

National Consultation on OER Policy for Higher Education in India

Organised on: 03 March 2017

A Report

Commonwealth Educational Media Centre for Asia (CEMCA)

New Delhi, India

Introduction

The Commonwealth Educational Media Centre for Asia (CEMCA) is an inter-governmental organization established by the Commonwealth of Learning (COL), Vancouver, Canada, to promote the meaningful, relevant and appropriate use of ICTs to serve the educational and training needs of Commonwealth member countries of Asia. It has taken the lead in popularizing Open Educational Resources (OER) and Massive Open Online Courses (MOOCs) in Commonwealth Countries. CEMCA has also formulated a Quality Assurance (QA) Framework for benchmarking the Quality of OER.

The National Policy on Education (1986) emphasized on making provisions for distance education to meet the diverse needs of learners and the country. The XII Five Year Plan of the Government of India focused on Excellence, Equity and Expansion as the three pillars of action in higher education. There are issues of quality, access and innovation challenging our higher open education sector.

The National Knowledge Commission (NKC) was constituted on 13th June 2005, as a high-level advisory body to the Prime Minister of India, with a time-frame of three years, from 2nd October 2005 to 2nd October 2008 with a mandate to guide policy and direct reforms, focusing on certain key areas such as education, science and technology, e-governance, etc. Easy access to knowledge, creation and preservation of knowledge systems, dissemination of knowledge and better knowledge services were core concerns of the commission. NKC (2009) in its Report to the Nation 2006-2009 gave its recommendation(s) on "Open and Distance Education and Open Educational Resources":

Development of open and distance education and open educational resources is imperative to achieve the objectives of expansion, excellence and inclusion in higher education. More than one-fifth of the students enrolled in higher education are in the Open and Distance Education stream. NKC recommendations on distance education focus on creating a national ICT infrastructure, improving regulatory structures, developing web based common open resources, establishing a credit bank and providing a national testing service. To supplement this, NKC also recommends that the production of quality content and leveraging global open educational resources, needs to be focused on in a comprehensive manner. We need to encourage open access for all material-research papers, books, periodicals etc.

The Open Universities have a big role to play in realizing these goals as envisaged by NKC. OER are a significant component of making open education accessible to masses. As CEMCA - COL embarks on its new Strategic Plan (2015-21), and being a world leader in ODL and OER, CEMCA-COL continues to build on its commitment to promote lifelong learning leading to sustainable development. With the mandate to promote ODL and OER, it was felt pertinent by CEMCA to convene a meeting of all the Vice Chancellors of State Open Universities in collaboration with Ministry of Human Resource Development (MHRD), Government of India to discuss the implementation of OER Policy for development and sharing of OER.

Accordingly, a one-day Meeting of Vice Chancellors of State Open Universities on Open Educational Resources was held by Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi in collaboration with Ministry of Human Resource Development, Government of India, New Delhi on 4th September 2015 at Chennai. The objectives of the meeting were to deliberate upon: Use, Creation and Adoption of Open Education Resources (OER) for improving Quality, Access and Innovation; and Formulation of a National and Institutional OER Policy. The senior leaders of open universities supported and recommended implementation of OER policy at institutional and national level. Similarly, on proposal of Shri S P Goyal, Joint Secretory, Higher Education MHRD, India (as CAC member), CEMCA Advisory Council (CAC) recommended for development of a draft OER Policy for Higher Education in India. An Advisory Cum Consultative Committee, under the Chairmanship of Prof V S Prasad, former Director NAAC, with members from various higher educational instittuions from across the country and nominees of MHRD, UGC and AICTE, was constituted for guiding the preapartion of a draft policy. Mr Sanjaya Mishra, Education Specialist at COL was asked to prepare the draft after wide consultations and place it before the committee for advice/guidance. Before the draft is prepared it was thought to orgnise a national consultation involving all the stake holders

National Consultation on OER for Higher Education

Before drafting the OER Policy for Higher Education, India, and placing it before the Advisory-cum-Consultative Committee, it was suggested by MHRD that a National Consultation should be organized involving all the stakeholders, especially, the Vice Chancellors of Open Universities in India and Academic leaders from other higher education institutions and civil societies. Keeping on view of the above CEMCA organized a day long National consultation on OER for Higher Education, under the Chairmanship of Prof Nageshwar Rao, Vice Chancellor, Utrakhand Open University, for drafting of OER policy. CEMCA, with support from COL, also invited an international expert, for sharing the international experience on OER Policies & Practices.

Objectives

The objectives of the National Consultation on OER policy for Higher education for India were:

- Experience sharing on OER practice and policy of other countries;
- Experience sharing on OER practice and policy of Open Universities in India; and
- Develop insights and strategies for OER policy for Higher Education in India.

Date for national consultation: 3rd March 2017

Venue: Hotel Oodles, 759-762, Main Road, Chattarpur, New Delhi

Format and Method

The National Consultation engaged and involved all the stakeholders to share their views, through a mix of presentations and group work. The Programme Schedule for National consultation is in *Appendix I*)

- **Presentations:** The consultation included a one keynote address and four experience sharing on OER practice and Policy at international/national level and at institutional level in India.
- **Group Work:** All the participants were divided in to five groups. The group leaders and rapporteurs, for each group, was identified. Each group, based on their experience and deliberations of the forenoon sessions, discussed the contours of OER policy for Higher Education in India and the group leaders presented the group work as actions, feedback and recommendations for drafting of OER policy for Higher Education in India.

Participants

The event was an invite only programme. Fourty Five Academic Leaders, Teachers in higher education from Indian Open Universities, Directorates of Distance Education, Central Universities, State Universities, National institutions, Civil Societies and all the members of the Advisory Cum Consultative Committee participated in the National Consultation. List of Participants in *Appendix II*.

Session I: Opening Session

Welcome of the guests

Dr. Manas Ranjan Panigrahi welcomed all the dignitaries: Prof. V. S. Prasad, Former Director, NAAC, Shri B K Bhadri, MHRD, Prof. Nageshwar Rao, VC Uttarakhand Open University.

