REPORT

Research on Open Educational Resources for Development: Dissemination Workshop

December 20, 2016

India International Centre, New Delhi

Organised by

Commonwealth Educational Media Centre for Asia
New Delhi

Research on Open Educational Resources for Development

Access to educational materials is essential to improve the quality of teaching and learning at all levels of education. Production and reuse of educational materials have always been a challenge due to the cost, time, permission and licensing fees to reuse copyrighted materials. Realising the importance of open courseware, the UNESCO organised a Forum on the Impact of Open Courseware for Higher Education in Developing Countries in 2002, which coined the term open educational resources (OER). In 2012, the Commonwealth of Learning and UNESCO with the support of William and Flora Hewlett Foundation, organised the World OER Congress that resulted into the 2012 OER Paris Declaration, which urged the governments to promote OER by releasing teaching, learning and research materials with an open license. It also called upon the governments to encourage research on "the development, use, evaluation and re-contextualisation of OER as well as on the opportunities and challenges they present, and their impact on the quality and cost-efficiency of teaching and learning in order to strengthen the evidence base for public investment in OER." While there have been several initiatives for policy developments, research in the field of OER is not common, at least in the Indian context.

In the year 2013, the Commonwealth Educational Media Centre for Asia (CEMCA), joined a network of research institutions to conduct Research on Open Educational Resources for Development (ROER4D) supported by the International Development Research Centre, Canada, and facilitated by the network hub at University of Cape Town, South Africa. This one-day workshop was organised to disseminate the findings of the research conducted at CEMCA, and also bring together other OER researchers to discuss research findings, challenges and opportunities for further research in the field.

Objectives

The objectives of the workshop were to:

- Disseminate the research findings on OER;
- Identify new areas of research on OER; and
- Develop insights and strategies to overcome challenges to conduct research on OER.

Format and Method

The workshop was followed with a mix of presentations and group work. The workshop agenda is given in ***Annex-1***.

Participants

The event was an invite only programme. Thirty-Two academic leaders, teachers in higher education institutions, researchers and librarians participated in the workshop (***Annex II***).

Workshop Proceedings

Inaugural

The workshop began with a formal welcome by Dr. Shahid Rasool, Director, CEMCA followed by introduction of the workshop by Dr. Sanjaya Mishra, COL. The Chief Guest for the occasion was Dr. B. K. Bhadri, Assistant Education Advisor, MHRD, Govt of India. He emphasised the need for providing excellent student support system and also to provide the student with adequate learning resources. He also highlighted the need of encouragement for researches on OER and ODL which will go a long way supporting learning outcomes in both formal and distance learning systems. He also appreciated COL-CEMCA's initiatives on OER/ODL for achieving the goal of quality learning in higher education.

Keynote Address

Prof. V.S. Prasad, Former Director of NAAC, graced the occasion and delivered the keynote address highlighting the research perspectives on sustainability and quality of Open Educational Resources for Development. He said, OER has the potential to bring a paradigm shift in education in 21st century, and the World OER Congress Paris Declaration 2012 has made some significant recommendations to be followed by governments and educational institutions to promote and encourage use of OER. One of these recommendations is undertaking research on OER. Appreciating the COL-CEMCA work on OER and organisation of this workshop on research in OER, he stated that research questions asked and the quality of research work done are critical to the relevance of research in OER for development. He elaborated on the following in his address:

- What is the nature of paradigm shift in education resulting from OER?
- What are the drives of OER?
- What institutional open educational architecture is essential for OER?
- Who authenticates the resources and ensures their quality?
- How do we build the capacities of stakeholders in OER?
- How do we synergise regional, national and institutional OER policies?
- How do we validate the research in OER?

