

## **DEVELOPING CONCEPTUAL FRAMEWORK FOR REVISING SELF-LEARNING MATERIALS (SLMS) OF THE OPEN SCHOOL (OS) OF BANGLADESH OPEN UNIVERSITY (BOU) AT A DIGITAL ENVIRONMENT**

**Asst. Professor, Sabina YEASMIN**  
**Bangladesh Open University**  
**Open School, Gazipur, BANGLADESH**

**CRK MURTHY**  
**Professor of Distance Education,**  
**STRIDE, IGNOU, INDIA**

### **ABSTRACT**

Bangladesh Open University (BOU) runs school programs as part of its academic activities through open schooling since its inception. As of today, the Open School uses the first generation self-learning materials (SLMs) written, before an era, following an in-house style and template.

The concerned faculty member corrects, every year, texts before the reprint; but this is limited to spelling mistakes, factual errors and page make-ups only. The University has taken policy and steps to revise the texts as a whole which is still limited to the previous process. But; the current government is implementing the agenda of digital Bangladesh which definitely will influence the texts vis-à-vis template, learner's instructions, gender-sensitiveness, context and content. In addition, education theory has been sifted from instructivism to constructivism which is being experimented and implemented by the Ministerial project entitled Teaching Quality Improvement (TQI) partnering with the BOU School of Education with new texts. Time changes, new things are being adopted. Open School also requires revising its texts in relation to the government's current agenda of implementing the digital Bangladesh. This study collects data from tutors, distance educators, writers and reviewers and finally develops a framework for revising the OS SLMs at a digital environment.

**Keywords:** BOU, Digital, SLMs, ODL, environment.

### **INTRODUCTION**

The Internet changed everything, particularly, in the delivery of distance education programs of the world. In order to cope with this change Bangladesh Open University (BOU) is re-examining how and what it does for its programs. Research paradigm in the DE also being changed and likewise, open schooling research by its faculty members is changing as well. The systematic development of the self-learning materials (SLMs) by the members of the BOU School has an academic responsibility to address these changes.

A number of drives from the BOU Vice-Chancellor, the School has sought increased attention to and focuses on a possible implementation of open schooling with in the digital environment as the country has been implementing the Digital Bangladesh.

This paper provides background information and a focus on issues that require further efforts in the SLMs of the School in the digital environment. Issues requiring the most ongoing attention include tutors, distance educators, writers and reviewers opinions pertaining to template, learner's instructions, gender-sensitiveness, context and content of the SLMs. Recommendations in these and other areas are also provided in this paper. A fully populated digital environment would represent a great addition to the BOU Open School movement to revise its SLMs. This research assists in increasing the visibility of both individual researchers within Open School as well as of the BOU as a whole. Open School can provide leadership within this realm that will serve BOU well for meeting the challenges of the 21<sup>st</sup> century in the delivery distance education at a fully-fledged digital environment.

### **AIMS AND OBJECTIVES**

This paper aims to find out the adoptable and adaptable format of the Open School's SLMs in the digital environment. In addition, it provides the followings:

- background information on the growing trend toward quality improvement of the SLMs in particular and the more general trend towards an opening up of access to the digital publications;
- specific information regarding the digital content development and standards that seek to digital content useful to students;
- a status report on institutional BOU Open School;
- a status report on OS's efforts towards review of the SLMs ;
- overviews and recommendations regarding a number of policy and procedural issues evoked by Open School SLMs review implementation;

### **METHODOLOGY**

This paper's recommendations are based on extensive reading and research in the areas of template, learner's instructions, gender-sensitiveness, context and content, through visits to and interviews with practitioners in the field DE such as tutors, distance educators, writers and reviewers. While providing information and comments on some of the technical aspects of the topic, this is not a primary focus for this document. Current government is implementing the digital Bangladesh which may require bringing changes in the different aspects of the BOU texts which is being used for the delivery of the School programs.

This survey aims to evaluate the SSC and HSC texts of the BOU Open School in relation to possible changes for the digital environment. Respondents circle their response to the items in the questionnaire.

