

ADVOCACY, SESITIZATION AND DEVELOPMENT OF AN OER POLICY FOR PROVINCIAL EDUCATION MINISTRIES IN SRI LANKA

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Abstract

With the objective of providing direction in the use of Open Educational Resources (OER) to increase access to and support quality teaching and learning in the school education system in Sri Lanka, an advocacy program was conducted leading to the development of draft OER policies for the Provincial Ministries of Education, representing the nine provinces of the country. This paper discusses the procedures, challenges and outcomes of this process.

The process included preparation of a draft OER policy framework; build awareness among key stakeholders on the concept of OER; advocate the benefits of an OER policy for education; initiate the process of drafting OER policies and working towards a final draft policy. While scheduling the meetings at the nine Provincial Departments of Education was very challenging due to their very busy official involvements and unanticipated issues such as natural disasters, the outcome of the activities was quite optimistic. This initiative was very positively accepted by all stakeholders in the nine provinces, realizing the significance of developing a government policy on integrating OER in the school education system in Sri Lanka, in order to help making teachers, learners and the greater community more sensitized about and encouraged to make productive use of openly licensed educational materials.

The draft policy framework prepared was accepted by all, indicating their specific feedback catering to provincial requirements. Especially, promoting teachers not only to reuse existing OER, but also to create and share supplementary educational materials as OER in the two national languages (Sinhala and Tamil) matching with the national school curriculum requirements was identified as a crucial need. For this, the need for raising awareness, building capacity, developing positive attitudes, preparing guidelines for OER adoption at school level, and establishing OER repositories containing materials created by teachers and learners were suggested. Further, the importance of utilizing the already established ICT-enabling environments at school, zonal and provincial levels, as well as introducing emerging technologies and upgrading of facilities to support access to and redistribution of OER, with proper monitoring and evaluation mechanisms were emphasized.

It is envisaged that the development of Provincial OER Policies leading to a National OER Policy would effectively address the needs of the Sri Lankan education system to meet new challenges in moving towards a knowledge society.

Keywords: OER Policy, Provincial OER Policy Framework, Provincial Ministries of Education in Sri Lanka, Advocacy, General School Education System,

Introduction

The general school education system in Sri Lanka spans over 13 years comprising three main levels – Primary (Grades 1-5); Secondary (Grades 6-11); and Collegiate (Grades 12-13). The Ministry of Education (MoE) is the Line Ministry responsible for general school education, and there are nine Provincial Ministries of Education (PMoEs) representing the nine Provinces of the country – Central, Eastern, Northern, North-Eastern, North-Western, Sabaragamuwa, Southern, Uva, and Western.

MoE is responsible in preparing the national strategic plans of the education sector based on national education policy, and the PMoEs can adopt policies to suit the needs of each province, based on national education policy and current reforms (MoE Website, 2016). National Education Commission (NEC) is a special body established to make recommendations to the President of Sri Lanka on national education policy, with a view to ensuring continuity in educational policy and enabling the education system to respond to changing needs in society (NEC Website, 2014).

The primary mode of general school education in Sri Lanka is teacher driven delivery, supplemented by prescribed printed government textbooks freely distributed to the students. During the recent years, several initiatives have been made to address the needs of the education system to meet the new challenges in moving towards a knowledge society. Integration of Information and Communication Technologies (ICT) in the general education system has been promoted and strengthened through various strategies such as establishment of ICT centers; provision of ICT infrastructure, facilities and resources to schools; introducing ICT as subjects in school curriculum; and teacher capacity building (MoE Website, 2016).

Open Educational Resources (OER) is relatively a new concept to the school education system in Sri Lanka. Some recent initiatives taken to raise awareness and promote teachers integrating OER into their teaching-learning process have been quite successful (Karunanayaka et al., 2015; Karunanayaka & Naidu, 2014; Karunanayaka, De Silva & Fernando, 2013). While such interventions have an impact on the school education system, it would be more desirable to have larger scale initiatives implemented at a higher level, through Government policy formulation. Further, it is envisaged that OER can act as an effective enabler that will allow schools to fully harness the potential provided by the already implemented ICT initiatives by the Government. Integration of OER to supplement the government textbooks would also result in enhancing the quality and equity of education.

