



Report

Workshop on National Capacity Building of ODL Professionals on OER Quality

27-29th May, 2015

Venue

*Multimedia Lab, Academic Branch,
Dr. B. R. Ambedkar Open University,
Road No. 46, Prof. G. Ram Reddy Marg,
Jubilee Hills, Hyderabad*

Report prepared by: Prof. M. S. Hayat, Director CIQA, Dr. B.R.A.O.U, Hyderabad

Edited by: Dr. Manas Ranjan Panigrahi, Programme Officer, CEMCA, New Delhi

Organized by
Common Wealth Education Media Centre for Asia (CEMCA)
&
Dr. B. R. Ambedkar Open University

We are thankful to the **Vice-Chancellor** and the **Registrar Dr. B.R.A.O.U** and the **University Team** for collaborating with **CEMCA** for organizing the workshop. Thanks are also due to **Dr. R. C. Sharma, Director CEMCA, New Delhi** for the initiative and supporting the event.

For further information, contact **Common Wealth Educational Media Centre for Asia**
13/14, Sarva Priya Vihar, New Delhi - 110016 (<http://www.cemca.org.in>)

Workshop presentations are available at:
<http://www.slideshare.net/CEMCA/presentations>

Workshop photos are available at:

Workshop report is available at: http://www.cemca.org.in/resources/workshop__reports

Download the recommendations of the workshop at

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Recommendations
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CEMCA is an international organization established by the **Common Wealth of Learning (COL), Vancouver, Canada** to promote the meaningful, relevant and appropriate use of ICTs to serve the educational and training needs of Common Wealth member states of Asia. CEMCA receives diplomatic privileges and immunities in India under section 3 of the United Nations (Privileges and immunities) Act, 1947.

Dr. B.R.A.O.U, the University initially known as **Andhra Pradesh Open University** was set up on 26th August 1982 through an Act of the AP Legislative (APOU Act 1982) subsequently, the University was renamed as **Dr. B. R. Ambedkar Open University on 26th October 1991, by the Government of Andhra Pradesh.**

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Summary

Within the overarching objective of learning for development, and the current Three Year Plan (2012-15) the Commonwealth Educational Media Centre for Asia (CEMCA) is engaged in reviewing & improving quality of Open Distance Learning (ODL) and Open Educational Resource (OER). It has developed the Quality Assurance Guidelines for OERs: TIPS Framework version 2.0 for use by individuals and institutions engaged in OER production. In order to make the TIPS framework used in the online/offline environment, CEMCA organised a National Capacity Building programme from 27-29 May, 2015 on OER Quality at Dr. B. R. Ambedkar Open University (BRAOU), Hyderabad for ODL professionals. A total of 21 ODL professionals from State Open Universities of India participated in this capacity building programme. The objectives of the programme were to: develop capacities of Open University teachers and BRAOU faculties on OERs and Quality Assurance Guidelines for OERs: TIPS Framework; and develop capacities of participants to use Quality Assurance Guidelines for OERs: TIPS Framework in identifying and assuring OER-quality.

The workshop was inaugurated by Prof. V S Prasad, Former Director NAAC and VC of BRAOU, Hyderabad. He explained the various critical issues pertaining to OERs. He also emphasized the philosophical foundation of OER and briefly discussed the ownership of knowledge to society, institutional approach to knowledge and individualised approach to knowledge. While recalling the OER Quality issues he put three Ps i.e. Perception: philosophy of OER, Passion: attitudes towards OER, Pride: feeling in doing. Finally he stressed upon the need to integrate sectorial policy to the National Policy for OER in India. Mr. B K Bhadri, Assistant Educational Advisor, MHRD, New Delhi explained the various policy initiatives of MHRD in this direction viz. integrating skill development in Higher Education, promoting open and distance learning, etc. He also discussed the opportunities for technology enabled learning by using NMEICT as a platform in teaching and learning process for the benefit of all. He also appreciated the CEMCAs initiatives in India for the development of learning. Prof. V Venkaiah, Former VC of Krishna University spoke on 2012-UNESCO Paris Conference, the need and importance of the OER in present context. He also suggested to all open universities of India to have OER policy in priority basis. End of the inaugural Dr. Manas Ranjan Panigrahi, Programme Officer (CEMCA), highlighted the agenda of the three days programme and proposed vote of thanks.