Introduction of the National Consultation

Dr. Shahid Rasool, Director, CEMCA gave the background of national consultation on OER policy for higher education in India. He stated that the idea of OER policy for HE came from Shri S P Goyal, JS, MHRD. COL is promoting OER at the globe level and ia actively supporting CEMCA to develop national policy on OER for higher education in India. The essence of national consultation is to get views from various stakeholders for a draft policy. He said that we also need to look into the existing institutional OER policies, such as IGNOU, UoH, NPTEL. He underlined various issues, flagged challenges facing OERs and hoped the daylong delibrations will discuss these issues. There is a need to provide awareness about OER among the faculty and establish robust OER platforms with quality OER in multimedia format, scalable through various modes including mobile apps. The institutions need to be strengthened for creation and use of high quality OER for teaching and learning process.

He highlighted that quality mechanism for assessment and certification need to be built within the policy. He suggested that subject wise portal may be set up for authentic and reliable educational content as OER. COL-CEMCA encourages use of OER and CEMCA during the last few years facilitated ten institutions in India to develop OER policies. He pointed out there is a need to create an OER culture among the institutions. He also mentioned that while developing policy, there is a need for an academic and administrative push/incenitives to drive implementation of these policies in the institutions.

Keynote Address

Prof. V S Prasad, Former Director, NAAC delivered the keynote address on the national OER policy for higher education in India. He stated knowledge has a universal value and must belong to all humanity. Knowledge is a public good is a great idea, but in practice it has many limitations and challenges. There are many open movements, open infrastructure, software and open practices, but the main challenge is how to operationalise the openness.

He expressed that policy gives an understanding of what OER is, how all these open movements are related to OER. OER is related to formal and informal educational systems. The policy must bring that conceptual clarity. There is a need for utilization of the full potential of OER. The policy should bridge the existing gaps.

Few reflections on a policy framework:

- i) The policy helps in preparing a road map Clear about the goals of the policy, objectives, principles which should ground the policy. Clarity in notions and concepts of OER. The policy helps to integrate the views and actions to realize the full potential of OER.
- ii) OER policy to address the challenges of education The main issues are access, equity and quality in higher education in India. OER policy must address these issues. Principles of authenticity should be addressed. How to address these challenges. The vision, mission and scope of OR should bring conceptual clarity on OER.
- OER use in a formal system and informal system should be integrated in the policy. As open education system is resource based learning system and conventional system is classroom based learning system, greater opportunities for interaction with the content should be provided. Institutions are in development of OER for general and curriculum based education. Development OER have maturity matrix of three stages (Stage 1-Low, Stage 2 Medium, Stage 3- High) and institutions may be encouraging the faculty

- to develop OER. OER Policy may provide a framework for development of institutional OER policy.
- Rational approach to OER policy
 Rationality provides effective and efficient ways to achieving goals. The arrangement focused view is more abstract and general in contrast to realization focused view which is more operational and specific.
- v) Dynamic Policy
 The policy should include the process of policy review and provisions for incorporation of necessary policy changes.
- Institutional experiences on OER such as IGNOU, NPTEL etc. may critally analysed to get input for policy. Experiences (Inferences drawn from experiences) and conceptual clarity can become part of policy input. Universal and contextual features of the resources should be integrated and matched. Education is becoming more competitive. Collaboration is a feature of OER. How to integrate competition and collaboration principle is challenging for OER policy.

Prof. Prasad also discussed how to incentivise the academic activity for OER. He said that sectoral policies and holistic educational policies are required. The specific points raised by Prof Prasad in his Key Note address is in *Appendix III*.

Remarks by Chief Guest

Shri Bhadri, MHRD appreciated the effort of CEMCA on developing OER policy for higher education in India by COL-CEMCA. He expressed that Educational resources should be made available to the masses in the form of open educational resources. He mentioned about NMEICT and NPTEL as e-learning initiatives of MHRD. Sharing is a very important thing in this context. Need to consider to what extent these resources are truly open. The government is emphasizing on MOOCs. Policy framework should not be for higher education only. It should percolate down to other institutions such as NIOS. The policy should not only be meant for open learning, online learning, MOOCs. Quality education should make the learners skillful and enhance employability. It is a process to be taken up in steps. The UGC MOOC regulations encourages all higher education institutions to allow upto 20% of credits through MOOCs on SWAYAM. He also emphasized the need to create an OER culture for transforming teaching learning process in educational institutions.

Presidential Address

Prof. Nageshwar Rao, VC, Uttarakhand Open University expressed his appreciation to MHRD for taking the intitative of developing an OER policy. He mentioned that policy is guided to the action and formulation of policy should not incorporate operational issues. It should provide broad

guidelines. There is a concern for the quality of OER materials as there are many OER portals available which leads for duplication of materials and further leads to learner confusion. He stated that IPR is another issue. There is often a restrictive clause that prohibits its reuse. Clarity regarding the re-use of the OER material should be properly defined. Change is required in the mind-set to use and develop OER. A sharing culture needs to be nurtured. A legal support system is also required. Process of OER should be centralised at the institutional level. At the state level, it should be decentralized. The localisation concept is also important. Facilitate the use and reuse of OER to meet the customised educational requirements at the local level.

Vote of thanks for Openning Session

At the end of the opening session, Mr. Thyagarajan, Head Finance and Administration, CEMCA thanked all the dignitaries and participants of the national consultation.

Session Two: Open Educational Resources: Policy and Practices (International)

Chair: Prof. Bhaskaran, VC, Tamil Nadu Open University Rapporteur: Ms. Sujata Santosh, Asst. Director, IGNOU

OER Policy development and international practices by Neil Butcher, South Africa

OER is a legal term. It refers to educational resources whose copyright has been modified to enable anybody to be able to share that resource without requesting permission from the copyright holder and the license permits to enable people to adapt that resource without requesting permission. The concept of OER highlights some strategic issues that the universities need to focus on. There are a lot of policies that have been created. These are on paper but there is no information on being implemented in practice. Institutions and governments have proven to be successful in producing policies globally that no one is taking it seriously. It is a real problem. The university sector is not addressing the challenges, that is faced by OER.

The model of education does not respect national boundaries. Anyone can study a course from wherever they want. We are in very early stages but that model of education is going to continue to grow very rapidly. It is going to pose significant threats to educational institutions, and particularly to open and distance learning institutions, that are doing nothing more than packaging content into courses and delivering it and running assessments that focus on whether the students have understood the content. OER facilitates the ability to access so much educational material free online that the universities need to understand that they are no longer custodians of knowledge when it comes to educational course design.