Rate aspects of the course on a 1 to 6 scale 2 equals "strongly disagree" and 6 equals "strongly agree." 2 represents the lowest and most negative impression on the scale, 4 represents an adequate impression, and 6 represents the highest and most positive impression.

Therefore data has been coded as 2=choose N/A if the item is not appropriate or not applicable to this course. NA=Not applicable, 2=strongly disagree, 3=Disagree, 4=neither agree/nor disagree, 6=Agree, 6=strongly agree. Initially, scale was 1-5; but at the time of coding the scale changed to 1-6 as '0' is not accepted in the SPSS system for analysis purpose.

## DISCUSSION AND ANALYSIS

### Open School and Technology

BOU Open School runs three pre-University programs such as JSC (Junior School Certificate) for grade 6-8, SSC (Secondary School Certificate) for grade 9-10, and HSC (Higher Secondary Certificate (HSC) for grade 11-12. These are traditionally delivered programs; textbooks are the basis and primary source of content although radio-TV programs are the part of program delivery; but very minimal. While textbooks should always be critically reviewed before adoption at least at the time of reprint, this is especially critical when the learner and the instructor are not in daily contact. Given adequate light, print materials can be used any time and any place without the aid of supplemental resources such as electricity, viewing screen, and specially designed electronic classrooms. The portability of print is especially important for rural learners with limited access to advanced technology what Bangladesh lacks behind. That why; the current government is implementing the digital Bangladesh. Discussions of digital technologies oftentimes are set within the context of 'crisis' (Andrews, 2004). This crisis maybe for pricing or maybe for using in relation to cultural and technical convergence that has greatly influenced trend towards the development of SLMs for the ODL learners. Some of the digital forces include:

- networking as represented by the World Wide Web;
- lowered costs for technical infrastructure;
- impressive increases in computer processing power;
- the growth of electronic publishing;
- increasing availability of open source software;

Paralleling these developments is an ongoing movement towards "open access" to learning materials. In relation to this every day Open Schools in the every corner of the world are gathering to solve the problem; The Commonwealth of Learning is providing facilities to build the open sources of open school materials..

### Course content1

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid not applicable	1	2.0	2.0	2.0
disagree	4	8.0	8.0	10.0
niether agree nor disagree	10	20.0	20.0	30.0
agree	31	62.0	62.0	92.0
strongly agree	4	8.0	8.0	100.0
Total	50	100.0	100.0	

### Course content2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not applicable	2	4.0	4.0	4.0
	disagree	2	4.0	4.0	8.0
	neither agree nor disagree	7	14.0	14.0	22.0
	agree	37	74.0	74.0	96.0
	strongly agree	2	4.0	4.0	100.0
	Total	50	100.0	100.0	

It is most essentially an organizational commitment to the stewardship of these digital materials, including long-term preservation where appropriate, as well as organization and access or distribution (Lynch, 2003). Now I want to show some analysis on my survey of the questionnaire. From my survey of course content1 (Learner's require the prerequisites for this course) you can notice that 31 people (62%) agreed to that. 4 people (8%) disagreed. From my survey of course content2 (Learner's had the prerequisites knowledge and skills for this course) you can notice that 37 people (74%) agreed to that. 2 people (4%) disagreed.

### Course content3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not applicable	1	2.0	2.0	2.0
	disagree	2	4.0	4.0	6.0
	neither agree nor disagree	7	14.0	14.0	20.0
	agree	34	68.0	68.0	88.0
	strongly agree	6	12.0	12.0	100.0
	Total	50	100.0	100.0	

From my survey of course content3 (Learner's were well informed about the objectives of this course) you can notice that 34 people (68%) agreed to that. 2 people (4%) disagreed.

### Course content4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	neither agree nor disagree	5	10.0	10.0	10.0
	agree	38	76.0	76.0	86.0
	strongly agree	7	14.0	14.0	100.0
	Total	50	100.0	100.0	

From my survey of course content4 (the course lived up to learners expectations) you can notice that 38 people (76%) agreed to that. 7 people (14%) strongly agreed.