The workshop was facilitated by Prof. Paul Kawachi from Japan, Prof. V Venkaiah from India and Mr. Akash Agarwal from India. The three-day capacity building programme involved: Concepts of Open Educational Resources; The CEMCAs TIPS Quality Assurance Framework; Design issues related to OER Quality and Media Wiki; Creating OERs using MediaWiki; and Teacher Professional Development and OER Quality. Participants of the workshop explored strategic and operational plan for implementing TIPS framework to create OERs in their institutions. The participants were created content specific OERs using CEMCAs MediaWiki in group and presented their plans and OERs to the whole group for feedback and reflection. Participants were exposed to theoretical as well as practical application of the OER and its quality through hands-on-experiences. In the valedictory session, certificates were distributed to the participants by Prof. Paul Kawachi and Prof. V Venkaiah.

Introduction

Today in the Higher Education sector rapid increase in the use of technology in face to face and open and distance learning mode is widely accepted and practiced. The ICT has also played a key role in different aspects of education like content delivery and management, students support services, innovative audio visual programmes (Tele lessons, Tele conferencing and Radio lessons). Open and Distance Education adopted teaching and learning strategies that can be used to overcome educators and students. It aims to create a quality learning environment using an appropriate combination of different media, tutorial support, peer group discussion and practical sessions.

Dr. BRAOU (formerly known as APOU, 1982) first Open University in India which Cater the education needs of the large segment of population including those in employment, women (including housewives) and adults who wish to upgrade their education or acquire knowledge and studies in various fields. The University Programmes aim at making education training instruments for living and for making a living.

In response to needs expressed by the Commonwealth countries of the Asian region for a more effective utilization of educational media resources for Distance Education, the Commonwealth of Learning (**COL**) established Commonwealth Educational Media Centre for Asia (**CEMCA**) in the year 1994. CEMCA, under a host country agreement signed between COL and Government of India (GoI) in 1998, has it's headquarter in New Delhi. The GoI notified CEMCA as a diplomatic mission under section 3 of the United Nations (privileges and immunities) Act, 1947 (46 of 1947) vide The Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) dated 10 February 2000.

Objectives & Strategies

The strategic objective of CEMCA is to promote co-operation and collaboration in the use of electronic media resources of distance education. The specific objectives are to:

- Serve as a regional electronic media resource centre.
- Facilitate an effective exchange of information on educational media resources between education and media organisations in the region.
- Promote greater use of electronic media in the delivery of distance education programmes.
- Promote linkages between CEMCA and other organisations to enhance the availability of education media resources region-wide
- Facilitate access to training in the development and use of electronic media resources of distance education.
- Serve as an information centre on educational technology.

Strategies

COL/CEMCA has identified five core strategies to achieve outcomes and impact: partnerships, capacity, materials, models and policy. In practice, most COL/CEMCA activities incorporate more than one of these strategies and in some cases, all five.

Partnership

Partnership refers to a dynamic relationship between organisations and institutions based on mutually agreed goals with clearly defined roles and responsibilities. COL/CEMCA, partners with government agencies, public institutions, civil society and other organisation to improve and extend teaching and learning services to people in the developing Commonwealth. Partnerships are based on collaboration and shared values and goals.

Capacity

Capacity development refers to processes that enable people and organisations to achieve their objectives more effectively. This can mean training but also networking and other processes that enable and empower people and organisations to develop appropriate policies, adopt and adapt models, and develop and use materials. In short, capacity development pervades all CEMCA activities. It focuses primarily on human resource development.

Materials

By materials, COL/CEMCA means learning and teaching resources. These can be course materials, toolkits and frameworks for quality or policy-making. Course materials and often also the toolkits and frameworks, are produced by partners with COL/CEMCA support. CEMCA publishes all its new learning resources as Open Education Resources (OER).

Models

A model is coherent set of structures and processes that has been shown to work in more than one context to achieve specific results. CEMCA is working to develop sustainable models for Community Radio Stations, and also develop new models of delivery of Open Schooling. In the past it has developed the model guidelines for Quality Assurance of Multimedia Learning Materials.

