them to scale, because of open licensing.

In contexts with a dearth of early reading materials, OERs can help fill the gaps in materials more cost-efficiently by facilitating co-prints. A co-print is when several organizations that are interested in printing the same title coordinate efforts to print together, under the same order, to reduce the unit cost of printing for all parties. For example, Uganda is currently distributing early reading materials in mother tongues—originally developed through the USAID Uganda School Health and Reading Program (SHRP) for 33 districts—at a national scale. This national initiative is being implemented through a 3-pronged approach involving several stakeholders: the MOE and Sports (MoES) of Uganda, through a GPE grant managed by the World Bank; the USAID-funded Literacy Achievement and Retention Activity (LARA); and other organizations (e.g. Build Africa). Because the materials developed under SHRP were “opened” through a Creative Commons license, several stakeholders can reprint the materials and distribute them to their assigned regions without the need for lengthy copyright negotiations. Additionally, all stakeholders can easily coordinate efforts to print materials together (time schedules and budgets permitting), thereby saving on printing costs. During 2016/17, Uganda SHRP handed copyright of the materials to the National Curriculum Development Center, which maintained the Creative Commons license to the materials to continue expanding access to structured reading content for millions of Ugandan children.

**How does open licensing operate?**

**Licensing terms**

The licensing terms are the conditions under which the copyright holder grants permission to reuse, adapt, and distribute the work to interested third parties. Licensing terms are applicable only to works that are eligible for copyright protection. The copyright holder must make
these terms explicit and include them in the work; in the case of printed materials, usually on the copyright notice.

In the case of educational resources (e.g. textbooks, decodable and leveled readers), there are two main approaches to licensing copyrighted content, as described in Table 1. The copyright holder can decide which approach to take. In both cases, the work remains the intellectual property of the copyright holder.

**Table 1. Approaches to licensing copyrighted materials**

<table>
<thead>
<tr>
<th>Licensing approach</th>
<th>All Rights Reserved</th>
<th>Open licensing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Origin</strong></td>
<td>The reserved or protected rights model is tied to the traditional publishing model.</td>
<td>The open licensing model was developed in response to the needs of the internet age.</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>Most commonly used by persons or organizations whose priority is to retain control over where and how the work is adapted and distributed, and by whom. Its purpose is also to retain the exclusive right to exploit the work for profit.</td>
<td>Most commonly used by persons or organizations whose priority is disseminating their work as widely and as quickly as possible. By reducing restrictions and not requiring case-by-case negotiations, content can be reused or adapted and distributed more easily, by anyone.</td>
</tr>
<tr>
<td><strong>Process for acquiring a license</strong></td>
<td>Third parties interested in reusing or adapting and distributing the material must have explicit authorization from the copyright holder. The rights holder will review licensing requests on a case-by-case basis, can deny or grant the request, and can charge a fee for issuing a license. The process of negotiating a copyright license is lengthy and not always successful.</td>
<td>Open licenses usually allow interested parties to reuse the work without having to contact the rights holder. Furthermore, open licenses do not require the payment of a fee.</td>
</tr>
</tbody>
</table>

**What is “open” content?**

Open licensing is the main tool for “opening” content. “The term ‘open content’ describes any copyrightable work […] that is licensed in a manner that provides users with free and perpetual permission to engage in the 5R activities:

1. Retain — the right to make, own, and control copies of the content (e.g., download, duplicate, store, and manage)
2. Reuse — the right to use the content in a wide range of ways (e.g., in a class, in a study group, on a website, in a video)
3. Revise — the right to adapt, adjust, modify, or alter the content itself (e.g., translate the content into another language)
4. Remix — the right to combine the original or revised content with other open content to create something new (e.g., incorporate the content into a mashup)
5. Redistribute — the right to share copies of the original content, your revisions, or your remixes with others (e.g., give a copy of the content to a friend).” (opencontent.org, n.d.)
Creative Commons Licenses

Creative Commons is a non-profit organization that developed a set of legal tools for open licensing. These tools were developed in response the changes in the way that content is produced and shared that were spurred by the Internet. The tools address the gap between the changes spurred by technology and copyright law.

Creative Commons developed six different types of open licenses. The copyright holder can choose one of these licenses. All six licenses protect the copyright holder’s right to receive credit for the original work (attribution.) Under the least restrictive of Creative Commons (CC) licenses, the copyright holder only reserves the right to attribution (receiving credit for the original work) and relinquishes exclusivity over other rights. Under the remaining CC licenses, the copyright holder can either retain the exclusive to right to adapt the work (create derivatives) or to exploit the work commercially. The copyright holder can also retain the right to decide how adaptations of the work should be shared further along. The six Creative Commons licenses are described in Table 2.

