

Open Educational Resources (OER) Policy of Bangladesh Open University (BOU): An Evaluation

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1. Introduction:

Use of technology at the Bangladesh Open University (BOU) is not the option but obligatory as the Section 5 of the BOU Act 1992 states as under:

...the purpose of the University shall be to spread multimedia instruction of every standard, and knowledge, both general and scientific, by means of any kind of communications technology, to raise the standard of education and to give the people educational opportunities by democratizing education and to create a class of competent people by raising the standard of education of the people generally [Section 5, BOU Act 1992] (MoE, 1992).

As per the provision of this section, BOU needs to cater to all levels of education and in order to do that it implements multimedia instructions using communication technologies assuring the quality. No organization can violate its objectives stated in the statute. In line with this, BOU uses multimedia for its programme delivery. They are—self-learning materials (SLMs) as print media using in-house style; radio-TV broadcasts (RTBs) as electronic media using national chunk and tutorial support services (TSSs) as human media using the infrastructure of the formal system (Rahman and Panda, 2015; Mannan, 2016). Therefore, technology has been the part of the BOU system, and following the influx of Information & Communication Technology (ICT), BOU introduces learning management system (LMS), web2 technology, webTV, webRadio, eBooks, mobile apps, interactive virtual class room (IVCR), ELT curriculum-linked videos (CLVs) and BOUTube etc. (BOU Showcase Report 2016). All texts have been made available in the web as open accessed materials (OAM) for free use, which do not protect the copyright. In 2014, the University adopted the OER Policy; but the implementation of the policy has been much slowed. Therefore, this desktop research reviews the existing OAM policies of the country in general and BOU in particular. Finally, it critically evaluates the existing OER policy and draws conclusion on OER issues.

2. Objectives:

This desktop research achieves the following specific objectives:

- to review the OAM policies of the country;
- to review the OAM policies of the BOU;
- to review the OER policy of the BOU for ascertaining the foundations of implementing the OER repositories;
- to suggest (based on objectives i–iii) for implementing OER at the BOU through CC licensing.

3. Methodology:

The research tools for this study include desktop analysis, content analysis, and document analysis. Desk research included the analysis of several research reports published in the context of OAM and OER over the years, and the websites of different international (such as UNESCO, OECD and COL) and Bangladeshi organizations (such as, BOU, MoE, and NCTB) have been analyzed. A lot of technology deployment happened in the last couple of years at the BOU, and accordingly, policy responses have been developed. Relevant literature relating to textbook and ICT have been considered but not directly quoted in this paper. Another information source was the wiki educator, which is a compilation of responses from national and institutional frameworks, policies and other knowledge based evidence.

4. OER Defined:

At the very outset, UNESCO talked about the copyright issues because of huge emergence of technology just after the millennium and came out with the new idea open educational resources (OER) and, in 2002, it defined OER as:

...teaching, learning or research materials that are in the public domain or released with an intellectual property license that allows for free use, adaptation, and distribution ([UNESCO, 2002]).

Hylan, et al (2012) find that this definition does not refer to OER as digital resources although the concept is usually restricted to ICT materials. Subsequently, UNESCO, in 2012, redefined the OER as:

...OERs are teaching, learning or research materials that are in the public domain or released with an open license that allows for free use, adaptation, and distribution [UNESCO, 2012].

In the same year, The Organization for Economic Co-operation and Development (OECD) defines OER as:

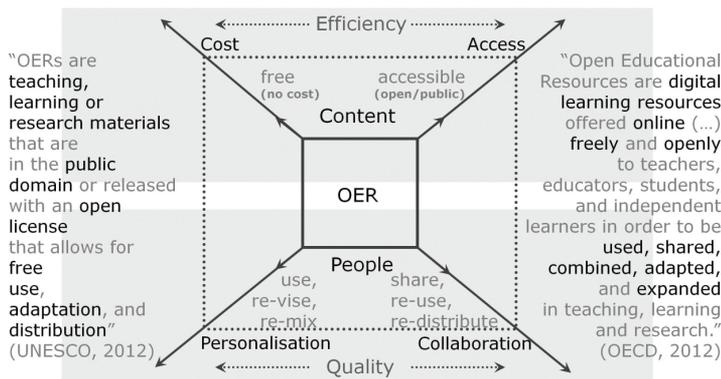
.....digitized materials offered freely and openly for educators, students, and self-learners to use and reuse for teaching, learning, and research. OER includes learning content, software tools to develop, use, and distribute content, and implementation resources such as open licenses (OECD, 2012).