Policies

A policy is a high-level statement of ambition that specifies the outcomes to be achieved and that guides decision-making through a defined course of action. COL/CEMCA supports the development of policy for organisations and institutions as well as for governments. Promoting the use of Open Distance and technology-enables learning, as use of Open Educational Resources require policy development at national and institutional level, and COL/CEMCA supports such initiative through capacity building and advocacy.

CEMCA has several collaborative projects with Dr. BRAOU in the past and presently a workshop on. “National Capacity Building” of ODL Professionals on OER Quality was conducted from 27th – 29th May 2015.

The Objectives of the Workshop are:

- Creating and enabling environment and policies for development and sharing of Quality Educational and Research Resources.

- Training in Application of new technologies and Capacity Building.
- Promote awareness and use of OER.
- Develop tools to facilitate access to OER.
- Promote quality of OER.

In the knowledge driven global economy, higher education plays pivotal role in the pursuit of social development and knowledge and also in supporting national economic competitiveness. ICT interestingly increasing the transfer of information through effective communication systems which leads to collective sharing of knowledge.

CEMCA, in order to meet the growing demand for higher education with limited resources at the end, has developed modules for professionals. One of the important roles of CEMCA is to develop ICT resources among the professionals in ODL system thus paved the path to conduct this workshop. The participation of professionals (teachers) is facilitating dynamic knowledge creation and social computing tools, opens opportunities to create and share a greater diversity of learning resources, accommodating a greater diversity of learner needs.

After completion of this workshop the participants will be able to:

- Make educational resources more transparent and can contribute quality learning materials using OER.
- Create OER for the professional development of the academic staff.
- Involve students in the adaptations of OER in order to participate actively in the learning process.
- Will organise interactive contact sessions with students.
- Will able to develop quality teaching and learning materials.
- Develop effective assessment tools for diverse environments.

In this context it is placed on record that CEMCA and Dr. BRAOU has come together to train the professionals (Academic staff) to equip themselves to the changing dynamics of the knowledge based society.

Opening Session

The workshop was marked with the welcome of dignitaries by Prof. N Venkat Narayana, Director (Acad.) Dr. BRAOU, Hyderabad. The session started at 10am on 27-05-2015, Prof V S Prasad former Director NAAC, Bengaluru was the Chief Guest. Prof V Venkaiah, former Vice-Chancellor, Krishna University, Mechilipatnam and Mr. B. K. Bhadari, MHRD New Delhi were guests of honour. Dr. Manas Ranjan Panigrahi, programmer officer, CEMCA, New Delhi introduced to workshop with the dignitaries. Prof N Venkat Narayana Director (Acad.) presided the session. Prof. A Sudhakar, Registrar Dr. B.R.A.O.U was also present in the session.

Prof. V.S.Prasad, highlighted the following crucial issues pertaining to **OER**

- Used and development of OER
- What is OER, its dimension and its role

- How we can maintain the quality of OER

He also emphasized the philosophical foundations of OER and briefly described the ownership of Knowledge to society. In this he described the Institutional approach to knowledge and individualistic approach to knowledge. Which recalling the OER Quality issues he put three “3Ps”.

- Perception about philosophy of OER.
- Passion – Attitude towards OER.
- Pride and feeling in doing.

Finally he stressed upon the need to integrate sartorial policy to be incorporated to the National policy, thus create the opportunity for **Uniform National Policy of OER in India**.

Prof. V Venkaiah, spoke the need and importance of the OER in present context and briefly described this to make it as part of teaching and learning process and the learning activity and foster the skills of learning to learners.

Mr. B. K. Bhadari, Asst Ednl. Adviser MHRD has emphasized the relevance of open and distance learning and significance of free availability of learning materials to all. The various policy initiatives of MHRD in this direction viz. Integrating skill development in higher education, promoting open and distance learning and online courses. The benefits of technology enabled learning by using **NMEICT** platform in teaching learning process got good impact on the learners. He also described the facilities provided by HRD 1 GBPS connectivity to 404 Universities and 1985 colleges were also provided VPN connectivity and 250 courses have been completed and made available on National Programme and Technology enhanced learning (NPTEL).

Dr. Manas Ranjan Panigarhi, has introduced the various components of the workshop and schedule for the workshop sessions were distributed to all the participants.