### Course design1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	neither agree nor disagree	5	10.0	10.0	10.0
	agree	38	76.0	76.0	86.0
	strongly agree	7	14.0	14.0	100.0
	Total	50	100.0	100.0	

From my survey of course design1 (the course objectives are clear) you can notice that 38 people (76%) agreed to that. 7 people (14%) strongly agreed.

### Course design

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	45	90.0	90.0	90.0
	strongly agree	5	10.0	10.0	100.0
	Total	50	100.0	100.0	

From my survey of course design3 (interactive multimedia was essential in the course) you can notice that 45 people (90%) agreed to that. 5 people (10%) strongly agreed.

### Self paced

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	agree	14	28.0	28.0	28.0
	strongly agree	36	72.0	72.0	100.0
	Total	50	100.0	100.0	

From my survey of self-paced delivery type question (video is an important aspect of the course) you can notice that 36 people (72%) agreed to that. 14 people (28%) agreed and no one disagreed with this matter.

### Status of BOU Open School's SLMs

BOU Open School runs the program in a traditional way where texts are the main materials. Every year little bit correction is made before re-print; but not revised in relation to changes in technological advancement. At present, revising has become paramount important for using it at the digital environment. While the trend is still relatively new, more and more open schools are creating digital resources. Two factors are worth highlighting in this regard. One is the ability of institutional capacity to provide a response to the perceived need to reform the review process. The other is availability of open source software that can serve as the infrastructure for the process. The COMSA 2009 international conference (open access initiatives) at Delhi, India should:

- **implement a policy to require members to deposit a copy of all their published SLMs in an open access, and**
- **encourage members to publish research articles in open access journals;**

**One of the things that the Open School should evaluate the nature of the content of the SLMs that would be accepted in the digital environment. One key result of the current survey is that it seems clear a significant number of respondents are committed to SLMs that go far beyond e-prints. Worldwide there is a growing trend to making these ODL materials available electronically. While in the past a university's quality was linked to its texts, in the future a university's quality will be linked to its digital environment, which is easily available over the Internet. Analysis has been shown to be much more utilized and accessed than their print counterparts. It continues to have a diversity of different content, and then it is likely that various levels of access to the content will be needed. Much of the content is likely to be (and should be) openly accessible to the greater Internet.**

## **CONCLUSION AND RECOMMENDATIONS**

**As a result of vision and commitment one of the world's largest open school systems is soon to have nearly all of its programs utilizing the digital equipment. An analogous situation can be seen in regard to the implementation of an institutional digital system. Such an implementation is complex and multi-faceted. Attention to these details should not, however, hamper a general progression towards this goal.**

**A good strategy for some issues is to wait and deal with the problem when and if it actually occurs. BOU Open School, as an largest schools of the University, creates knowledge and learning objects for the students by its faculty. Increasingly, these objects maybe represented in some digital format that can be easily shared and distributed throughout the University and the world. The Digital formal will provide the school with the services and a technology infrastructure to foster learners support with a focus on reducing duplication of effort across campuses, establishing mechanisms for the seamless sharing of digital learning objects, and leveraging school's intellectual and cultural resources.**

**How can faculty be convinced that it is a good idea to post their work to the digital environment? Part of this is just a matter of time. As faculty see the results of studies indicating more access to openly available works open access movements, as the implementations gain maturity the content will follow incorporating changes in relation to contemporary issues. On the other hand, it indicates the large amount of painstaking, time-consuming outreach is necessary to have a populated text development review process. It is a task that requires a significant amount of staff input from those charged with developing the SLMs. The indication is that as many different approaches to gaining content, as possible should be considered. This variety includes:**

- **focus on a department or group of faculty that have indicated an interest in self-archiving;**
- **evaluate faculty web sites for texts suitable for the digital;**
- **utilize an administrative champion to make the case;**

- discussions with upper management regarding the level of commitment to digital content delivery;
- analysis of state, national and international efforts in areas of digital text and how these might be utilized by OS system;
- adoption of a policy of supported and non-supported data formats similar to that in place
- Designation of a change team to work on these specific areas.