Table 2. Types of Creative Commons Licenses

<table>
<thead>
<tr>
<th>License name, abbreviation, and terms</th>
<th>Logo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribution CC BY</td>
<td><img src="https://creativecommons.org/licenses/by/" alt="CC BY Logo" /></td>
</tr>
<tr>
<td>This license lets others distribute, remix, tweak, and build upon your work, even commercially, so long as they credit you for the original creation.</td>
<td></td>
</tr>
<tr>
<td>Attribution Share Alike CC BY – SA</td>
<td><img src="https://creativecommons.org/licenses/by-sa/" alt="CC BY-SA Logo" /></td>
</tr>
<tr>
<td>This license lets others remix, tweak, and build upon your work even for commercial purposes, so long as they credit you and license their new creations under the identical terms.</td>
<td></td>
</tr>
<tr>
<td>Attribution No Derivatives CC BY – ND</td>
<td><img src="https://creativecommons.org/licenses/by-nd/" alt="CC BY-ND Logo" /></td>
</tr>
<tr>
<td>This license allows for redistribution, commercial and non-commercial, so long as it is passed along unchanged and in whole, with credit to you.</td>
<td></td>
</tr>
<tr>
<td>Attribution Non-Commercial CC BY – NC</td>
<td><img src="https://creativecommons.org/licenses/by-nc/" alt="CC BY-NC Logo" /></td>
</tr>
<tr>
<td>This license lets others remix, tweak, and build upon your work non-commercially, and although their new works must also acknowledge you and be non-commercial.</td>
<td></td>
</tr>
<tr>
<td>Attribution Non-Commercial Share Alike CC BY – NC – SA</td>
<td><img src="https://creativecommons.org/licenses/by-nc-sa/" alt="CC BY-NC-SA Logo" /></td>
</tr>
<tr>
<td>This license lets others remix, tweak, and build upon your work non-commercially, so long as they credit you and license their new creations under the identical terms.</td>
<td></td>
</tr>
</tbody>
</table>

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9 Adapted from https://creativecommons.org/licenses/
<table>
<thead>
<tr>
<th>License name, abbreviation, and terms</th>
<th>Logo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attribution Non-Commercial No Derivatives</td>
<td><img src="image" alt="CC BY – NC – ND Logo" /></td>
</tr>
<tr>
<td><strong>CC BY – NC – ND</strong></td>
<td></td>
</tr>
<tr>
<td>This license is the most restrictive of the six main licenses, only allowing others to download your works and share them with others so long as they credit you, but they can’t change them in any way or use them commercially.</td>
<td></td>
</tr>
</tbody>
</table>

**How to choose a Creative Commons license**

When choosing a Creative Commons license, the copyright holder will need to weigh the importance of retaining control over derivatives of the work, commercial exploitation of the work, and how the work is shared further along. Creative Commons Australia developed a useful decision flow chart to aide in making these decisions, available in Annex A.

**How to issue a Creative Commons license**

- Issuing a CC license does not require previous registration, but only the copyright holder can issue a CC license.
- To issue a CC license, all the copyright holder must do is to include a notice in the original work—usually, in the copyright notice—indicating the type of license. The text of the license should include the link to the Creative Commons webpage that discloses the full legal text of the license, as well as the logo for the license. The logo can be downloaded for free from the Creative Commons website.¹⁰
- Creative Commons licenses cannot be modified in any way. The logos must be downloaded directly from the Creative Commons website.¹¹
- Once the license has been granted it cannot be revoked unless the user violates the terms of the license.
- The copyright holder can, on a case by case basis, waive some terms of the CC license, or add supplemental terms to the license, or enter a separate agreement with a specific licensee. However, any alternate arrangements will not be considered a CC license. Furthermore, while a licensor can offer separate terms and conditions to other parties, the licensor cannot do so in a way that would neutralize the terms of the CC license (Creative Commons, n.d.).
- Examples of copyright notice texts for each of the CC licenses are provided in Annexes B through G.

**Must a work be available in digital form to issue a Creative Commons license to it?**

Although Creative Commons licenses were developed in response to the proliferation of online content, they can nonetheless be applied to both digital and printed content. However, because the intention is that content licensed under Creative Commons should be accessible

¹⁰ [https://creativecommons.org/about/downloads/](https://creativecommons.org/about/downloads/)
¹¹ [https://creativecommons.org/policies](https://creativecommons.org/policies)
for reuse or adaptation, the original digital files for printed content should be available for sharing.