Prof. N Venkata Narayana welcomes the participants and introduced the dignitaries and resource person **Prof. P Kawachi**.

Prof M.S. Hayat Director CIQA introduced the session. The session concluded with the vote of thanks by **Dr. Manas Ranjan Panigarhi**.

Day 1: Concepts of Open Education Resources

Prof. V Venkaiah, former Vice-Chancellor, Krishna University has shared the session along with **Prof. Paul Kawachi FRSA, Japan**. Prof. V Venkaiah introduced the OER: Why we need them & what they are. There was interaction with participants. Prof. P. Kawachi, introduced the quality parameters of OERs and needs of the users in the OER context. Session 1.3 & 1.4 were merged and Prof. P Kawachi described the various issues from the documents given to participants CEMCA: Tips Quality Assurance Framework. The self-introduction of all participants has helped the participants. The CEMCA provided sessions 1.1 to 1.4 related texts were given as OER 2015 CDs. This has helped all the participants what they are supposed to do, the philosophical foundations of OER, quality definitions, world praxis, domains, validation in the Quality assurance frame work were

highly useful to the participants. Prof. P Kawachi has emphasized the learner-centred approach to be adopted in creating OERs to suit the local needs of the learners.

Each participant was assigned to identify the various issues pertaining to OER before commencement of the Day 2 session. **Prof. P Kawachi, divided the participants into 5 groups. Group A, B, C, D, E (list enclosed).**

The summary of Day 1 or overview of Day 2 was described and discussed various components with the participants of workshop. The workshop kit was given to all the participants who include Tips Framework, Notepad and pencil, **Wifi link** and personal feedback form.

In the self-introductory session each participant expressed her/his feelings and experiences on the OER and their expectations and the workshop, the challenges and problems they foresee and their future plans after the completion of the workshop. There was open forum chat in which each participants is allowed to interact and converse with the co-participants.

Hands on practice about OER made the participants to examine the OER and decide if they are in good quality. The small group interactions helped them to develop skills and CEMCA tips Quality Assurance Frame work will be useful for practice.

Day 2: Design Issues to OER Quality and Media wiki

Creating OER: This session illustrated the key points or criteria while creating OER. It is also dealt with the Lesson notes to be developed for each class. Eg: involve criteria for video online sharing which will help the developer in teaching learning process.

Prof P Kawachi highlighted the five domains of learning which constitute a full comprehensive model of learning.

The five domains are:

- **Cognitive Domain**
- **Affective Domain**
- **Mata cognitive Domain**
- **Environment Domain**
- **Management Domain**

The theory and practice of domains of learning will help in developing framework for OER. It is also observed by Prof P. Kawachi these domains of learning can be translated into local language.

Mediawiki-1//introduction to mediawiki: In this session an introduction to Media wiki was discussed in detail. The search engine (Wikipedia) empowers their standards of wikis across the world. It is also discussed how to install mediawiki on various platforms, with live demonstration by Prof. P. Kawachi and **Mr. Akash Agarwal, IIIT, Hyderabad.** (**mediawiki://introductiontomedaiwiki**)

Mediawiki-2 : Using Media wiki for creating your OER, how to create OER using Media wiki and shown how to install Media wiki on various platforms and how to deploy the same on the institution platform. The various features of the Media wiki with demonstration made participants to acquire the knowledge to create their own OER.

Mediawiki-3 : Media wiki extension for OER Quality assurance. All the participants do hands-on practice, using tips framework as a Media wiki extension for judging the quality of OERs. It will equip the students with the 21st century knowledge creative skills. The participants learned after productive discussion how to review for the quality of OER by adding simple tag to the page.

Hands on practice about OER: The participants were grouped in five groups; **A,B,C,D,E**. Each group decided their own criteria to be applied in designing new OER and participants decided their own leading criteria for judging quality. The purpose of this activity is that each the participants should examine some of the pre-existing OER to assess quality. The tips frame work 2.0 version is used as a reference guide.

Day 3: Teacher professional development and OER Quality

The day 2 assigned activities was evaluated and discussed by Prof. P Kawachi. The session started with brain-storming activity and discussed the challenges facing by OER authors. Prof. V Venkaiah, delivered lecture on OER benefits to the teachers, the students, institutions and communities. The participants discussed the benefits, impediments of OER authors.