In this context, , with the objective of providing direction in the use of OER to increase access to and support quality teaching and learning in the general school education system in Sri Lanka, an advocacy program was planned by the Commonwealth of Learning (COL), leading to the development of draft OER policies for the nine PMoEs. This was implemented during April-August, 2016, with the consent and support from the MoE in Sri Lanka. This process included preparing draft OER policy framework catering to provincial requirements; build awareness among key stakeholders on the concept of OER; advocate the benefits of an OER policy for Education; initiate the process of drafting OER policies and working towards a final draft policy. This paper discusses the procedures, challenges and outcomes of this process.

Conceptual Framework

The growing scope of Open Educational Resources (OER), while increasing access to education, expands opportunities for effective participation in education by all, by making knowledge more

relevant, accessible and usable (Butcher, 2011). Further, the increased availability of a wide variety of quality teaching-learning materials online in the form of OER, paves the way for teachers and learners to gain access to a wide variety of educational resources in diverse formats, allowing flexible and dynamic knowledge creation. OER help developing countries save money as well as course-creation time (Kanwar, Kodhandaraman & Umar, 2010). In particular, use and adaptation of OER would be a very cost-effective way to invest in curriculum development and quality teaching-learning material development at regional and national levels within the Asian context (Dhanarajan & Porter, 2013).

The significance of OER in supporting equal opportunity for quality education is elaborated by their characteristics as described below:

“Open educational Resources should be freely shared through open licenses which facilitate use, revision, translation, improvement and sharing by anyone. Resources should be published in formats that facilitate both use and editing, and that accommodate a diversity of technical platforms. Whenever possible, they should also be available in formats that are accessible to people with disabilities and people who do not yet have access to the Internet.”
(Cape Town Open Education Declaration, 2007).

The Paris Declaration defines OER as;

"teaching, learning and research materials in any medium, digital or otherwise, that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions"
(UNESCO-COL, 2012).

Within the legal framework of the notion of ‘open licensing’ users are permitted to re-use, combine and modify any original work, while the creators are acknowledged (Fitzgerald, 2007). The licenses can vary from the least restricted ‘Attribution’ (CC BY), that allows to use materials in any way, as long as attribution is given, to the most restricted ‘Attribution-NonCommercial-NoDerivs’ (CC BY-NC-ND), that only allows others to download work and share with others as long as they give credit (Creative Commons, 2016). Through the five ‘R’s – Retention, Reuse, Revision, Remixing, and Redistribution of OER materials (Wiley, 2014), teachers and learners are enabled flexibility in the use, creation, and sharing of educational resources.

The contemporary developments in OER display a shift from a focus on resources to a focus on open educational practices (OEP). The concept of OEP is defined as practices which support the (re)use and production of OER through institutional policies, promote innovative pedagogical models, and respect and empower learners as co-producers on their lifelong learning path, and it addresses the total OER governance community: policy makers, managers/ administrators of organizations, educational professionals and learners (Ehlers, 2011).

The recognition of the significance of OER and OEP in education has resulted in various initiatives in the adoption of policies at institutional levels and national levels. Creative Commons (2016) defines OER policies as legislation, institutional policies, and/or funder mandates that lead to the creation, increased use, and/or support for improving OER. The successful adoption of OER would require appropriate policy development at national and institutional levels. The adoption of OER policies has taken place mostly in the higher education system, while some initiatives in the general education system are evident. A set of guidelines prepared by UNESCO-COL supports governments, teaching staff, higher education institutions/providers, and quality assurance/accreditation and recognition bodies to adopt OER (Daniel & Uvalić-Trumbić,

2011). Further, ready to use templates have been designed and made available to help governments to review and develop key policy issues for implementing effective OER policy at national level (Butcher, 2012) as well as to support educational institutions draft OER policies (COL OER Policy Template, 2014).

Since the OER Paris Declaration in 2012, Commonwealth of Learning (COL), together with UNESCO has extensively worked with educational institutions to promote the use and adoption of appropriate OER policies and practices. With the growing awareness that governments can generate significant public benefits by supporting OER through policy, guidelines, and incentive funding, there is a need to support governments understand their role and the steps they can take to implement and operationalize OER (Stacey, 2013).