A growing number of governmental, higher education and research-oriented institutions have debated and passed resolutions dealing with the changes and evolution seen in the realm of digitization of SLMs. And, a survey indicates that 81% of respondents would cooperate willingly with such a mandate.

**Authors Note:** Paper presented in 15th Annual IDEA Conference on "Quality Assurance in Open and Distance Education: Issues, Concerns, Challenges and Developments" organized by Indian Distance Education Association (IDEA) & Directorate of Distance Education, University of Kashmir from 5th-7th Nov, 2009 at Srinagar, J & K (India)-190006.

#### BIODATA and CONTACT ADDRESSES of the AUTHORS



**Sabina YEASMIN** is an assistant professor of Open School of the Bangladesh Open University. I have obtained B.Sc (Hons.) and M.Sc degrees from University of Dhaka, Bangladesh. After graduating with excellent academic record I have joined BOU as a lecturer in January 1996. She has already submitted my M.phil thesis paper (Social Security and Working Women: A Case study in Dhaka City) to Dhaka University authority. Now she is doing her Ph.D (Study on Design and Development of Self-Learning Materials for Open Schooling with particular emphasis on Gender-Sensitivity: a Case of Bangladesh Open University) at IGNOU, Delhi. She has received many national and international training on distance education concept, instructional design, and preparation of audiovisual materials from International Extension College, Cambridge, UK.

**Sabina YEASMIN**  
 Assistant Professor,  
 Open School, Bangladesh Open University  
 Gazipur-1705, BANGLADESH  
 Phone: +8802-9663744  
 Mobile: +8801715835899  
 Email: [sabina\\_d@hotmail.com](mailto:sabina_d@hotmail.com)

**CRK MURTHY**  
 Indira Gandhi National Open University  
 Email: [crkmurthy@hotmail.com](mailto:crkmurthy@hotmail.com)

## REFERENCE

Digital Repository Resources (SPARC) <http://www.arl.org/sparc/repos/index.html>

Scholarly Electronic Publishing Bibliography (SEPB)  
<http://info.lib.uh.edu/sepb/sepb.html>

Open Archives Initiative <http://www.openarchives.org>

Creative Commons <http://www.creativecommons.org>

Directory of Open Access Journals <http://www.doaj.org>

Publisher Policies Regarding Self-archiving <http://www.sherpa.ac.uk/romeo.php>

SPARC Institutional Repositories Discussion List Archive  
<https://mx2.arl.org/Lists/SPARC-IR>

Dspace <http://www.dspace.org>

SUNY Digital Repository <http://dspace.sunyconnect.suny.edu/>

Virginia Tech's ETD Resources for Students <http://etd.vt.edu/>

Networked Digital Library of Theses and Dissertations (NDLTD)  
<http://www.ndltd.org>

Open access Information Resources  
<http://www.earlham.edu/~peters/fos/overview.htm>

Search Tools <http://oaister.umdl.umich.edu/o/oaister> and  
<http://scholar.google.com>

Misanchuk, E. R. (1994). Print tools in distance education. In B. Willis (Ed.),  
Distance education: Strategies and tools (pp.109-129). Englewood Cliffs, NJ:  
Educational Technology Publications.  
PhD references <http://uidaho.edu/eo/distqlan.html>



## Annexure A

### SSC and HSC Texts Evaluation Questionnaire

Course Name: \_\_\_\_\_

Respondent's Name (optional): \_\_\_\_\_

Date: \_\_\_\_\_

Job Title: \_\_\_\_\_

Years in present position? \_\_\_\_\_

<1

1-3

#### INSTRUCTIONS

Current government is implementing the digital Bangladesh which may require bringing changes in the different aspects of the BOU texts. This survey aims to evaluate the SSC and HSC texts of the BOU Open School in relation to possible changes for the digital environment.