These two commonly used definitions provide two domains, they are content and people. These definitions also denote four different characteristic dimensions. **Fig 1** illustrates them. OER are digital learning teaching and research materials that are:

- (1) free (as in “gratis”);
- (2) open (i.e. freely accessible, publicly licensed, in the public domain);
- (3) they can be shared and re-distributed; and
- (4) they can be freely (or liberally) re-used, adapted and mixed for individual learner’s and teacher’s purposes.

The first two dimensions concern the content domain of OER. The latter two dimensions, also referred to as the 4Rs of Open Content [2] (i.e. the right to reuse, revise, remix and redistribute content), point to the use of content through personalization and association. This is what we call the “people” domain of OER. It is imperative to bear in mind, however, that not all educational materials usually considered as OER actually satisfy all four conditions.

Fig 1: The IPTS OER Square



Source: Sabadie et al (2014)

By way of comparison, the Commonwealth of Learning has adopted the widest definition of Open Educational Resources (OER) as:

....materials offered freely and openly to use and adapt for teaching, learning, development and research (COL, 2014).

However, in Bangladesh, OER is meant as OAM which is emphasized on freely accessible and usable particularly the NCTB and BOU materials where copyright is not yet protected what open licensing platforms do.

5. Digital Bangladesh Promise:

Vision 2021 and the promise of establishing a digital Bangladesh drew immense support from the people and that created positive grounds for the realization of power of ICT to achieve the sustainable development. In this line, the country has been implementing ICT establishment projects such as A2i (access to information) through the Ministry of ICT which created an environment to implement the OER repositories in Bangladesh.

6. Education Policy and BOU:

The Bangladesh Government implemented the National Education Policy 2010, and this policy states that 'Bangladesh Open University will be built up as a true digital university enriched by facilities of IT'. Through the one sentence, policy has conferred huge tasks on BOU, in line with this; BOU has been deploying technologies in the delivery of the programme. In addition, the education policy also puts emphasis on operationalizing the libraries through ICT by phases, and thus opens up ways to access global knowledge (SoE, 2016). The policy has clear direction on OER, and can be explored from the following statement cited in the policy:

....enriched libraries will be set up in every college and university. All research journals will be collected through electronic subscription. All libraries of the country will be connected through networking so that any student can have access to the resources of other libraries. By phases, digital edition of books and journals will be made available. Recognizing the importance of the institutions, the structural format of the national library and archives will be reorganized and they will be brought under the digital system (SoE, 2016, p, 15).

Therefore, OER has been imperative for BOU and as well for the nation.

7. Textbook Policy:

7.1 NCTB Texts:

The National Curriculum and Textbook Board (NCTB), in the light of the set objectives of the primary education, will prepare subject-based textbooks, supplementary text materials, exercise books and teaching aids (books with analyses, exercises and examples) with a view to meeting the marginal requirements of every subject and class (MoE, 2010; p.7). Free textbooks are being provided to primary and secondary schools. This system will continue. The existing policies of preparing, printing, publication and free distribution of subject based textbooks at primary and secondary levels will continue. NCTB made all texts available as open accessed materials (see **Fig 2**).

7.2 BOU Texts:

Textbook is the heart of the BOU course delivery. The text development at the BOU passes a process for assuring quality. In addition, the University has the textbook policy as mentioned under:

- texts to be structured using the in-house style (Jahan, et al, 2015);
- texts to be authored, edited and reviewed by the reputed teachers;
- texts to be written as self-learning materials;
- texts to be distributed among the students; and
- texts to be made available in the web for free use as open accessed materials;

Making BOU SLMs as OAM is the latest policy response and it has made all the materials available in the web for free use (see **Fig 2**). Initially, it was predicted that there will be least use of the OAMs by the learners. Rahman & Panda (2015) find that BOU Open School learners are extensively using the OAM in the tutorial centres in the smart phone and tabs rather carrying the hard copies of the SLMs.