COL's policy on OER as stated below demonstrate its commitment to support adoption of OER by governments and institutions:

The Commonwealth of Learning:

- recognizes and promotes OER in support of quality teaching and learning, as one tool for using technology to increase equity in access to education;
- facilitates collaboration among institutions, governments and organizations in the use of OER;
- promotes relevant capacity strengthening processes for stakeholders; and
- shapes and promotes new models for OER generation, publication, access and re-use.

It will therefore:

- encourage and support governments and institutions to establish supportive policy frameworks to introduce practices relating to OER;
- advocate the merits of collaboratively creating, sharing and using OER, as one form of intellectual capital in education, to improve quality and enhance long-term cost-effectiveness; and
- release its own materials under the most feasible open licenses including the Creative Commons CC-BY-SA license

(COL, 2011)

A comprehensive analysis of case studies from fifteen countries on the adoption of OER policies and initiatives since the Paris Declaration reveals that OER has significantly impacted on the costs of producing, distributing and providing access to learning materials, and that noteworthy progress is being made across the countries in this regard (Fengchun, Mishra, & McGreal, 2016).

Objectives

The objective of the activity was to conduct an advocacy program which will lead to the development of draft OER policies for the nine Provincial Ministries of Education (PMoEs) in Sri Lanka, to provide direction in the use of OER to increase access to and support quality teaching and learning in the school education system in Sri Lanka.

The expected outcomes of the advocacy program were to:

- Prepare a draft OER policy framework which caters to the requirements of the nine PMoEs in Sri Lanka;
- build awareness among key stakeholders at PMoEs on the concept and impact of OER;
- advocate the necessity and benefits of a provincial OER policy for Education;
- initiate the process of drafting OER policies for each province;

- identify champions in each PMoE, who will draft the OER policies; and
- provide ongoing online support/follow-up to champions of each PMoE leading up to a final draft policy.

Methodology

The initial step of the process was to get approval from the Secretary, MoE to engage in this activity in the nine PMoEs. This was obtained successfully, and letters were issued to PMoEs. Next, an initial draft OER Policy Framework was prepared (COL, 2016a). Resource materials required for the advocacy meetings including a PowerPoint presentation prepared to explain the concept of OER and its significance, and to highlight the need for an OER Policy and some short video clips about the concept of OER and Creative Commons licenses were identified.

Having coordinated with relevant officials in the Provinces, the advocacy meetings at the Provincial Departments of Education under the PMoEs in all nine Provinces were conducted during April – August, 2016. During these meetings, the participants were introduced to the concepts of OER, Creative Commons licensing, and the significance of it in teaching and learning. The draft OER Policy Framework prepared for general school education system was introduced with a brief explanation about each aspect of it and its significance. General feedback was obtained from the participants through focus group discussions.

All discussions were fruitful and very positive responses were received from the participants. The need for a policy on OER, and the draft policy framework and its significance were discussed. They were also presented with copies of the resource books on OER and handouts of the presentation and the draft policy framework. A follow-up action plan was agreed on. Contact persons/ Champions were identified at each Provincial Department of Education, who were entrusted to study the draft policy framework, have further discussions with the relevant officials and send feedback with compiled draft OER policy documents in relation to their Province.

Results:

Ideas generated during the focus group discussions held with the officials that followed after the advocacy meetings at the nine Provinces, are summarized and presented in Table 1.

Table 1: Ideas generated at the Advocacy Meetings conducted in the nine Provinces

Aspect	Ideas
Concept of OER and its significance	<ul style="list-style-type: none"> • OER, Creative Commons - Open Licensing, 5Rs are novel concepts. • Having access to free and open resources as OER is very beneficial to the school education system in Sri Lanka. • Even without knowing the term, use of such learning resources as well as creation and sharing of resources is happening in schools. • It is important to raise awareness about these concepts, and motivate teachers to engage in OER creation and sharing.
Need for an OER Policy	<ul style="list-style-type: none"> • The need for an OER policy is accepted, and its significance is realized. • Proper guidelines from MoE is needed for organization and implementation.
Challenges	<ul style="list-style-type: none"> • Technical infrastructure and facilities in schools need to be