Please circle your response to the items. Rate aspects of the course on a 1 to 5 scale 1 equals "strongly disagree" and 5 equals "strongly agree." 1 represents the lowest and most negative impression on the scale, 3 represents an adequate impression, and 5 represents the highest and most positive impression. Choose N/A if the item is not appropriate or not applicable to this course. Your feedback is sincerely appreciated. Thank you.

NA=Not applicable, 1=Strongly disagree, 2=Disagree, 3=Neither agree/nor disagree, 4=Agree, 5=Strongly agree

#### COURSE CONTENT (Circle your response to each item)

1. Learners require the prerequisites for this course.  
NA=Not applicable, 1=Strongly disagree, 2=Disagree, 3=Neither agree/nor disagree, 4=Agree, 5=Strongly agree
2. Learners had the prerequisite knowledge and skills for this course  
NA=Not applicable, 1=Strongly disagree, 2=Disagree, 3=Neither agree/nor disagree, 4=Agree, 5=Strongly agree
3. Learners were well informed about the objectives of this course.  
NA=Not applicable, 1=Strongly disagree, 2=Disagree, 3=Neither agree/nor disagree, 4=Agree, 5=Strongly agree
4. This course lived up to learner's expectations.  
NA=Not applicable, 1=Strongly disagree, 2=Disagree, 3=Neither agree/nor disagree, 4=Agree, 5=Strongly agree
5. The content is relevant to learner's job.  
NA=Not applicable, 1=Strongly disagree, 2=Disagree, 3=Neither agree/nor disagree, 4=Agree, 5=Strongly agree

#### COURSE DESIGN (Circle your response to each item)

6. The course objectives are clear  
NA=Not applicable, 1=Strongly disagree, 2=Disagree, 3=Neither agree/nor disagree, 4=Agree, 5=Strongly agree
7. \_\_\_\_\_ T  
he course activities stimulated learning.  
NA=Not applicable, 1=Strongly disagree, 2=Disagree, 3=Neither agree/nor disagree, 4=Agree, 5=Strongly agree
8. Interactive multimedia was essential in the course.  
NA=Not applicable, 1=Strongly disagree, 2=Disagree, 3=Neither agree/nor disagree, 4=Agree, 5=Strongly agree
9. The activities in this course gave learners sufficient practice and feedback  
NA=Not applicable, 1=Strongly disagree, 2=Disagree, 3=Neither agree/nor disagree, 4=Agree, 5=Strongly agree

10. The test(s) in this course were accurate and fair.  
 NA=Not applicable, 1=Strongly disagree, 2=Disagree, 3=Neither agree/nor disagree,  
 4=Agree, 5=Strongly agree
11. The difficulty level of this course is appropriate.  
 NA=Not applicable, 1=Strongly disagree, 2=Disagree, 3=Neither agree/nor disagree,  
 4=Agree, 5=Strongly agree
12. The pace of this course is appropriate.  
 NA=Not applicable, 1=Strongly disagree, 2=Disagree, 3=Neither agree/nor disagree,  
 4=Agree, 5=Strongly agree

**SELF-PACED DELIVERY (Circle your response to each item.)**

13. ODL was a good way for me to learn this conten  
 NA=Not applicable, 1=Strongly disagree, 2=Disagree, 3=Neither agree/nor disagree,  
 4=Agree, 5=Strongly agre
14. Video is an important aspect of the course  
 NA=Not applicable, 1=Strongly disagree, 2=Disagree, 3=Neither agree/nor disagree,  
 4=Agree, 5=Strongly agree
15. How would you improve this course? (Check all that apply.)
- Provide better information before course started
  - Clarify the course objectives
  - Reduce content covered in course
  - Increase content covered in course
  - Update content covered in course
  - Improve the instructional methods
  - Make course activities more stimulating
  - Improve course organization
  - Make the course less difficult
  - Make the course more difficult
  - Slow down the pace of the course
  - Speed up the pace of the course
  - Allot more time for the course
  - Shorten the time for the course
  - Improve the tests used in the course
  - Add more video to the course
16. What other improvements would you recommend in this course?
17. What is least valuable about this course?
18. What is most valuable about this course?