The challenge of OER is simply the challenge of how we can take our intellectual property and put it online or that how we can take other people's intellectual property that they have put online

with an open license and use it in our courses. The real challenge that OER is presenting to us is how we can transform the nature and approaches of our education so that we are actually delivering an educational service that will help our students to succeed in the 21st century.

He explained another key problem by citing the example of the University of South Africa. UNISA is delivering education to four hundred thousand students in South Africa. When started discussions on OER, UNISA being scared that it was going to share its intellectual property and thereby undermine itself because everyone will have access to it and they would have its business model impacted. Any open university that thinks to sharing its IP online feels threatened as its business model may suffer. The content that UNISA has is available online already from a multitude of different sources. But more importantly, by thinking that their content is more important, the academics and the students are losing out on an opportunity to harness the world of open educational resources to improve the quality of the educational experience that the students have. Instead, there is a vast growth of educational material online and integrate it into our courses so that our students can get a better educational experience. Another problem is that since we are focused on producing our own content we are losing the space - the cost effectiveness of space - that comes from being able to share content online. He also explained that we need to focus on our strengths of existing content rather than producing new content.

He reflected on another example from Ghana. Kwame Nkrumah University of science and technology (KNUST) and the University of Michigan through a collaborative project. In that project the objective was to create educational materials in medical field and to share those resources online. It was expected that KNUST based in Ghana will be a beneficiary of educational materials that are being produced in university of Michigan, which is regarded as having one of the few top faculties in the world. Interestingly, adopting the approach of focusing on what the actual strengths of KNUST were – the first example of sharing of content was that the academics in the University of Michigan using materials prepared in Ghana.

With this background discussion, Mr. Neil stated that the OER policy is simply talking about licensing, use of creative commons licensing and then talking about our approaches of sharing the content online that is not really tackling the critical problem. The critical problem is that we need academics to understand how to design effective teaching-learning environments that prepare students for the new world in which they are going to operate. And the academics are able to harness both the available resources in their course design and help students to do the same. He also suggested that academics who have the ability to produce high quality educational resources can shared the OER networks that are already very well established online. Effective policies need to focus on that human aspect of education, on growing the capacity of our academic to be able to navigate this new world more effectively.

While talking about OER, he said that there is a need to examine our copyright and plagiarism policies of institutions as well. At the national level, it makes sense to ensure that public money is judiciously spent when it is being used on producing the educational materials. Those materials should go into to the public domain under open licenses so that they become accessible to anyone. This creates a number of different challenges about how we will operationalise it.

Lastly, the Issue of bandwidth and access to internet and ICT for students in India becomes of considerable consideration. India has a reputation as a global power in ICT. Many educational campuses have poor connectivity. This is an easy problem to solve with policy commitments and India is moving in that direction very strongly. OER policy should push us further and faster in that direction by ensuring that it is essential that our students get access to the world of knowledge that is available on the internet. This should lead to better quality higher education institutions in India. Mr. Neil Butcher's Power Point presentation is in *Appendix IV*.

After the presentation, the chairperson asked the participants for open discussion.

The role of library in open educational resources plays important in an institutional repository. Libraries re-imagined for 21st century will be the centre of effective university in the future, because a part of libraries function is effective information management. Unfortunately, most of the libraries have not transformed themselves to think of their role in the 21st Century. So most of them still think their function is to curate physical book collections. But there is a much bigger range of functions that is central to the whole practice and whole endeavour of teaching and learning and research that the libraries should get at the centre of. From the policy one ought to be re-imagining and re-inventing the library as the centre of knowledge production, creation, and sharing activities in the institution, Dr. Ramesh Gour of JNU said.

He also added that openly licensed material gives us greater opportunity to actually localise education and to check and counter multilingualism. It makes the translation of material from one language to another cheaper and easier. OER has a license that allows you to adapt, reuse, revise etc. We have a resource which can be translated from one language into another. If we have access to the raw material/ document, then we can be able to translate with no licensing cost, no extra fees. It is important to focus on ensuring that we re-focus our policies and energies in our OER policies in producing what is unique and not just to create generic material that is already available.

Session three: Experience sharing on OER and policy in India

Chair: Prof. V.S. Prasad, Former Director, NAAC Rapporteur: Dr. G. Mythili, Dy. Director, IGNOU

Prof. V.S. Prasad, Chair of the session introduced the speakers and requested for presentation.

IGNOU Presentation by Prof. Ravindra Kumar, VC, IGNOU

Prof. Ravindra Kumar briefed about Indira Gandhi National Open University and its activities from 1985. IGNOU is mainly focused on distance education and produced self learning materials for the year 1985 to 2000. IGNOU produced enriched materials and also shared with other open universities. Through Gyan Darshan and Gyan Vani, IGNOU reaches its learners and produced audio and video programmes as a supplementary material for the learners. He highlighted that the profiles of the learners have changed now. Most of the learners equipped with technology support. Way of learning also changed with the support of technology. He expressed that learner profiles should be taken into concern while developed digital course materials.

While talking about the future action, there is a need to change from printed course materials to digital course materials. IGNOU is now in the experiment to establish Technology based Learning Study Centre (TLSC) it disseminates digital learning through technology. TLSC to be implemented with connectivity, infrastructure and access to Gyan Dharshan and Gyan Vani with adequate manpower. Anybody can use the TLSC including learners from conventional system, he said.

NPTEL Presentation by Prof. Mangala Sunder Krishnan, IIT Chennai

Prof. Mangala Sunder highlighted that the National Programme on Technology Enhanced Learning (NPTEL), a project funded by the Ministry of Human Resource Development (MHRD) was conceived in 1999 to develop multimedia and web technology to enhance learning of basic science and engineering concepts. Infrastructure has been set for production of video-based teaching learning materials by the Indian Institutes of Technology (IIT). Seven IITs and the Indian Institute of Science (IISc) have worked together to develop video based materials for basic undergraduate science and engineering courses in order to enhance the reach and quality of technical education in the country. The NPTEL contents are licensed under CC-By-SA. He mentioned that now NPTEL is linked with SWAYAM MOOCs to facilitate the leaners from different institutions. His main focuses are the quality parameters to provide quality materials to the teachers as well as learners from other technical institutions across the country. He mentioned quality parameters should consider learner profiles, credit transfer and localization. NPTEL is mainly support to create and sharing quality materials for the learning process. Now NPTEL is not only for IITs also for all.