7.3 NGO Texts:

NGOs in Bangladesh are very active in imparting literacy programme for disadvantaged people through face-to-face mode, and after that, they run CE (continuing education) programmes coupled with vocational courses under open and distance learning (ODL) mode using texts and animated learning CDs. In addition, DNFE (Directorate of Non-

formal Education) also do the same programmes using the NGO model collaborating with NGOs. NGOs and DNFE have huge literacy and CE materials which is an important source of open educational resources and which is now limited in hardcopy only.

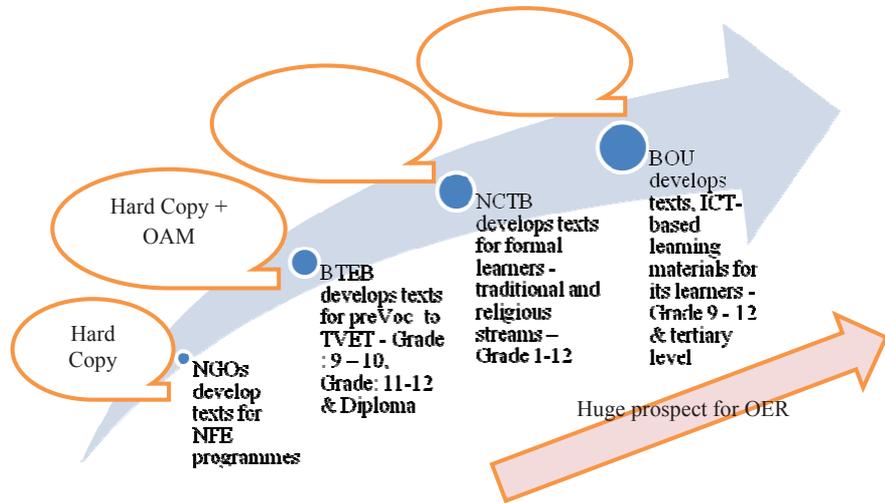


Fig 2: OER Prospect in Bangladesh

7.4 BTEB Texts:

Bangladesh Technical Education Board (BTEB) runs TVET–preVoc, SSC Vocational (Grade: 9-10), HSC Vocational (Grade: 11-12); and Diploma Programmes in different trades. All programmes are supported by the texts books (see **Fig 2**) of which some are already made available as open accessed materials.

8. BOU OER Policy Challenges:

Implementation of OER initiatives always has challenges and Sabadie et al (2014) find that in Europe although OER are high on the policy agenda and supported by many education and training actors, their use at schools, universities and adult education institutions has not reached a critical threshold. Likewise, Commonwealth of Learning (COL) initiated to implement OER at BOU and accordingly, the University drafted a ‘BOU OER Policy’, which, subsequently, the Academic Council (AC) of the University adopted on 2014, and no progress has been made on the policy agenda. The following bottlenecks have been identified:

8.1 Content:

In Bangladesh, there are two big publishing houses. They are: National Curriculum and Textbook Board (NCTB) and Bangladesh Open University (BOU). As mentioned earlier that as per the education policy NCTB is responsible for producing and distributing primary and secondary (including the equivalent vocational and religious stream) textbooks free of charge. Every year, on January 1, the Board distributes 3.5 billion books and make them available in the web for downloading free of charges (NCTB, 2016). As a matter of fact, there is least use of this OAM as the students already have the hardcopies of the books. National Textbook Policy has been one of the bottlenecks to mainstream the OER.

On the other hand, BOU develops SLMs for its learners and supplies hard copies to them. Sometimes, these have already been made available in the web to make up the delay, in some cases, in distributing the books. In spite of that, there are some educational resources and OER platforms on the Internet, which are actually used by the students of English medium.

8.2 Language:

Bangladesh is a uni-lingual country where about 99% people speak Bengali. Both NCTB and BOU develop texts in Bangla putting emphasis on local context where there are reflections of cultural richness. However, the people in the diversified nation like India and EU countries do have different languages, and there is a high demand for OER. Therefore, language has been one of the problems of not expanding the OER; at the same time, it can be a grace for OER.