Building trust sharing storage and retrieval of OER: In this session Prof. P Kawachi discussed five kinds of trust and how to build these into an OER, and how an OER can repair trust by repeating certain aspects in its design. He also emphasized on the retrieval for OER from the available open web-based repositories. Mr. Akash Agarwal, research scholar at IIIT, Hyderabad who developed the Media wiki peer evaluation extension shared with participants.

Global issues on OER: Prof. P Kawachi shared the experience of other countries in the field of OER especially in building courses based on OER and MOOC and other open courses. This helped the participants to know more about OER practices in other countries.

Session 3.4: Prof. P Kawachi, discussed about the online forums help and support systems and role of teachers as creators and re-users of OER. The developers need help in deciding quality as required by students and institution. It was suggested to start up a forum for future interaction sharing and helping each other.

Valediction

All the Participants shared their experiences with Prof. P Kawachi, Prof V Venkaiah and Mr. Akash Agarwal and Prof. N Venkat Narayana Director (Acad.)

Prof. V Venkaiah was chief guest for closing ceremony of the workshop. He emphasized the need to create OER in the global context and its importance in the Indian context, how OER can bring bright future for teachers and efficiently address the digital needs of the students. Prof. N Venkat Narayana Director (Acad.) presided over this session.

In the three day workshop Prof. P Kawachi guided Day 1 & Day 2 sessions except the Media wiki 1, Media wiki 2 and Media wiki 3 sessions on Day 2 are guided by Mr Akash Agarwal.

The participants were given certificates and Prof. M. S. Hayat Director (CIQA), Dr. B.R.A.O.U, proposed vote of thanks.

Recommendations

1. In the contemporary global knowledge economy it is mandatory to develop quality teaching learning process in any institution of higher learning.
2. Realizing the fact that OER and other online courses may bring change in the dynamics of the classroom it is suggested to recommend to the University to adopt and bring ICT policy for effective implementation of the new technologies.
3. It is suggested to use of open licenses for educational materials of the University.
4. Require support from the Government to provide and support for creation of OER for all learning materials, a policy decision to recognize such collaborative initiative with NMEICT / CEMCA and advise University to adopt new technologies for the ODL programmes.
5. The University policies on OER and open access should help develop capacity of teachers and learners and University must develop open access to its repositories for sharing of teaching, learning and research materials to the students.
6. The teachers are requested to understand the concept and practices of OER and Open licences and create teaching – Learning materials as part of their course activity.
7. Sharing with other University / Teachers can learn while sharing learning materials with other University and Teachers.

8. Teachers engagement and collaborative attitude will enhance possible opportunities to develop equity OER materials.
9. To avoid plagiarism it is suggested to adopt all ethical practices in developing and use of OERs.
10. It is suggested to train all the teachers periodically in OER and other new technologies.

National Capacity Building of ODL Professionals on OER Quality

Workshop Agenda

Workshop
Organized by the
Commonwealth Educational Media Centre for Asia
In collaboration with
Dr. B.R.Ambedkar Open University

Hyderabad
27-29 May 2015

Venue: Multimedia Lab, Academic Building, Dr. B.R.A.O.U, Hyderabad
Contact Person: Prof. N Venkatenarayana, Director (Academic).

Schedule: at a Glance

DAY 1 : Concepts of Open Educational Resources			
Time	Activity		Resource Persons
09:00-10:00	Registration	Faculty Room, Academic Building	
10:00-10:50	Opening	Welcome by : Prof. N Venkatnarayana, Dr. B.R.A.O.U	
		Address by Hon Chief Guest : Prof. V S Prasad	
		Vote of Thanks by : Dr. Manas Ranjan Panigrahi, Programme Officer, CEMCA, New Delhi	
Short Break			
11:00-11:40	Session 1.1	Introduction to OER : Why we need them & What they are	Prof. V Venkaiah
11:50-13:00	Session 1.2	Introduction to Quality : What users want	Prof. P Kawachi
Lunch Break			
14:00 - 15:10	Session 1.3	Self - Introductions by Participants	All the participants
Short Break			
15:20-16:50	Session 1.4	The CEMCA TIPS Quality Assurance Framework	Prof. P Kawachi
16:50-17:00		Summary of DAY-1 & Overview of DAY-2	Prof. P Kawachi