UoH Presentation by Prof. J. Prabhakar Rao, Director, eLearning center

Prof. J. Prabhakar Rao explained details about the e-learning centre at UoH where 'Guru' become 'e-Guru'. The e-learning centre mainly have e-room for foreign languages, E-QUAL project have 8 courses and now moved into SWAYAM MOOCs, participated in e-Pathasala and SWAYAM.

The objectives of the centre are (i) equality & accessibility (ii) pedagogical experiences and (iii) capacity building.

He also highlighted the administrative flow of the centre which includes UoH courses and OER and course approval processes. He mentioned the following points are pillars of success:

- Multidisciplinary
- Teaching and research experiences
- Scientific and technical infrastructure
- Experience team for machine translation
- Reorientation of teachers
- World class infrastructure
- Innovative courses and skill based courses
- Partnering with other institutions

While talking about future plan of e-learning centre he also recommended that OER policy shuld have (i) m-learning environment, (ii) multi-lingual approach and promotion of academic diplomacy. Prof. J. Prabhakar Rao's Power Point Presentation is in *Appendix V*.

After the presentation, the chairperson innitiated discussion among the participants. Participants raised various though provoking questions, comments, suggestions for drafting of OER policy through the above presentations.

While concluding the session, Prof. V S Prasad expressed that all the open universities come together for collective structural arrangement for developing OER. Focusses needed for common content and creative commons. Institution's focus must shift from content creation to outcome based learning, including localization, necessary support system and assessment.

Session Four: Group Discussion

All the participants are divided into 5 groups. Each group, lead by a group Moderator and Rapporteur, discussed one particular area concerning OER Policy for Higher education. These were: (1) Goals, Mission, Vision, (2) Copyrights and Licencing (3) Curriculum Development, Teaching and learning (4) Capacity Building (5) Infrastructure, Connectivity and Quality Assurance. Prof Nageshwar Rao, Prof V S Prasad, Mr Neil Butcher, Dr Shahid Rasool and Dr Manas Panigrahi spent some time with each group to assist the discussion. After the discussion, the moderator of each group presented their issues and challenges to be considered in policy development.

Group 1: Goals, Mission, Vision

Moderator: Prof. T. V. Prabhakar, IIT Kanpur

Rapporteur: Ms. Sujata Santosh, Asst. Director, IGNOU

Members: Prof. Biswajit Das, Prof. S.P. Pani, Dr. S. S. Jena, Prof. Gita Bamezai

Issues to be considered in policy development

Vision: To make OER as a movement to create, access, equity and quality of educational resources *Statements for Goals:*

- Empower learners and institutions with resources
- Address multiple languages, perspectives, grades and skills
- Building knowledge and capacities
- Standard textbooks available online
- Quality enhancement of the content in the local language "Think Globally Act Locally"
- Focus on skills
- Meant for multiple levels of learners
- Same material could be used for multiple skill levels

The group believes giving open access to institutional materials that does not affect the value / interest of the institution.

Group 2: Coptrights and Licencing

Moderator: Prof. Subha Sankar Sarkar, VC, NSOU Rapporteur: Dr. G. Mythili, Dy. Director, IGNOU

Members: Dr. M.S. Manna, Prof. Shivakant Jha, Prof. Sitarama Rao, Dr. Hemlata Chari, Prof.

K. Srinivas, Ms. Indira Koneru, Ms. Anubha Sinha

Issues to be considered for policy development

- Raising awareness about copyrights and licencing.
- Institution should have functional autonomy with quality control mechanism to release under OER (Develop Rubric and Plagiarism checking)
- Content (in all the format) developed by the public funded higher education institutions should be released with appropriate (latest) CC licencing (whichever is applicable).
- Materials and open courses (MOOCs) developed in collaboration with other institutions, should be released under CC licencing with mutual understanding of collaborators
- CC licencing should be attached to SWAYAM similar to that followed by NPTEL.
- Institutions must adopt and follow of free and open source software (FOSS) policy of Govt. (Mutatis and Mutentis).
- Integrating credits with API and FDA.

- Copyrights should not be lying with institutions once released under CC licencing.
- Nodal officers for OER need to be identified in each institution.
- Software developed by using publicly funded projects should be released under CC Licencing.

Challenges to be considered for policy development

- Lack of awareness among faculty about copyrights and CC licencing
- No quality criteria defined and content is not plagiarism free.
- Content developed by publicly funded institutions is not accessible and usable.
- No mechanism for attaching an open license for collaborative work.
- Institutions not using FOSS in compliance with national policy on OSS.
- No nodal officers at institutional level to motivate faculty.

Group 3: Curriculum Development, Teaching and Learning

Moderator: Prof. Madhu Parhar, IGNOU Rapporteur: Ms. Sanjogita Mishra, CEMCA

Members: Dr. Rajkumar Sachdeo, Prof. Praveen Jain, Dr. Pradeep Kumar Vaid, Dr. K. Rama, Dr. Nisar Ahmad Mir,

Issues to be considered for policy development

- All curriculums need revision to match the needs of the markets.
- Curriculum framework is available from UGC which can be customized by institutions upto 20-30%.
- Curriculum must be multi-cultural, multi-lingual, gender sensitive, etc.
- Innovations in Curriculum Development must be incentivized.
- Curriculum must be unitized to promote Credit Accumulation and Credit Transfer.
- Every Curriculum must be elaborated in proper Learning Outcomes.
- Employability and Life Skills must be integrated in all curriculum.
- Pedagogy must promote experiential learning.
- Quality Assurance and Acceptance by Industry / Employer are needed.
- Innovation in Teaching, Learning practices must be encouraged.
- Peer Assessment, Group Work and Interactivity must be integrated into the curriculum.
- Uniformity / Standardization of Curriculum for OER must be further elaborated.