8.3 Quality:

In practice, quality assurance is the responsibility of each institution, teacher or learner who uses OER (Kanwar & Uvalic-Trumbi, 2011). In both NCTB and BOU are public entities where production of materials passes through a process, and there are quality audits in every step. The Ministry of ICT has prepared a repository using the NCTB books and fewer hits are found as many learners have the same hard copies with them.

Bangladesh has tremendous opportunities for open educational resources (OERs) as its contents are curriculum-linked and prepared

in Bangla-language of majority people—and all the materials are of high quality as it passes through a comprehensive review and audit process (see Fig 3).

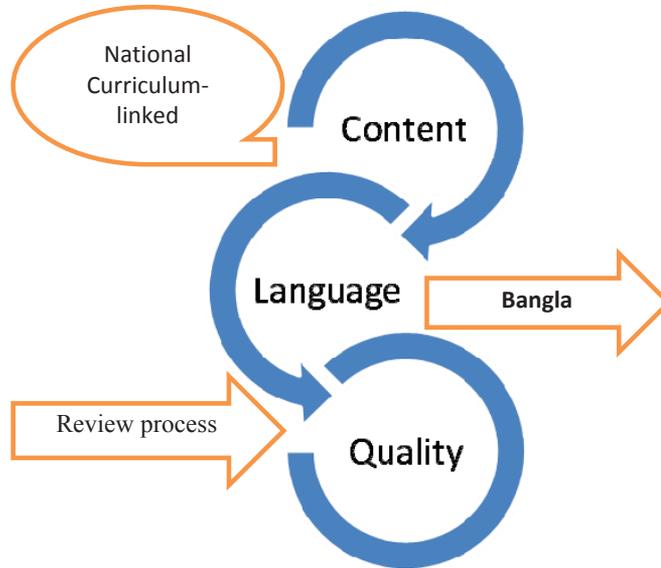


Fig 3: Quality of OER in Bangladesh

8.4 BOU OER Policy, 2014:

BOU OER Policy 2014 has been formulated in accordance with the provisions of the copyright act of the country that is central to the open educational resources. Therefore, there will be no conflict in publication, use, reuse and distribution of the materials – print, self-instructional materials (SLMs) and radio TV broadcasts (RTBs), audio-video lectures and so on. These materials are now being made available in the web as open accessed materials. Now the question remains—does the copyright acts allow doing that. If the answer is no, how the policy can protect BOU at the time of litigation, if happens? In addition to copyright act, ethical issues in this regards have been crucial as the teachers, tutors and students are only allowed to use the materials. However, because of making materials available in the web, anyone can use, reuse and distribute at a free of charge. In connection to these questions, BOU OER Policy 2014 clearly recommends the following:

...BOU supports the principles of open education and as a default position recommends that the created materials should be open to public for the benefit of the society. BOU Copyright Policy is aligned with

the requirements of the Copyright Act 2000 (and periodic amendments) [BOU OER Policy 2014; p. 1].

The policy is also very clear about the ethical consideration and stated in the following:

.....Intellectual property (IP) refers to the exclusive rights including economic and moral rights arising from creative works developed to support teaching and learning [BOU OER Policy 2014; p. 1].