**Common concerns about open licensing**

As illustrated in the decision flow chart in Annex A, the first step in deciding whether to release materials on an open license is asking, “Am I ok with other people copying and distributing my content without asking my permission every time?” Thus, a MOE could ask, “Are we comfortable with allowing third parties to copy and distribute educational resources that are the intellectual property of the MOE, and/or were developed with public or donor funds, without asking our permission every time?” Some ministries of education may be justifiably concerned about the implications of allowing any third party to either reproduce materials that are for use in public schools, make modifications to them, or sell them for profit without the explicit permission of the Ministry.

**Answers based on copyright law or the legal code of Creative Commons licenses**

To begin answering some of these concerns, it is important to emphasize that, as explained in the previous section, Creative Commons licenses allow the copyright holder to retain exclusivity to some of the rights to the original work. Thus, if a MOE is concerned about the ramifications of allowing third parties to exploit the work commercially, it can use one of the Non-Commercial or Share Alike licenses. If a MOE is concerned about the ramifications of allowing third parties to modify the original work, it can use one of the No Derivates licenses.

Moreover, embedded in the legal code of the licenses are additional provisions for protecting the rights of the copyright holder under these scenarios:

**What if a third party adapts the content in a way that is not supported or condoned by the national education authorities? Who is liable for those adaptations?**

For example, a MOE has raised the concern that a third party could adapt the content of an openly licensed early reading text in a controversial way; for instance, by encouraging the discrimination of certain minority groups in the country. The MOE is not only concerned about the offensive content of the adaptation, but also about liability issues. Because the original content was developed by the MOE, it is possible that reactions against the offensive content will be directed at the MOE.

First, the purpose of providing clear guidelines for attribution on the copyright notice of the material is to help third users accurately describe how they reused the work. According to Annexes B, C, E, and F, any third party adapting content originally developed by a national

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12 As shown in Annex B, the CC license terms must be included in the copyright page of the licensed material. The terms must include a web link to the summary license terms on the Creative Commons website. (e.g. “This work is licensed under the Creative Commons Attribution 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0/.) This hyperlink will take users to the license deed page, which is a summary of the license terms. The license deed page, in turn, says, “This is a human-readable summary of (and not a substitute for) the license.” The license hyperlink provides access to the detailed legal code with the full provisions of the license. Alternatively, the license deed and legal code for each license can be accessed at: https://creativecommons.org/licenses/.

13 These annexes correspond to the licenses that allow derivatives (i.e. adaptations) of the original.
education authority, should include the following reference in their work: *This is an adaptation of an original work developed by the [national education authority] and licensed under the Creative Commons Attribution 4.0 International License.* Although third parties are not obligated to use this exact language, they must nonetheless attribute the original work to the copyright holder and mark the work as an adaptation. Failure to fulfill both requirements is a breach of the license. In this case, the attribution language, along with a comparison of the original and adapted texts, would demonstrate that the MOE did not originally create the offensive content.

However, if the Ministry considers that being linked to the offensive content in any way is a grave liability, Creative Commons licenses also offer the copyright holder the option of waiving attribution for that specific adaptation. The Ministry could ask the user of the license responsible for the offensive content to remove the Ministry’s credits from the adaptation. The user will then be obligated to remove the attribution or they will be in breach of the license (Collins, Milloy, & Stone, 2011; Creative Commons, n.d.).

Furthermore, the legal code for all CC licenses includes a “no endorsement” clause, which protects the copyright holder from liability for third-party adaptations. The no endorsement clause in the CC-BY 4.0 License legal code is shown in Figure 1.

**Figure 1. CC-BY 4.0 License Legal Code – No Endorsement Clause**

6. No endorsement. Nothing in this Public License constitutes or may be construed as permission to assert or imply that you are, or that your use of the Licensed Material is, connected with, or sponsored, endorsed, or granted official status by, the Licensor or others designated to receive attribution as provided in Section 3(a)(1)(A)(ii).

**How can the MOE prevent low-quality adaptations of Ministry-approved educational resources that are openly licensed?**

Ministries of Education are also concerned that low-quality adaptations of their educational resources—for example, adaptations that promote an instructional approach that is not aligned with the curriculum—could eventually reach schools. It could also be the case that educational materials that were not developed by the Ministry, but were approved by the Ministry, could be adapted under a CC license in a way that does not align with curricular standards and eventually reach schools.

As explained in the previous section, the non-endorsement clause in all CC licenses implies that Ministry approval of the original work cannot be transferred to the derivatives. In addition, an open license does not override any mechanism in place for government approval of materials prior to distribution in government schools. Any third party interested in adapting openly licensed materials for distribution in government schools, must still follow national curricular guidelines and procedures. (Yet, it is also true that these mechanisms will often only apply to materials for distribution in government schools, not private schools.)