Group 4: Capacity Building

Moderator: Prof. V.V Venkaiah, Former VC, Krishna

Rapporteur: Prof. Pradeep Kumar Misra, Dean, Faculty of Education, CCS University, Meerut Members: Prof. R A Gupta, Prof. M P Dube, Prof. Bhaskaran, Dr. Amarendra Pani, Prof. Neelofer Khan

Issues to be considered

- Sensitization and awareness of concepts, philosophy and use of OER
- Motivation of individual contributors and institutions
- Funding constraints
- Training and Faculty development
- IT infrastructure
- Resistant to change and adopting to the dynamic teaching-learning environment

Challenges

- Lack of willingness and confidence among contributors
- Lack of academic leadership at departmental and institutional level
- Lack of adequate financial resources for capacity building
- Lack of OER experts to train the large number of stakeholders
- Lack of adequate teaching and technical staff in HEIs
- Absence of academic sharing culture among peers

Solutions/Recommendations

- Identifying potential institutions as nodal centers for capacity building
- Identifying competent teachers to develop and offer MOOCs
- UGC may provide some grant to identify potential institutions for capacity building
- Orientations and capacity building programs for teachers and technical staff
- Strengthening IT infrastructure
- Incentive structure for institutions and individuals for using and creating OER
- Establishment of institutional linkages for sharing of resources

Group 5: - Infrastructure, Connectivity & Quality Assurance

Moderator: Prof. Mangala Sunder Krishnan Rapporteur: Ms. Ishita Pradhan, CEMCA

Members: Prof. J Prabhakar Rao, Prof. A H Mir, Dr. Arupjyoti Choudhury, Dr. Srikant Mohapara, Dr. Ramesh Gour, Prof. Uma Kanjlal, Shri Raju Srinivasan, Dr. Pitam Singh

Issues to be considered

- Availability of adequate software/hardware infrastructure
- Maintenance: Sustainable model for updates and up gradation
- Necessary/adequate funding

Challenges to be considered for policy development

- Assuring quality/minimizing duplication
- Assuring 24/7 connectivity and accessibility
- Assuring the editable/reusable form of content
- Fitting OERs with academic curricula
- Adequate user-response-feedback for evaluation
- Creating an assessment/evaluation based only on OER

Recommendations

Infrastructure & Connectivity

- Cloud software for hosting and access by contributing institutions, appropriate CDNs to be created within the cloud
- Preferably open software which allows source codes to be made available using open software, e.g. HTML file; counter e.g. is PDF
- Content development should not require browser specificity; content to be platform independent, to be played by all browsers
- Adequate connectivity for institutions; minimum recommended 1gbps and user connectivity and the speed of 0.5 mbps to 1mbps per user.
- Software for content development as part of the infrastructure, bulk/enterprise licenses to professional software, when required
- Content to be created should be mobile friendly (mobile platform), where necessary mobile apps could also be initiated

Quality Assurance

- Check on plagiarism to be instituted at all levels
- Mechanisms for evaluating the content b/w different institutions to be standardized
- Some form of a review of all OERs from one institution before being included in the repository
- Searchability of all content records is an absolute must across different OER modules.
 Where there are high quality video resources, the streaming (audio/video) capability to be checked before being added to the library/repository. Existing OER content to be able to be harvested into the current repository and made 'Open Access Initiative Protocol Metadata Harvesting' (OAI/PMH) compliant
- Content quality to be independently reviewed
- Editing, repurposing to be assured through open formats

Session Five: Concluding Discussion

Prof. V.S. Prasad and Prof. Nageshwar Rao made concluding remarks in the day long programme. The following are some of the remarks:

- OER provider shall take the responsibility of the quality then OER user taking the responsibility of the quality.
- The quality assurance processes should be decided by a quality assurance agency.
- Quality parameters must be integrated with OER.
- There may be an external assessment agency to assess the quality of OER before it used by the users. But practically it is not possible. So there must be some quality parameter that developer must integrate while developing the OER.
- OER should include objectives and purpose of the materials.

While discussing about the capacity building, they have highlighted the following:

- Incentives should be provided to facilitate the faculty who are developing OER also this should be considered for their promotion.
- It is suggested that faculty should attend at least one capacity building programme on OER
- OER is not an academic issue, it is more of a governance issue so the regulatory body should promote the OER in higher education sectors.

Prof. S.P. Pani, DDE, Utkal University stated that

- Knowledge should be free, but certificate comes with a price
- Less the barrier better it is for the learners
- Concern of access, equity, quality, affordable cost and need for diversity etc. must be addressed.
- Culture of sharing must be promoted.
- OER is not a mere ODL/conversational education institution issues. It should be focused on learners and teaching learning process.
- Policy should be robust to take care of drastic changes in technology.

While taking about the vision and mission the following are stated:

Vision: OER vision must have the purpose with distinct feature

Mission: the social reasoning and the reason are in the interest of the society.

Finally, they mentioned that OER should also become the primary learning resources. Invisible teacher is replaced with these OERs. Secondary learning material should be changed to OER which can be used for teaching purposes. Now that will reduce the cost as well.

The programme ended with vote of thanks by Dr. Shahid Rasool, Director, CEMCA followed by a high tea.



Schedule of the National Consultation on OER for Higher Education

Time	Activity		
9:30-10:00	Registration		
10:00-11:00	Opening Session		
	 Welcome of the guests and Introduction of the National Consultation: Dr. Shahid Rasool, Director CEMCA 		
	 Keynote Address: Prof. V.S. Prasad, Former Director, NAAC. 		
	 Remarks by the Chief Guest / Guest of Honour 		
	 Presidential Address: Prof. Nageshwar Rao, VC, Uttarakhand Open University 		
	• Vote of Thanks: Dr. Manas Ranjan Panigrahi , CEMCA, New Delhi		
11:00-11:30	Tea/Coffee Break		
11:30-12:30	Open Educational Resources: Policy and Practices (International)		
	Chair: Prof. Nageshwar Rao, VC, Uttarakhand Open University		
	Rapporteur: Ms. Sujata Santosh, IGNOU		
	OER Policy Development and International Practices by: Mr. Neil		
	Butcher , South Africa (30 minutes)		
	Discussion: All Participants		
12:30-13:30	Experience sharing on OER practice and policy in India		
	Chair: Prof. V.S. Prasad, Former Director, NAAC		
	Rapporteur: Dr. G. Mythili, IGNOU		
	• Presentation by IGNOU: Prof. Ravindra Kumar , VC (15 Minutes)		
	• NPTEL Presentation : Prof. Mangala Sunder Krishnan (15		
	Minutes)		
	• UOH Presentation : Prof. J. Prabhakar Rao (15 Minutes)		
	• Discussion : All Participants		
13:30-14:30	Lunch Break		