Release of the Monograph

CEMCA published the completed research project entitled "Teachers' Attitudes, Motivations, Perceptions of Quality and Barriers to Open Educational Resources in India" as a monograph entitled "Promoting Use and Contribution of Open Educational Resources". The publication is now available at:
http://cemca.org.in/ckfinder/userfiles/files/CEMCA_OER%20Monograph.pdf

Sharing of Research Findings

Dr. Sanjaya Mishra, Education Specialist, Commonwealth of Learning, and Principal Investigator of the project presented the key research findings. The presentation is in ***Annex III***.

After presentation of detailed research report Prof. Santosh Panda from IGNOU, New Delhi presented a critical commentary on the work. In his review he stated that, the research, as part of ROER4D network and funded by IDRC, is very timely, and addresses as to how best OERs can be used/ reused more effectively by both contributors and non-users. The study was conducted on 148 Indian university teachers (though, finally, 117 questionnaires and interviews could be analysed), who attended four interactive workshops on OERs by CEMCA at four regions of the country. The interactive sessions included: just-a-minute sessions, interactive quiz sessions, snowball sessions, and panel discussions. A structured and standardised Attitude Towards Open Educational Resources (ATOER) scale was developed and used in the study. The study focused on four variables: attitudes, motivations, barriers, and quality—within a well-structured conceptual research framework and also used the Activity Theory of Engestrom (1987) and the ideas of mediating tool advocated by Vygotsky (1978).

Further he emphasised that this study will be useful for both policy analysis as well institutional and faculty adoption of OER. More research though is needed to further crystallise how best OER can address the twin pillars of higher education in India today—numbers on one hand, to increase GER; and quality on the other hand, to achieve employability and happy living. The commentary is available at ***Annex IV***.

OER Researches in India

In the post lunch session, the other IDRC researchers in the region and one doctoral researcher on OER were invited to make presentations on their work and share their findings, challenges and opportunities of further research in the field. The following presentations were made:.

- "A Study on the Adoption and Integration of OER Materials in Self-Instructional Course Development" Presentation by Prof. Mohan B. Menon. This works was conducted through Wawasan Open University, Malaysia (***Annex V***)
- "Teacher Professional Learning Communities: a collaborative adoption approach to OER in Karnataka" Presentation by Mr Kasinathan Gurumurthy (***Annex VI***)
- "Openness and OER in context of Distance Education in India" Presentation by Ms Sujata Santosh (***Annex VII***)

The participants discussed on research design and findings of the researches. All presentations are in ***Annex V to VII.***

Group Work for Identification of Key Research Priorities on OER and Challenges & Solutions to Promote OER research

All participants were divided into four small groups at random, and engaged in small group discussions. There were asked to highlight three research areas/ questions that needs further

research, and also identify challenges and solutions conduct research in these areas. The key research areas, challenges and solutions to promote research on OER are presented below:

Key Research Priorities on OER:

- Development of OER capacity building mechanisms for higher education teachers and to study its impact on teaching and learning
- The challenges of development, use and re-use of OER in disciplinary contexts
- The quality and cost-efficiency of teaching and learning using OER
- Adoption and integration of OER in course development for distance learners
- Quality and authentication of available OER for use and repurpose for better learning
- Motivation of higher education teachers to create and repurpose existing OER
- Interventions of governments and institutions for adoption and promotion of OER
- Study on attitude and perception of teachers on copyright, public domain, open licences and Creative Common licences

Challenges for OER research:

- Lack of awareness and understanding of OER
- Poor funding for conducting research
- Capacity of teachers to use, create, and contextualising of OER
- Access to technology and availability of internet

Solutions for OER research:

- Leveraging positive attitude of teachers about OER
- Creating awareness about OER though development of national and intuitional policies for OER
- Provision for adequate funding for individual and institutional research
- Scholarships for higher education students and teachers to conduct research on OER
- Institutional capacity building on OER and open licence for teachers and academic leaders
- Adequate infrastructure facility for use of technology, especially for differently able and marginalised communities
- Provide uninterrupted internet facility to remote and difficult geographical areas

Closing

The workshop ended with feedback from two of the participants: Dr. P. Prakash (UGC) and Prof. Uma Kanjilal (IGNOU). Dr. Mishra thanked all the participants for their active participation and contributing their time of the workshop. Dr. Rasool thanked all, including CEMCA staff for the hard work to organise the workshop.