DAY 2 : Design Issues related to OER Quality and Media Wiki			
Time	Activity		
09:30-10:50	Session 2.1	How to create your own OER	Prof. P Kawachi
Short Break			
11:00-12:00	Session 2.2	Media Wiki-1: Introduction to Media Wiki	Mr. A .Agarwal
12:00-13:00	Session 2.3	Media Wiki-2: Using Media Wiki for creating your OER	Mr. A .Agarwal
Lunch Break			
14:00-15:10	Session 2.4	Media Wiki-3: Using Media Wiki for creating your OER	Mr. A. Agarwal
Short Break			
15:20-16:50	Session 2.5	Hands-On Practice about OER	Prof. P Kawachi
16:50-17:00		Summary of DAY-2 & Overview of DAY-3	Prof. P Kawachi

DAY 3 : Teacher Professional Development and OER Quality			
Time	Activity		
09:30-10:50	Session 3.1	Benefits to the Teachers, the Students, Institution & Community	Prof. V Venkaiah
Short Break			
11:00-13:00	Session 3.2	Building Trust, Sharing, Storage & Retrieval of OER	Prof. P Kawachi
Lunch Break			
14:00-15:10	Session 3.3	Global Issues on OER	Prof. P Kawachi
Short Break			
15:20-16:20	Session 3.4		Prof. P Kawachi
16:20-17:00	Valediction	Experience Sharing by the Participants	
		Closing Address by the chief guest : Prof. V Venkaiah Awarding of Certificates	
		Vote of Thanks : Prof. M.S.Hayat, Dr. B.R.A.O.U	

Guidelines to Participants to develop OERs Teaching and Learning Process

1. Pedagogy:
 - (a) How to use OER?
 - (b) Learner centric approach.
 - (c) Authentication of the pedagogy.
 - (d) Use schema activities cues.
 - (e) Align it to local wants and needs anticipate the current and future needs of the students.

2. Rationale:
 - (a) The reason and purpose of the OER.
 - (b) Anticipate the current and future needs of the students.
 - (c) Students should be informed about employable skills and comments from potential employers.
 - (d) State intended age / level of your intended student.

3. Student:
 - (a) Adopt a gender free and user friendly conversational style in the active voice.
 - (b) Try to offer learner support.

4. Language:
 - (a) Don't use complex language.

5. Interactivity:
 - (a) Include learning activities and foster the skills of learning to learner.

6. Motivation:
 - (a) Accurately express the study work load.
 - (b) Stimulate the intrinsic motivation to learn Eg: through arousing curiosity with surprising anecdotes.

7. Assessing:
 - (a) Students satisfaction.
 - (b) Offer academic credit upon successful completion.
 - (c) Provide a way for the students and other teachers to give your feedback and suggestions and how to improve.

8. Support:
 - (a) Try to offer learning support.

Information and Material contents

1. Accuracy:
 - (a) Make sure that the knowledge and skills you want the students to learn up-to-date, accurate and reliable.
2. Relevance:
 - (a) Content should be relevant and appropriate.
 - (b) Linking with external examinations or national curriculum standards.
 - (c) Encourage students input to create localised content for situated learning.
3. Content Load:
 - (a) Try to keep your OER compact in size (or) Add links to other materials to enrich your content.

Presentation, Product and Format

1. Openers:
 - (a) Be sure the open licence is clearly visible.
 - (b) Ensure your OER is easy to access and engage.
 - (c) Clearly give the original author contact information.

2. Multimedia:
 - (a) Multimedia should be limited to two or three types.
 - (b) Present your material in clear concise and coherent way.
 - (c) If you use any theme music try to make this appropriate to the local culture and context.

3. Design:
 - (a) Space for Moderate feedback.
 - (b) Attractive design using whole space and colours effectively to stimulate learning.

4. Format:
 - (a) OER will be considering for print usable off line, suitable for mobile use.
 - (b) Use open formats for delivery of OER to enable maximum reuse and remix.

5. Pathways
 - (a) Suggest which OER could come before your OER and which OER could form after words in a learning pathway.