14:30- 16:30	Group Work
	Group 1: Goals, Mission, Vision
	Moderator: Prof. T.V. Prabhakar, IIT Kanpur
	Rapporteur: Ms. Sujata Santosh, IGNOU
	Group 2: Copyrights and Licencing Moderator: Prof. Subha Sankar Sarkar, VC, NSOU Rapporteur: Dr. G. Mythili, IGNOU
	IGNOO
	Group 3: Curriculum Development, Teaching and Learning Moderator: Prof. Madhu Parhar, IGNOU Rapporteur: Ms. Sanjogita Mishra, CEMCA
	Group 4: Capacity Building
	Moderator: Prof. V. Venkaiah, Former VC, Krishna University
	Rapporteur: Prof. Pradeep Kumar Misra, CCS University
	Group 5: Infrastructure, Connectivity and Quality Assurance
	Moderator: Prof. Mangala Sunder Krishnan, IIT, Madras
	Rapporteur: Ms. Ishita Pradhan, CEMCA
	Each group to discuss issues and challenges and present solutions/ recommendations considered for policy development. Each group will have a moderator, and a rapporteur. Group work: 1hr.; Presentations: 30 Minutes Discussion: 30 minutes.
16:30-17:00	Concluding Session
	Major recommendations by Mr. Neil Butcher , South Africa
	Closing Remarks by Prof. Nageshwar Rao , VC, Uttarakhand Open University
	Vote of Thanks by Dr. Shahid Rasool , Director CEMCA
17:00-17:30	High Tea

National Consultation on OER Policy for Higher Education in India List of Participants

SI.	Name and Address	Phone No.	e.Mail
No.			
Intern	ational Expert		
1	Neil Butcher, South Africa		
Adviso	ory Cum Consultative Committee		
2	Prof. V.S. Prasad	+91 7893192146	prasadvs99@hotmail.com
	Former Director, National		
	Assessment and Accreditation		
	Council (NAAC); and Former Vice-		
	Chancellor, Dr. B.R. Ambedkar		
	Open University		
	302, Hallmark Residency,		
	Arora Colony, Banjara Hills		
	Hyderabad 500 034, India		
3	Prof. Nageshwar Rao,	91 9582326657	vc@uou.ac.in
	Vice Chancellor,		
	Uttarakhand Open University,		
	Haldwani,		
4	Uttarakhand Prof. Madhu Parhar	01 0010677004	madhu.parhar@gmail.com
4	STRIDE,	91 9810677084	maunu.parnar@gman.com
	Indira Gandhi National Open		
	University (IGNOU),		
	New Delhi-110068		
6	Dr. B K Bhadri		bkbhadri.edu@nic.in
	Educational Advisor		binod bhadri@yahoo.co.in
	MHRD, Govt. of India		
	New Delhi		
7	Dr. M. S. Manna		director.aicte@gmail.com
	Director Administration		manpreetsinghmanna@aicte-
	All India Council for Technical		india.org
	Education (AICTE)		
	Vasant Kunj, New Delhi		
8	Dr. Nisar Ahmad Mir	011-23219719	nisarmiar.usc@nic.in
	Joint Secretary,	099101 41596	
	University Grants Commission		
	Bahadur Shah Zafar Marg		
	New Delhi - 110 002		

9	Prof. Biswajit Das		bdas@jmi.ac.in;
	Jamia Millia Islamia University,		biswas.das@gmail.com
	Jamia Nagar		
	New Delhi		
10	Professor Furgan Qamar,	011-23232131	sgoffice@aiu.ac.in
-0	Secretary General,	011 10101101	sgemeet alaraem
	Association of Indian Universities		
	AIU,		
	New Delhi - 110002		
11	Prof. R A Gupta	+91 9414052862	ragupta.ee@mnit.ac.in
	National Institute of Technology	.515111052002	ragmnit@gmail.com
	Jaipur		rugiiiiit@giiiaii.coiii
12	Prof. J Prabhakar Rao	+91-40-23133820	pjandhyala1@gmail.com
	Director Centre for eLearning,	131 40 23133020	pjananyaa Leegman.com
	University of Hyderabad,		
	Hyderabad		
13	Prof. V Venkaiah, Director, Centre	+91-9440715294	venkaiah.v@gmail.com
	for Education Technology and	.51 5110/15251	verikalani.v@gman.com
	Learning Science, Rajiv Gandhi		
	University of Knowledge		
	Technologies (AP), Hyderabad		
	Former Vice Chancellor		
	Krishna University		
	Plot # 232, Kavuri Hills,		
	Jubilee Hills Post, Hyderabad		
14	Prof. A H Mir	+91 9419010409	ahmir@rediffmail.com
17	Dean NIT,	191 9419010409	diffin @Teamman.com
	Srinagar, J&K		
15	Prof. Subha Sankar Sarkar		Vc_nsou@wbnsou.ac.in
13	Vice-Chancellor		Sarkarsubha55@gmail.com
	Netaji Subhas Open University		Sarkarsubriass@gman.com
	Kolkata		
Popro	sentatives from Open Universities		
16	Prof. (Dr.) Shivakant Jha	+91 9431021277	nou@nou.ac.in
10	Vice-Chancellor Nalanda Open	+91 9431021277	nod@nod.ac.iii
	University,		
	3rd floor, Biscomaun Bhawan,		
	Gandhi Maidan,		
	Patna-800 001, BIHAR		
17		±01 021 2E00072	vcksou@gmail.com
1/	Prof. D. Shivalingaiah Vice-Chancellor	+91 821-2500873	vcksou@gman.com
	Karnataka State Open University		
	Mukhtagangotri,		

