



Workshop On “Technologies for Open Textbooks”



25th – 27th February, 2016

Organised by
Commonwealth of Learning (COL), Canada
Hosted by

Odisha State Open University, Sambalpur

Venue: Hotel Swosti Premium, Bhubaneswar, Odisha, India

Commonwealth of Learning (COL), Canada has supported the Caribbean Open Textbook initiative of 2014 and has encouraged research into how Open Educational Resources (OER) might be used to enhance access by both educators and students to qualitative materials. In recent times there has been growing interest in the model applied in the Caribbean Open Textbook initiative, and how it might transform the traditional textbook to better suit the specific needs of teachers and learners, make it less static and more dynamic so that it can be adapted to support local challenges. While there are many guides to OER, how to build a platform to disseminate OER using free and open source technologies are missing. Therefore, COL has initiated the development of an *Open Textbook Manual* through the internet revolution creating vast universal educational resources accessible to all, enabling students to reach the world's best teachers with the click of a mouse. Thus, man's indomitable thrust for knowledge and skill has brought the transition from muscles to machines through the spectrum of science and technology. Odisha State Open University, Sambalpur has collaborated with COL in hosting a workshop on use of technologies in preparation of open textbooks. Participants were from thirteen Open Universities in India.

Expected Learning Outcomes of the Workshop

1. Understanding of OER and its practical implication in the educational system by developing content-based-materials for the curricular transaction.
2. Use appropriate open license and web services (Gooru, OER Commons & Pressbooks) to develop OER Textbook platform with limited technical skills.
3. Build a platform for open textbooks using existing open source technology solutions. (Drupal Content Management System, Canvas Learning Management System and others).
4. Design appropriate learning experiences for OER-based eLearning.
5. Offer OER-based eLearning courses and programmes using appropriate technologies.
6. Provide feedback on how the manual can be improved.



Dr. Pradeep Kumar Panigrahi, Minister Higher Education, Odisha in the Inaugural Session

Workshop Proceedings

For achieving these learning outcomes, a workshop was held at Hotel Swosti Premium, Bhubaneswar, Odisha from 25-27 February 2016, on “Technologies for Open Textbooks” conducted by Mr. Andrew Moore, Education Specialist, OER, South Africa. All 28 participants were from different State Open Universities of India. Dr. Srikant Mohapatra, OSD, Odisha State Open University (OSOU), Odisha welcomed the guests and the participants of the workshop. Dr. Pradeep Kumar Panigrahi, Minister Higher Education, Odisha in his inaugural speech, has stressed upon the growth and development of the Open Universities in India with a mandate to provide higher education to large segments of the society. He said, “In the era of advanced technology, the conversion of traditional textbooks into techno-based open textbooks will be a boon to the society by improving the gross enrolment ratio of students into the higher education system”.

Mr. Andrew Moore began with a question “How much Open are Open Universities?”. He explained the purpose of the workshop and the manual and how it has been designed to enable others to develop their own platforms based on capacity and resources. He discussed the role of teacher in the creation of the knowledge and its dissemination. He further discussed the flexibility in the framework of OER Licensing Policy based on 04 conditions i.e. Attribution, Non – Commercial, Non – Derivatives and Share Alike, which is going to take over the

traditional policy of Copyright and Intellectual Property Rights (IPR). Andrew also discussed on the necessary components of OER i.e. Repository of OER, metadata linked to the curriculum, a master set of sequenced OER, user interface that allows manipulation and enhancements of the master set and a distribution mechanism to share each version. He guided the participants to use Gooru platform giving an opportunity to investigate the OER Maths Textbook that has been developed in Gooru for Ministry of Education, Government of Antigua & Barbuda. The participants registered themselves on the Gooru platform and developed a small textbook using the resources identified in the earlier OER session and a set of curriculum statements identified by the participants.

On the 2nd day of the workshop ,the participants were given an opportunity to investigate the OER Maths Textbook that has been developed in OER Commons with an opportunity to replicate the model using their own resources of learning and remixing an existing resource in Open Author. While discussing on PressBooks, the resource person guided participants to create a platform and import an epub file to create a small OER Textbook publication on dedicated book website. Further, the participants got an opportunity to upload their own resources and add additional metadata for their own subjects into the Drupal Content Management System (CMS). Uploading and tagging new resources and using the repository search tools were experimented.

On the 3rd day of the workshop, the participants got an opportunity to create a new master set of curriculum resources in the Canvas environment using the Learning Management System (LMS) tools to manipulate the content as per the requirement and create a small OER Textbook prototype. After that one session was conducted for recent development in the Drupal sphere i.e. Opigno, which is both a CMS and LMS built on the Drupal platform constructing an OER Textbook platform using this technology. Participants interacted with the Opigno LMS platform and extended the taxonomy, uploaded curriculum documents and created small lessons and finally they were provided to work-out how the DSpace could be inserted into a Moodle environment, where DSpace database created a small repository of OER.

All these sessions of the three-day workshop offered a hands-on experience and practice in which participants engaged in online role play activities by taking part in simulation exercises for better understanding and application of online moderation. It involved groups of participants posting comments to issues raised as ‘students’ on learning management system.

Feedback by Participants

After the completion of the workshop, feedback of the participants were taken, in order to assess the effectiveness of the workshop on the different topics covered during the workshop. An online questionnaire developed by the COL for assessing the effectiveness of the workshop was responded by the participants. Another printed questionnaire was distributed to the participants to give their feedback regarding the various academic and administrative aspects of the workshop.

Some of the important feedback given by the participants on the Workshop included:

- Creation of a supportive atmosphere in the country for the massive use of OER and accreditation of online courses through the framing of ICT policies by the respective open universities
- Creation of a **Consortium of Open Universities of India(COUI)** to create a platform for discussion and deliberation on issues of mutual interest and facilitate academic collaborations for design, development and delivery of online courses/MOOCs
- Creation of an LMS under OSOU to set off the process of academic collaboration for mutual benefit
- Organising a couple of more workshops in future to follow up the activities undertaken in the present workshop
- Provision of more time for hands on training to develop the self-sufficiency of the participants in the application of ICT-enabled academic initiatives
- Creation of curriculum-based teams from amongst the participants to design and develop online courses/OER for the courses being offered by OSOU
- Development of OER in regional languages to enhance the accessibility of the courses by the masses

Feedback on the Manual for Open Textbooks:

- Description of OER before the discussion on Open textbooks
- Rewording of the objectives in behavioural terms
- Inclusion of Flow-Charts, video tutorials and screen shots for the description of processes involved in the application of LMSs and CMSs
- Development of separate manuals for separate audiences(teachers, students, administrators, technical experts and policy makers or developing the same manual with specific instructions for separate groups of users/audiences
- Inclusion of Case-Studies pertaining to India or any South-Asian Country to make it more relevant to the Indian audience