Also, in the case of original works that include Ministry branding (either because they were originally published by the Ministry or received Ministry approval), the CC license does not apply to the Ministry brand or logo, only to the content itself (Creative Commons, n.d.). The copyright holder can add language to the copyright notice to make this exclusion explicit; for example:
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As explained above, the minimum requirement under all Creative Commons licenses is giving credit to the author(s) of the original work. The issuer of the license should provide guidelines for users on how to attribute the work (see Annexes B through G.) Failure to give credit to the original author/copyright holder is a breach of all Creative Commons licenses.

Works for commission. In the case of educational materials, copyright for the original work does not always belong to the author. In countries where the MOE or national curriculum development body develops many of the textbooks and reading materials, national policies or laws may state that copyright belongs to the nation (the ministry or the curriculum development center), not to the individuals who developed the text and illustrations. In these cases, it is the ministry or the curriculum development center that should receive credit for the original work, unless otherwise explicitly noted in the attribution language included in the copyright notice. Similarly, educational publishers will often engage authors under “work for commission” arrangements, which means that the publisher acquires copyright and should receive credit for the original. Thus, it is usually the copyright holder (i.e. the issuer of the license) who should receive credit for the original work, regardless of whether it is an individual or an organization, and any exceptions should be made explicit in the copyright notice.

Content remixed from several sources. It is not uncommon for educational materials to remix content from several authors. For example, a grade 4 language textbook may include examples of different literary genres (narrative, poetic, informational, etc.). The exemplar of the poetic genre could be a previously published poem by a nationally renowned author. Following tenets of copyright law, the publisher will need a license from the copyright holder to include the poem in the textbook. For each of the existing works that were “remixed” to develop the textbook, the publisher must cite the original work, the copyright holder, and the licensing terms under which the work was reproduced.

Therefore, it is possible to remix works with different licensing terms—some All Rights Reserved, some public domain, some openly licensed—to create a larger work that will be available on an open license, so long as the licensing terms for each of the works that make part of the mix are cited in the copyright notice. The open license does not necessarily need to cover all the elements of a work; for example, while the text is available under an open license, the illustrations may be All Rights Reserved. The copyright notice of an anthology of stories that was developed under a USAID-funded early reading program in Nigeria, and then released under a Creative Commons license, further illustrates how to give credit for several original works remixed into a single volume. It is available in Annex H.
Nonetheless, just because something is possible, it is not necessarily a good idea. Based on RTI’s experience, simple is better when it comes to open licenses, especially in contexts in which OERs are not yet part of the educational materials environment. Materials that mix previously published works, all with different copyright license conditions, may confuse users and ultimately not protect those authors that did not release their work on an open license. Furthermore, when projects anticipate that they will be remixing content from different sources or authors, they should consider the implications for licensing before developing the remixed educational resource.

**Royalties**

The copyright holder of an openly licensed work can sell the work in the market and generate royalties, but only for copies of the original work that it reproduces and distributes directly. However, issuing an open license implies forgoing profit from third-party reuse and adaptation of the original work. Figure 2 contains a fragment of the legal code that is common to all Creative Commons licenses, which states that the license is royalty-free.

![Figure 2. License Legal Code – License Grant Terms](image)

**Reuse and redistribute.** In the hypothetical case that a publisher was to reprint the material that was originally developed by the Ministry for Education and released under a CC license that allows commercial use, the MOE would not be able to claim royalties.

**Revise and redistribute.** In the case of translations, copyright for the translated work would belong to the translator or publisher of the translation. Hence, under open licensing, the copyright holder of the original work cannot claim royalties for the adapted work.

**Remix and redistribute.** Considering that some CC licenses would allow third parties to add new elements to the original content—for example, new illustrations or more stories—and sell the remix commercially, the developer of the new illustrations or stories could choose to pay royalty to the authors of those new elements only.

**Answers based on other countries’ experiences**

MOEs also have concerns about the potential of open licensing to disturb the “business as usual” of how educational materials are developed and distributed in the country. In a context in which the publishing of educational materials is organized around the traditional publishing model (i.e. the copyright holder reserves all rights to the original work and will only grant licenses upon request), how will stakeholders and the market react to a 180 degree turn in the opposite direction? What measures can the government take to ensure that open licensing achieves its goal of expanding access to educational resources, without causing other major disruptions?
Market dynamics

A common concern about the implications of an open license is that third parties may commercially exploit content openly licensed by the MOE to the extent of “cornering” the market. However, this scenario is theoretically unlikely. Assuming the Ministry distributes printed copies of the openly licensed content for free to government schools, third parties distributing the same material at a price would be competing against a product free of cost. If a commercial publisher identifies an opportunity to sell an openly licensed work, targeted at public schools, for a profit, it is most likely because there is a gap in access or a scarcity of the material that needs to be filled, not because the material is available through an open license.