	Mysore-570 006		
	KARNATAKA		
18	Prof. K Sitarama Rao	+91-40-23680201	vc@braou.ac.in
	Vice-Chancellor Incharge		
	Dr. B. R. Ambedkar Open		
	University,		
	Prof. G.Ram Reddy Marg,		
	Road No. 46, Jubilee Hills,		
	Hyderabad-500 033		
	ANDHRA PRADESH		
19	Dr. Pankaj L. Jani	+91 9825140363	baouvc@gmail.com
	Vice-Chancellor In charge Dr.	.31 30231 10303	Sucure & gritain.com
	Babasaheb Ambedkar Open		
	University,		
	Jyotirmay Parisar Opp.		
	Shri Balaji Temple		
	Sarkhej-Gandhinagar Highway		
	Chharodi		
	Ahmedabad-382481 Gujarat		
20	Prof. M P Dube	+91 9415649462	dube.mp@gmail.com
	Vice-Chancellor	1313113013102	addeniip@giiidiiid
	U. P. Rajarshi Tandon Open		
	University,		
	University Campus,		
	Shantipuram (Sector-F),		
	Phaphamau, Allahabad-211 013		
	UTTAR PRADESH		
21	Prof Praveen Jain	+91 9425013315	vcoffice.mpbou@gmail.com
	Director, IT		
	M.P.Bhoj (Open) University,		
	Raja Bhoj Marg (Kolar Road),		
	Bhopal-462016		
	Madhya Pradesh		
22	Prof. Bhaskaran	+91-44 24306600	vc@tnou.ac.in
	Vice-Chancellor	. 51 112430000	100 moducini
	Tamil Nadu Open University,		
	577, Anna Salai, Saidapet,		
	Chennai-600 015		
	TAMIL NADU		

23	Dr. Arupjyoti Choudhury Dean, Academic The Krishna Kanta Handiqui State Open University, Block III, Housefed Complex, Last Gate, Dispur, Guwahati-781006 ASSAM Prof Ravinder Kumar	+91 9864336345 +91-11-29534180	kkh_sou@yahoo.com pvcnroffice@ignou.ac.in
24	Vice Chancellor (Actg) Indira Gandhi National Open University Maidan Garhi, New Delhi – 110068	131 11 23334100	pvemomee@ignou.ue.m
25	Dr. Srikant Mohapatra Vice-Chancellor Odisha State Open University (OSOU) G.M. University Modipada, Sambalpur Odisha 768002	+91 8802714059	Srikant_mohapatra@rediffmai I.com
26	Dr. Rajkumar Sachdeo Registrar Pt. Sunderlal Sharma Open University Vyapar Vihar, Near Deen Dayal Upadhyay, Bilaspur Chattisgarh495001 India	+91-7752-414225	vc@pssou.ac.in
	Participants	.01.0000013150	han Qaal du aa in
27	Prof. H. C. Pokhriyal Executive Director School of Open Learning University of Delhi	+91 9868812156	hcp@sol.du.ac.in
28	Dr. Hemlata Chari Dy. Director (Academic) Distance & Open Learning, University Mumbai, Mumbai	+91 9820147307	hemlata@idol.mu.ac.in drhemchari@gmail.com
29	Prof. S. P. Pani Director, Directorate of Distance and Continuing Education (DDCE), Utkal University, Vanivihar, Bhubaneswar- Pin: 751007 Odisha, India	+91-9437095522	director@ddceutkal.ac.in
30	Dr. Pradeep Kumar Vaid	+91-9459448811	pkvaid_2006@yahoo.co.in

	Bisseles Islandii I.C. i. f		
	Director, International Centre for		
	Distance Education and Open		
	Learning (ICDEOL), Himachal		
	Pradesh University, Summer Hill,		
	Shimla - 171005, Himachal Pradesh		
31	Prof. T.V. Prabhakar		tvp@iitk.ac.in
	Department of Computer Science		
	and Technology,		
	Indian Institute of Technology		
	Kanpur		
	Kanpur(U.P.) 208016, India		
32	Prof. K Srinivas	+91 9650880208	drksvasu@gmail.com
	Professor ICT		ksrinivas@nuepa.org
	NUEPA, New Delhi-110016		
33	Prof. Mangala Sundar		mangalasunderk@gmail.com
	IIT Madras		
	Chennai		
34	Dr. Ramesh Gour	+91-11-26742605	rcgaur66@gmail.com
	University Librarian		
	Jawaharlal Nehru University(JNU)		
	New Meharuli Road,		
	New Delhi		
35	Dr. S S Jena	+91 9910075392	ssjena1960@gmail.com
	Indira Gandhi National Open		,
	University (IGNOU)		
	Maidan Garhi,		
	New Delhi		
36	Dr. G Mythili	+91 9868287636	gmythili@ignou.ac.in
	Deputy Director, STRIDE		
	Indira Gandhi National Open		
	University (IGNOU) Maidan Garhi,		
	New Delhi		
37	Prof Gita Bamezai	+91 11-26742920	gitabamezai@gmail.com
	Indian Institute of Mass		
	Communication		
	JNU new campus,		
	Aruna Asif Ali Road,		
	New Delhi - 110067, India.		
38	Ms Sujata Santosh	+91-11-29536413	sujata.santosh@ignou.ac.in
	Assistant Director, National Centre		
	for Innovation in Distance		
	Education, Indira Gandhi National		
	Open University (IGNOU) Maidan		
	Garhi, New Delhi		
1	· · ·	•	

39	Prof. Pradeep Kumar Misra	+91 9457756036	pradeepmsr@yahoo.co.in
	Dean Faculty of Education, CCS		
	University, Meerut		
40	Ms. Indira Koneru		indkon@gmail.com
	eLearning Department, IBS,		
	ICFAI Group, IBS HO, Nagarjuna		
	Hills, Hyderabad - 500 082		
41	Dr. K. Rama		k.rama@naac.gov.in
	Advisor,		
	National Assessment and		
	Accreditation Council (NAAC),		
	Nagarbhavi, Bangalore-560 072		
42	Prof. Neelofer Khan	+91- 9419014366	Khan.n.dr@gmail.com
	Director		
	Directorate of Distance Education		
	Kashmir University		
	Kashmir, J & K		
43	Prof. Uma Kanjilal	+ 91-11-29572714	ukanjilal@ignou.ac.in
	Director, IUC-TEFED		
	Indira Gandhi National Open		
	University		
	Maidan Garhi, New Delhi		
44	Ms Anubha Sinha	+91 9899197791	anubha@cis-india.org
	Programme Officer		
	The Centre for Internet and Society		
	First floor, B 1/8, Hauz khas		
	Near G Block Market, New Delhi		
45	Dr. Amarendra Pani	+91 9818248913	Pani_amar@rediffmail.com
	Incharge Research Division,		
	AIU, New Delhi		