	<ul style="list-style-type: none"> upgraded • A more conducive ‘school climate’, teaching-learning environment is required. • Increasing teacher motivation to engage in innovative teaching-learning processes and material development is crucial. • Time constraint is a severe challenge faced by all – teachers, ISAs and other officers at Departments of Education.
Suggestions	<ul style="list-style-type: none"> • Existing ICT initiatives, facilities and resources to be used to promote OER creation, sharing and use by teachers. (Eg. SchoolNet, E-Thaksalawa, Nenasala, EKSP Project) • Raising awareness and skill development of teachers is required • Encouraging teachers to create OER in their native languages (Sinhala/Tamil) is very important. • Providing guidance, support, and motivation of teachers is needed. • Collections of already developed materials should be organized. • Creating “Interest Groups” of school teachers and others at Provincial level / Zonal level would be useful. • OER integration can be linked with existing initiatives at school/zonal/provincial levels (Eg: LMS, e-Studios, “Open School”; “Connecting Schools Programme”) • A proper monitoring and evaluation system need to be in place.

As evident by data presented in Table 1, it was very encouraging to observe the positive thinking among the officials in all PDEs. Also it was quite interesting to see how they quickly grasped the novel concept of OER and its significance in school education, and came up with very promising suggestions, linking with the existing facilities and with their own initiatives at various levels.

Specific feedback received on the draft OER Policy (see <http://oasis.col.org/handle/11599/2360>) from the key stakeholders of each of the Provinces, after conducting the advocacy meetings at the nine Provinces, are summarized and presented in Table 2.

Table 2: Summarized Feedback on Draft OER Policy Framework
(see <http://oasis.col.org/handle/11599/2360>)

Section	Comments/Suggestions for inclusions and revisions
1.0 Overall Policy Objective	Agreed. Create awareness among teachers and learners on access to OER. Monitor quality of OER created through a mechanism to get feedback and update. Create a culture of knowledge-sharing. Inclusion of OER in the professional training programmes of teachers.
2.0 Introduction	Agreed.
3.0 Policy Statements	3.1. Agreed. Add Provincial Departments of Education (PDE) too. Schools in uncongenial areas to be given equal facilities to get wider access to education. 3.2. Agreed. 3.3. Agreed. Educational materials should be created in English as well. 3.4. Agreed. Legal Framework should be made aware of; Doubtful if copyrights would become an obstacle in the process. 3.5. Agreed. OER should be user friendly; User comments may be very valuable for creation of OER.

	3.6. Agreed. Need to have a good feasibility study.
4.0 Specific Policy Objectives	4.1. Agreed. Indicators should be clearly outlined. 4.2. Agreed. 4.3. Agreed. But preparing guidelines and manuals should be done in consideration of the social, geographical and economic backgrounds. Need to develop appropriate OER tools for inclusion and use in non-formal education. Need to design a proper feedback mechanism. 4.4. Agreed. OER repositories should be established under the direct supervision of ADEs and ISAs. 4.5. Agreed. Policy-wise sounds good, but concerns are raised about practical difficulties in implementation. Facilities such as Wi fi zones should be established. 4.6. Agreed.
5.0 Strategic Outputs	5.1. Supplementary educational materials should be in English as well. It is very important to have a proper monitoring mechanism to ensure the use of OER. 5.2. Agreed. A proper master plan and a well-established mechanism to ensure the implementation of OER island-wide is essential. 5.3. Agreed. An assessment of available resources is a prior need. 5.4. Agreed. The recipients of the training to be given proper recognition and incentives in a well-structured way. 5.5. Agreed. but Copyright matter better be reconsidered
6.0 Scope	Inclusion of Private schools/International schools and Semi-government schools needed. Because there should be uniformity and also inter – exchange of educational facilities/resources can be encouraged.
7.0 Responsibility	Agreed. Shared responsibility among MoE and PMoEs is desirable.
8.0 Procedures	8.1. Agreed. PMoE authorities should clarify its position with regard to availability of resources and ability to communicate this among stakeholders. Also the key entry points to the policy should be identified 8.2. Agreed. Suggest to decide on priority subject areas (eg. Maths, Science, ICT) to initially create OER, and the number of schools with which this can be piloted. 8.3. Agreed. Suggestion made to relax the copyright condition. 8.4. No comment. 8.5. Agreed.
9.0 Effective date	To be decided.
Any other suggestions	The quality of the OER should be monitored. Can OER be prepared using brail? (For visually impaired students) A mechanism to distribute OER to schools where there is no Internet connection and ICT facilities should be developed. (Eg. OER libraries at Divisional/Zonal level) SchoolNet facility can be used as a web-portal. Podcast facilities be made available to all stakeholders, giving opportunities to get access to the internet so that the self-learning can be strengthened. Concept of OER is appreciable but it needs a great deal of consideration and propagation if it is actually to be a foundation in schools.