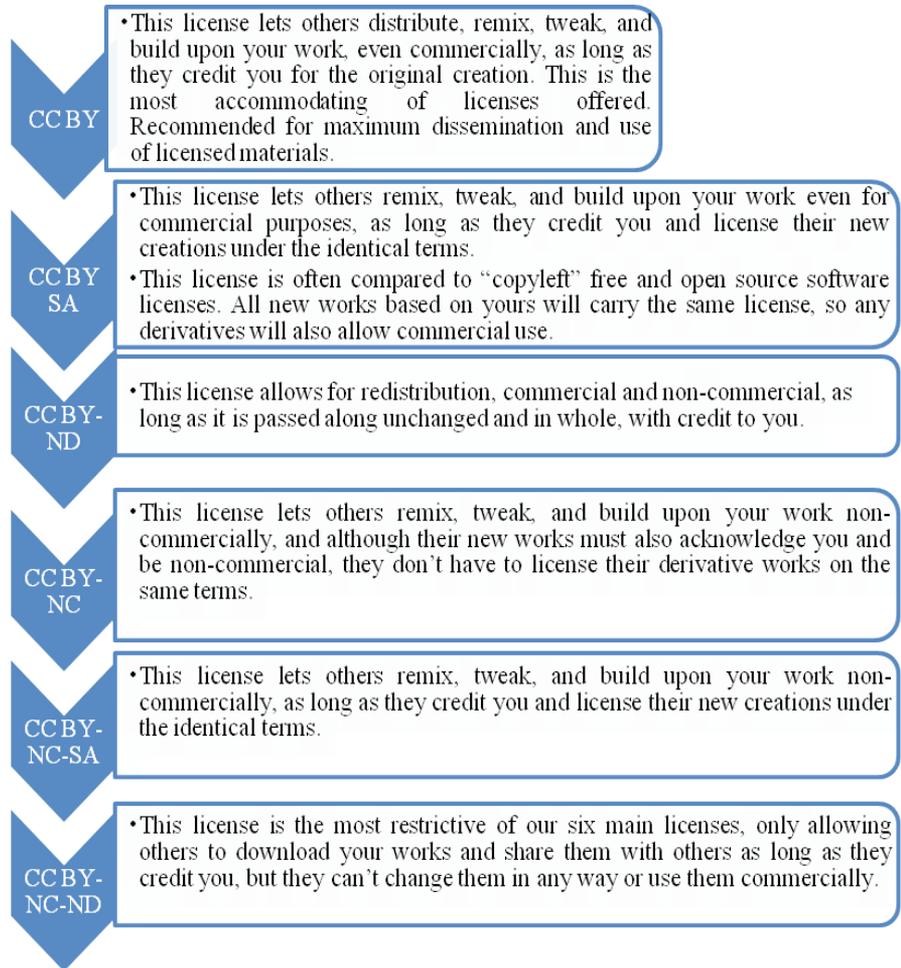
The policy customized the two well-known OER definitions given by UNESCO and OECD and the BOU definition is as under:

Open Educational Resources (OER) are resources and materials used to support education that may be freely accessed, reused, modified and shared by anyone under some specified provisions [BOU OER Policy 2014; p. 1].

BOU definitions did not refer to any digital matters. Therefore, BOU's current drive towards shifting from traditional ODL to ICT-enabled ODL through learning management system (LMS), web2 technology, webTV, webRadio, eBooks, mobile apps, interactive virtual class room (IVCR), and BOUTube etc. has been less emphasized in the Policy.

In relation to the actors of OER, the Policy only refers to Creative Commons (CC) licensing for implementing OER at the BOU. This may be for the popularity of the CC; but in Bangladesh, other actors are also playing vital role in implementing OER. In connection with CC, BOU policy also describes the CC's characteristics and recommended only two attributions-CC BY and CC-BY-SA, and in relation to compliances of the copyright act 2000, the Policy recommends attribution 4.0 (CC - BY) for default position (see **Fig 4**).

Fig 4: BOU OER Policy Focus



One of the beauties of this Policy is that it recommends publications of created works created by students as well what is likely to have a positive impact on the student’s learning through creating motivation in them.

The BOU OER Policy suggests that thorough examination of the copyright issues before implementation of the OER, and recommended a Committee headed by the Vice Chancellor of the University consisting of members of copyright experts including the policy level people.

9. Conclusions:

In line with the implementation of the digital-Bangladesh, as BOU shifts to digital learning environments gradually, teachers and

tutors are leveraging digital instructional materials including open accessed materials (OAM) to provide more diversified and personalized instruction to improve teaching and learning. Adoption of OER Policy has been a dynamic drive towards implementation of OER at the BOU and as a part of the movement to digital learning; the implementation of open educational resources is climbing. Educational institutes are modifying their current policies for approving curricula to include OER materials, encouraging the use of OER at the private universities, and in some cases providing OER materials. These trends provide faculties the opportunity to fully utilize digital instructional materials, including OER, and to improve teaching and learning at the BOU. Policymakers need to take appropriate actions for mainstreaming OER throughout the University, and be the champion in using, reusing and remixing learning materials for the students and for other users. In addition, Bangladesh also needs the National OER Policy.

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