System, Teaching and Technology:

1. Discoverability:
 - (a) Try to use only free source ware/software and this should be easily transmissible across platforms.
 - (b) OER is easily adaptable Eg. Separate your computer code from your teaching context.

2. Technology:
 - (a) OER should be cosily portable and transmissible and you should be able to keep an off-line copy.
 - (b) Your OER and the students work should be easily transmitted to the students own e-portfolio.

3. Technical:
 - (a) Include a date of production and date of next revisions.
 - (b) Consider allowing social tags to allow any student or teacher to add review.
 - (c) Meta data tags to allow students to give feedback on the immediate output, short-term outcome and long term impact.

Teaching and Learning Process (Assignment to Each Group)

Each group involved in Teaching and learning process has adopted the following procedure for OER.

- Pedagogy:** The group discussed various issues pertaining to OER, How to use it, and verified the authenticity of the pedagogy. The group anticipated the current and future needs, keeping in mind the local wants and needs.
- Rationale:** The reason and purpose of OER is to inform the students about employable skills based on the comments from the potential employees.
- Students:** The OER content is developed in friendly conversational style in the active voice and treasure support is offered, what to do and what not to do.
- Language:** The language is very simple avoid complex sentences.
- Interactivity:** The group included the learner's activity in the form of short question. Try it ?, Answer in one word, Quiz.
- Motivational:** Stimulate the students with surprising anecdotes.
- Assessing:** Feedback from other teachers and students.
- Relevance:** The groups discussed the present content and its relevance in the context of ODL learners and curriculum in designed to meet the needs of the National Curriculum standards.
- Content Load:** The groups have added links to other materials
- Openness:** The group got licence and original author contact information.
- Multimedia:** Each group uploaded a 5 minutes video link to the OER content.
- Precursor Format :** The OER content it can be uploaded on APPs and mobiles /I pad/I phone link is given at appropriate place.
- Pathways:** The groups have given directions to NP learners which OER should come before and which OER should come after words in learning pathway. Each group identified one person for all queries.

System Technical and Technology

1. The groups used free source software which can be easily transmissible across platforms.
2. Each group allotted separate computer code from the teaching code so that OER can easily be adapted.
3. The student's e-portfolio is given to transmit the students work periodically.
4. The date of production is 29-5-2015 and will be revised on 16-8-2015 or periodically.
5. Meta tag is given and immediate feedback is allowed from the students on the University platform/server to answer their queries.

Resources

1. Increasing access to education for all through Mobile learning – www.col.org/knowledge
2. Case studies on OER based, e-learning, Simi and Sanjaya Mishra
3. Technology tools for teachers – M.s Vidya
4. Connecting Radio continuous improvement tool kit version 2.0 Vinod Pavarala, Kanchan, K Malik, Vasuki Belavadi.
www.col.org/cemca
5. Gender main streaming tool kit for teachers and teacher educators
www.col.org/gendermainstreamingtoolkit
6. Resources for developing online communities of practice
www.imarkgroup.org
7. Trends in web technology management
www.webat-25.org
8. UNESCO – COL Guidelines for Open Educational Resources (OER) in Higher Education
9. A Basic Guide to Open Educational Resources (OER) prepared by NEIL for the Common Wealth of Learning BUTCHER UNESCO Edited by Asha Kanwar (COL) and STAMENKA UVALIC – TRUMBIE (UNESCO) published by COL and UNESCO 2011 (ISBN 978-1-894975-41-4)
10. www.ocwconsortium.org/aboutus/whatisocw
11. <http://en.wikipedia.org/wiki/open-access>
12. http://en.wikipedia.org/wiki/open-education_resources
13. <http://creativecommons.org/about/licenses>
14. www.ocwconsortium.org
15. Shaheen E-Lakha and Kavita Jhunjhun wala, open source software education, EDUCAUSE, Quarterly, Vol 31, No 2 April – June 2008.
16. The Open University of Hong Kong (<http://freecourseware.ouhk.edu.hk>)