Furthermore, the traditional publishing model is based on exclusive (reserved) rights to the work. The reason why a commercial publisher can extract profit from a work is because no other competitor has the right to publish that same work (Butcher, Hoosen, Levey, & Moore, 2016). Yet, in the case of openly licensed content, anyone can print or adapt the work, which neutralizes the exclusivity advantage that is central to the traditional publishing model. Just as a commercial publisher can reprint the work and sell it in the market, a parent can download the work and print a single copy for their child to use.

In practice, several countries that make publicly-funded educational resources openly available online share them through MOE web portals that require ministry-approved login access. These countries (and is some instances, states within countries) have created OER portals where teachers and education administrators can view, download, and even upload their own adapted versions of openly licensed materials. In addition, some of these portals are a platform where teachers can interact with each other through online communities of practice. Through these portals, the MOE may track who is interacting with the educational content and can also ensure that openly licensed materials are accessible to support the objective of strengthening classroom instruction. It has also been suggested that MOEs concerned about the commercial exploitation by third parties of resources on these portals only make alternate (e.g. low-risk, abbreviated or simplified) versions of the original work available on the portal (Global Reading Network, 2017).

An additional benefit of creating online portals with openly licensed resources for teachers is that teachers can adapt instructional content to suit the needs of specific contexts and learners in a cost-effective way (Central Square Foundation, 2013).
Educating stakeholders

As stated previously, the use of OERs for K-12 education in developing countries is still at a nascent stage. Therefore, most stakeholders may lack an understanding of the legal and technical aspects of open licenses and OERs. To prevent the violation of CC licenses and to create an environment in which content developers feel it is safe to share their work with
others, countries will need to invest in sensitization and in building the capacity of individuals and institutions to operate with open licenses (Central Square Foundation, 2013).

Summary

- Open Educational Resources (OER) are “any educational resources […] that are openly available for use by educators and students, without an accompanying need to pay royalties or licence fees” (Butcher, 2015).

- Twenty-five countries in the world currently have policies for promoting and regulating the use of OERs; among them, the United States. Several more countries have included OERs in their education sector plans. Although OERs are currently more widespread in higher education, they are nonetheless being used at all schooling levels.

- The international education’s sector support for OERs emerged in response to a very specific problem: the dearth of early reading materials—particularly, supplemental reading materials, like decodable and leveled readers—in underserved languages in low- and middle-income countries. Thus, it is primarily targeted at contexts that have a policy for early reading instruction in mother tongues and where there is a demonstrated scarcity of early reading materials in those languages. It is also targeted at contexts where, although there is only one language of instruction, there is a demonstrated scarcity of high-quality early reading materials and insufficient local capacity to resolve that scarcity quickly and cost-efficiently.

- There is evidence that open licensing can dramatically increase the quantity of titles in underserved languages in low- and middle-income languages. Some salient examples are Pratham’s Storyweaver, the African Storybook Project, and the SIL Bloom Library. Open licensing has also helped promote collaboration between development partners, thereby optimizing efforts and costs, and aiding the long-term sustainability of donor investments in developing early reading materials in mother tongues.

- Open licensing is the main tool for “opening” content. The term “open content” describes any copyrightable work that is licensed in a manner that provides users with free and perpetual permission to retain, reuse, revise, remix, or redistribute it.

- Creative Commons licenses are the most widespread tool for open licensing. There are six types of Creative Commons licenses. The copyright holder can choose one of these licenses. All six licenses protect, at minimum, the copyright holder’s right to receive credit for the original work (attribution.) The least restrictive license (CC-BY) only protects the copyright holder’s right to attribution, while the other licenses offer a choice between retaining commercial rights to the work, retaining rights to create derivatives of the work, or to deciding how derivatives should be shared further along. The legal text of each license details additional protections for the copyright holder.

- Issuing a CC license does not require previous registration, but only the copyright holder can issue a CC license. To issue a CC license, all the copyright holder must do is to include a notice in the original work—usually, in the copyright notice—indicating the type of license. CC licenses can be applied to digital or printed materials.
References


Yang, J., & Kinshuk. (2017). *Survey and Reflection of Open Education Policies*. In M. J. (eds.), *Open Education: from OERs to MOOCs* (pp. 23-37). Berlin Heidelberg: Springer-Verlag.
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