While all PDEs were in agreement with all aspects in the content of the draft policy document, there were some useful interesting and suggestions made, as evident in Table 2. Especially, promoting educators to create supplementary educational materials as OER in the two national languages (Sinhala and Tamil) matching with the national school curriculum requirements was emphasized. Despite various challenges, the significance of utilizing the already established

enabling environments for ICT, as well as emerging technologies to facilitate access to and redistribution of OER was realized.

Further, specific activities such as raising awareness, building capacity, developing positive attitudes, preparing guidelines for OER adoption at school level, and establishing an OER repository containing materials created by teachers and learners were identified as crucial.

Impact

The advocacy work conducted at the nine provinces not only resulted in a set of draft OER policy documents, but also raising awareness, interest and motivation among the key stakeholders in the Provincial Departments of Education. The productive discussions generated the following suggestions that could be taken into consideration in future action.

Existing ICT-related facilities and resources under various initiatives by the Government of Sri Lanka (GOSL), should be used to promote OER creation, sharing and use by teachers:

- E-Thaksalawa <<http://www.e-thaksalawa.moe.gov.lk/>> – The e-Learning Portal of the MoE, developed and maintained by the ICT Branch of MoE
- Nenasala <<http://www.nenasala.lk/>> – An initiative by GOSL/ICTA under which tele centres/ knowledge centres were established with the intention to spread ICT services to the rural and semi-urban populations in Sri Lanka
- EKSP Project - http://www.cardno.com/en-au/Projects/Pages/Projects-Sri_Lanka_Education_for_Knowledge_Society_Project.aspx - ADB-funded Project of MoE
- SchoolNet - <<http://www.schoolnet.lk/>> - A network connecting all secondary schools in *Sri Lanka*, with the objective of optimal use of ICT for teaching learning process, coordinated by the ICT Branch, MoE.
- Provincial level school websites hosted in the SchoolNet
- Interactive learning materials developed by the National Institute of Education, and distributed to schools in DVDs
- Interactive learning materials developed by school teachers in local languages and in English

On the other hand, integrating OER in to teaching and learning in Sri Lanka would provide numerous advantages to learners such as; reducing barriers to education, enabling free access to knowledge which can be reused and repurposed in different forms, enabling innovative pedagogical practices, facilitating inclusive education, expanding outreach to disadvantaged and marginalized communities, and promoting a healthy academic culture of sharing knowledge. Development of a government policy on OER in school education would thus help in making teachers, learners and the greater community more sensitized to the availability and free-usage of openly licensed educational materials in a productive manner.

Conclusions:

This initiative was very positively accepted by the key stakeholders in all nine Provinces. The value of development of a government policy on OER in school education in Sri Lanka, to help making teachers, learners and the greater community more sensitized about and encouraged to make productive use of openly licensed educational materials was realized and accepted. At the

same time, taking such a bottom-up approach to developing a government policy on OER in contrast to the typical top-down approach is more desirable, in the effective implementation.

It is envisaged through the development of Provincial OER policy frameworks leading to a National OER Policy would effectively address the needs of the Sri Lankan education system to meet new challenges in moving towards a knowledge society.

Future Plans

Future work is being discussed and planned, especially in terms of conducting a National Workshop with the participation of the key stakeholders at the MoE, PMoEs, PDEs, in order to finalize the policy documents and then push towards implementation.