List of Participants

Group A

1. Dr. V Santosh Reddy
2. Dr. M.T.V.Naga Raju
3. Dr. L.V.K. Reddy
4. Dr. G Dayakar

Group B

1. Prof. Praveen Jain
2. Prof. Pushpa Chakrapani
3. Dr. Rajani Ranjan Singh
4. Dr. Amarnath Pandey.

Group C

1. Prof. E Sudha Rani
2. Dr. Anirban Ghosh
3. Dr. Nabankur Pathak
4. Prof. Jagdeesha
5. Dr. Vaddanam Srinivas

Group D

1. Rajendra Vadnere
2. Chandrakala
3. B.K.Bhadri
4. Rajesh Saxena
5. Rajendranath Goswami

Group E

1. Dr. Rabindranath Soloman
2. Dr. B Srinivas
3. Prof. M.S.Hayat

Our Experience with CEMCA

In order to meet the Common wealth 's education and training needs and optimise their potential and develop their human capital through extending quality education access to Common Wealth region sharing Open Learning and Distance Education knowledge resources and technologies COL (Common Wealth Of Learning) was established and become operative in 1989 and in response to needs expressed by the Common Wealth Countries of the Asian Region for a more effective utilization of education media resources for Distance Education, the COL established Common Wealth Educational Media Centre for Asia (CEMCA) in the year 1994.

Dr. B.R.A.O.U (April 1982) has established AVPRC (Audio Visual Production Research Centre) in 1983 to assist the faculty to expand the scale, efficiency and quality of learning by using multiple media in open distance and technology learning.

AVPRC as an electronic media resource centre produced Radio, Audio, Video lessons and facilitated an effective exchange of information using electronic media in the delivery of distance education programmes. Initially AVPRC broadcasted Radio lessons through Air "B" station, Hyderabad and in 1998 with the help of ISRO, the University started Tele lessons and Teleconferencing through Door Darshan (Prasara Bharathi).

The University Faculty, teachers, technical staff needs effective training in the development and use of electronic media resources for distance education.

CEMCA, as an information centre on educational technology collaborated with Dr. B.R.A.O.U for a dynamic relationship between CEMCA and Dr. B.R.A.O.U on mutually agreed goals partnered as training institutions identified core strategies eg, capacity building, training models and materials for the Faculty and the technical staff of the University.

This capacity building helped the University to achieve their objectives more effectively, this can be considered as networking of the ICT that enable the University empower its core faculty and staff to develop its own content for electronic media. The University adopted and adapted models provided by CEMCA in different Training Workshops and University developed its own strategies for human resources development by conducting Programmes and training through CSTD Centre for Staff Training Development (1993). The University established this centre to enhance the capacity building and efficiency through several training and awareness programmes thus paved path for future ICT programmes for its staff.

COL/CEMECA developed learning and technical resources tool kits and frame works under partnership with University could able to train the Faculty and able to develop E-Learning and OER Modules.

A module learning resources developed by the University and CEMCA helped policy the University in decision making through a defined course of action. The University from its inception supported and promoted the use of technology enable learning and with this lead to activate through capacity building and advocacy.

The teachers / technical staff trained by CEMCA and Dr. B.R.A.O.U are able to produce E-Learning models, Radio lessons, Tele lesson and participated in Tele-conferencing programmes.

Beside this the CEMCA, country Radio consultation conducted in Dr. B.R.A.O.U and its engagement in experimenting with learning technologies benefited Dr. B.R.A.O.U.

The University engaged its staff in both sectors of education and skills and prioritized its initiatives and activities in continuous process in providing Radio, Video and Teleconferencing programmes for its stake holders. Our interactive programmes implemented in partnership with Door Darshan (Prasara Bharathi) geared up towards the mass contact with the students and public.

We look forward for the long term engagements with CEMCA to promote and support in use of open distance and on line programmes for development. We would like to work on impact factor, skills acquired by our Faculty and teaching staff in future.

Our Journey in pursuance of ICT by strengthening the capacity of institution and its educators in ODL system using appropriate technologies should not stop here. We will be happy to partner with CEMCA to develop offline materials for use in the class room by students. We further assure you that Dr. B.R.A.O.U Commitment from development, deployment and delivery of learning materials for the benefit of the Faculty and students and would like to convert this institution Virtual University of the state in future.

The vision of our University is access to relevant quality education and training programmes for diverse sections of society with a focus on hither to deprived sections at lower costs by using modern technologies in teaching learning process. We wish CEMCA should play catalytic role in developing more and more collaborative programmes with Dr. B.R.A.O.U