National Consultative Meet on OER Policy for Higher Education in India

(Held at New Delhi on 03.03.2017, Organised by CEMCA)

A Few Reflections on OER Policy Framework

By *Prof. V. S. Prasad* (prasadvs99@hotmail.com)

> Policy is essential

System based and policy based responses are necessary to address the phenomenal changes that are taking place in the world of education. Open Educational Resources (OER) as 'public good' needs a public policy to support, facilitate and regulate its development and use. Policy - a series of steps to be taken to achieve the goal-provides a legitimate basis for action and helps in taking integrated view and actions to realise the full potential of OER.

> OER policy to address the challenges of education

Access, equity and quality are the major concerns of higher education in India. The ways and means of addressing these concerns by OER should form an important component of OER policy. Many international studies have indicated that reducing the costs of curriculum development and improving the quality of teaching and learning are the two major concerns in the use of ODL (G.Dhanarajan (Ed.) 2016, OER: Vignettes of Selected Asian Experiences). The vision, mission and scope of OER policy should bring conceptual clarity on OER and many other types of open movements like open practices, open infrastructure, open culture and similar others.

> OER policy at national and institutional levels

Individuals, institutions and education system are the reference units of national OER policy. The inclusive national policy may take note of multiple uses and forms of OER. The use of OER in formal and non-formal systems have to be integrated in the national OER policy. The diversity and complexity are the important features of higher education in India. The institutions are in different stages of development. They may have to be encouraged to develop institutional OER policies appropriate to their context. It may be desirable to develop OER maturity matrix of three stages i.e., low, medium and high and the institutions may be encouraged to move from one level to other (like in Open Educational Quality Initiative, OPAL, www.oer-quality.org). The national OER policy may provide a framework for development of institutional OER policies.

> Rational approach to OER policy

Effective and efficient ways of achieving goals is a rational approach. Public policy making should move from 'arrangement focused' approach to 'realisation focused' approach. The arrangement focused view is more abstract and general in contrast to realisation focused view which is more operational and specific.

> Dynamic Policy

The policy should include the process of policy review and provisions for incorporation of necessary policy changes as responses to changes in context.

➤ Learning from experiences and addressing apprehensions

The Indian experiences in OER practices deserve critical reflection to get inputs for policy. Contradictions in the education context like knowledge in public domain for free use and management of education in private domain; OER without open educational practices; practices of recognition of individual excellence; competition among public institutions for scares resources may be taken note in policy formulation of OER. The policy as an action guide will have relevance only if it can provide a broad way forward in the use, development and regulation of OER, in this complex higher education scenario.

Mr. Neil Butcher's Power Point Presentation

Slide 1

THE POWER AND POTENTIAL OF OPEN EDUCATIONAL RESOURCES

Slide 2

OPEN EDUCATIONAL RESOURCES ARE...

- Educational resources that are freely available for use by educators and learners, without an accompanying need to pay royalties or licence fees
- Not synonymous with online learning or e-learning

WORLD OER CONGRESS

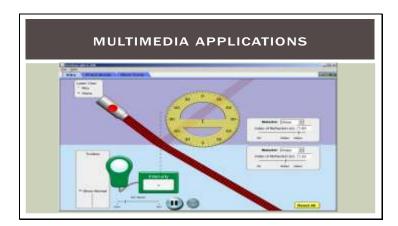
- Momentum has culminated in Paris OER Declaration at World OER Congress, which recommends, amongst others, that States:
 - Foster awareness and use of OER.
 - Reinforce the development of strategies and policies on OER.
 - Promote the understanding and use of open licensing frameworks
 - Support capacity building for the sustainable development of quality learning materials.
 - Encourage the development and adaptation of OER in a variety of languages and cultural contexts.
 - Encourage the open licensing of educational materials produced with public funds.

Slide 4

THE OPPORTUNITIES...

- Telecommunications capacity is growing rapidly
- Growth in range of devices at reducing cost
- Lower power use and growth in solar power
- And there is an explosion of freely available, high quality content online that educators and students can link to...





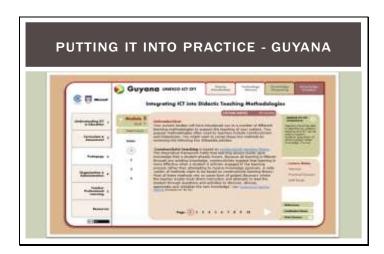
Slide 7







Slide 10



Slide 11

Bandwidth and access have become essential...

...but there is a growing disconnect between changing needs/contexts and the dominant educational models globally

Slide 13

INSTITUTIONALIZING OPENNESS

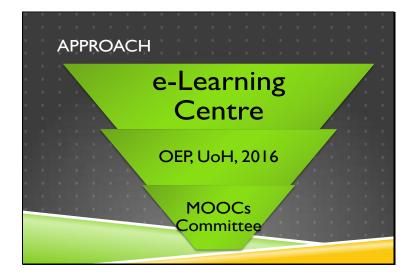
- Investment in more effective teaching, learning, and research environments using resource-based learning
- ■Embrace open licensing environments
- Need to be accompanied by review of institutional policies
- Bandwidth and access have become essential

Prof. J. Prabhakar Rao's Power Point Presentation

Slide 1

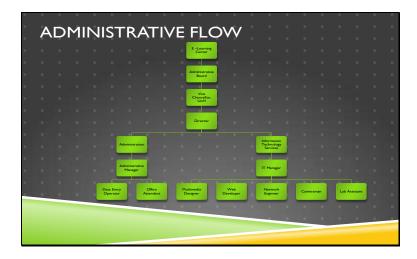






Slide 4







Slide 7







Slide 10