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References

- Atkins, D.E., Brown, J.S., & Hammond, A.L.(2007). *A review of the open educational resources (OER) movement: Achievements, challenges, and new opportunities*. Retrieved <http://www.hewlett.org/uploads/files/ReviewoftheOERMovement.pdf>
- Butcher, N. (2011). *A basic guide to open educational resources (OER)*. Retrieved <http://unesdoc.unesco.org/images/0021/002158/215804e.pdf>
- Butcher, N. (2012). *A Government Policy Development Template to Progress Effective Implementation of Open Educational Resources (OER)* Retrieved <http://oasis.col.org/handle/11599/2336>
- Cape Town Open Education Declaration. (2007). *Cape Town Open Education Declaration: Unlocking the promise of open educational resources*. Retrieved <http://www.capetowndeclaration.org/read-the-declaration>
- COL (2016a). *OER Policy - Provincial Ministries of Education Sri Lanka*. Retrieved <http://oasis.col.org/handle/11599/2360>
- COL (2016b) *Institutional OER Policy Template*. Retrieved <http://oasis.col.org/handle/11599/2361>
- COL. (2011). *COL's policy on OER*. Retrieved <https://www.col.org/footer/cols-policy-open-educational-resources>
- Creative Commons – Home page (2016). Retrieved <http://creativecommons.org>
- Daniel, J. & Uvalić-Trumbić, S. (2011). *Guidelines for OER in higher education*. Retrieved <http://unesdoc.unesco.org/images/0021/002136/213605e.pdf>
- Dhanarajan, G. & Porter, D. (2013) (Eds.). *Open educational resources: An Asian perspective*. Vancouver: Commonwealth of Learning and OER Asia.
- Ehlers, U.D. (2011). Extending the territory: From open educational resources to open educational practices. *Journal of Open, Flexible and Distance Learning*, 15(2), [1–10]. Retrieved <http://journals.akoatearora.ac.nz/index.php/JOFDL/article/view/64/46>
- Fengchun, M, Mishra, S. & McGreal, R. (2016). *Open Educational Resources: Policy, Cost and Transformation*. Retrieved <http://oasis.col.org/handle/11599/2306>

- Kanwar, A., Kodhandaraman B., & Umar A. (2010). Toward sustainable Open Education Resources: A perspective from the global south. *American Journal of Distance Education*. 24(2), 65 – 80
- Karunanayaka, S. P., & Naidu, S. (2014). *Impacts of the integration of OER in teacher education programs at the Open University of Sri Lanka*, Research paper presented at the 28th Annual Conference of the Asian Association of Open Universities (AAOU), Hong Kong, China, 28-31 October, 2014. Retrieved <http://www.stou.ac.th/lcm/Uploadfile/AAOU%202014%20Proceedings.pdf>
- Karunanayaka, S., Fernando, C., De Silva, V. (2013). Designing an Online Learning Environment on Open Educational Resources for Science Education. *AAOU Journal*, Volume 8, No.1. pp 1-11. Retrieved <http://www.emeraldinsight.com/doi/abs/10.1108/AAOUJ-03-02-2008-B001>
- Karunanayaka, S.P. (2016). *Provincial OER Policy Development, Sri Lanka - Consultant Report*. Retrieved <http://oasis.col.org/handle/11599/2386>
- Karunanayaka, S.P., Naidu, S., Kugamoorthy, S., Gonsalkorala, L.R., Ariyaratne, A., Dhanapala, T.D.T.L., Rajini, M., Wanasinghe, S., Weerakoon, S., Karunanayaka, S., Sudarshana, M.L., Nawaratne, R., Fernando, M.N.C., & Gnaneratnam, K. (2015). *Perspectives and practices of student teachers of OUSL in the use of OER in teaching and learning*. Research paper presented at the OUSL Annual Academic Sessions-2015, held 19-20 November, 2015, at OUSL, Nawala.
- Ministry of Education – Home page. (2016). Retrieved <http://www.moe.gov.lk/english/>
- National Education Commission – Home Page. (2016). Retrieved <http://nec.gov.lk/en>
- Stacey, P. (2013). *Government support for OER: Policy, finding and strategies*. Retrieved <http://www.irrodl.org/index.php/irrodl/article/view/1537/2481>
- UNESCO. (2012). *Paris OER Declaration*. Retrieved http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/Events/Paris%20OER%20Declaration_01.pdf
- UNESCO-COL (2011). *UNESCO-COL Guidelines for Open Educational Resources (OER) in Higher Education*. Retrieved http://oerworkshop.weebly.com/uploads/4/1/3/4/4134458/2011.04.22.oer_guidelines_for_higher_education.v2.pdf