Annex I

Agenda of the Workshop

Time	Activity
10:30-11:30	Inaugural Session • Welcome of the guests: Dr. Shahid Rasool, Director, CEMCA • Introduction of the workshop: Dr. Sanjaya Mishra, COL • Remarks by the Chief Guest: Mr. B. K. Bhadri, Assistant Education Advisor, MHRD, Govt of India • Keynote Address: Prof. V.S. Prasad, Former Director, NAAC. • Release of the Monograph on OER • Vote of Thanks: Mr. R Thyagarajan, HAF, CEMCA
11:30-12:00	Tea/Coffee Break
12:00-13:00	What the Indian higher education faculty say about OER? • Presentation of Key Findings: Dr. Sanjaya Mishra • Commentary: Prof. Santosh Panda, IGNOU
13:00-14:00	Lunch Break
14:00- 15:00	OER Research in India • Presentation by Prof. Mohan B. Menon • Presentation by Mr Kasinathan Gurumurthy • Presentation by Sujata Santosh
15:00- 16:00	Group Work • Key Research Priorities on OER • Challenges and Solutions to Promote OER research
16:00	Closing and High Tea

Annex II

List of Participants

Sl. No.	Name and Address	Phone No.	email
1	Prof. V.S. Prasad Former Director National Assessment and Accreditation Council (NAAC); and Former Vice-Chancellor, Dr. B.R. Ambedkar Open University Banjara Hills, Hyderabad 500 034, India	07893192146	prasadvs99[at]hotmail[dot]com
2	Dr. Sanjaya Mishra Education Specialist Commonwealth of Learning Canada		smishra[at]col[dot]org
3	Prof. Mohan Menon Chairperson, DISHA-Global Trust Mahakavi G. Road, Kochi-682011 Kerala, INDIA	M: 91-9746062029 LL: 91-4842376063	mohanbmenon[at]gmail[dot]com
4	Mr Gurumurthy Kasinathan Director, IT for Change # 393, 17th Main Road, 35th Cross, Jayanagar 4th 'T' Block, Bangalore, Karnataka - 560041.	Tel: +91 80 2665 4134 / 2653 6890 TeleFax: +91 80 4146 1055	ITfC[at]ITforChange[dot]net Guru[at]ITforChange[dot]net
5	Dr. Santosh Panda Professor Indira Gandhi National Open University Maidan Garhi, New Delhi	9810012828 7042173838	spanda[at]ignou[dot]ac[dot]in
6	Ms Sujata Santosh Assistant Director, National Centre for Innovation in Distance Education, Indira Gandhi National Open University (IGNOU) Maidan Garhi, New Delhi	Mob: 9811744708; Off.: 011 29573070	sujata[dot]santosh[at]ignou[dot]ac[dot]in
7	Atul Thakur (former RA OER4D)	8750679544 9086025969	atulschalkur[at]gmail[dot]com
8	Prof. Madhu Parhar Indira Gandhi National Open University, Maidan Garhi, New Delhi (CEMCA Advisory Council Member)		madhu[dot]parhar[at]gmail[dot]com
9	Dr. S S Jena	+91 9910075392	ssjena1960[at]gmail[dot]com

	Indira Gandhi National Open University, Maidan Garhi, New Delhi		
10	Dr. Mythili Indira Gandhi National Open University, Maidan Garhi, New Delhi	09868287636	gmythili[at]ignou[dot]ac[dot]in
11	Prof. Uma Kanjilal Director, IUC-TEFED Indira Gandhi National Open University, Maidan Garhi, New Delhi	+ 91-11-29572714, 29572323 (O)	ukanjilal[at]ignou[dot]ac[dot]in
12	Dr. A K Gaba School of Vocational Education & Training, Indira Gandhi National Open University, New Delhi - 110068	011-29571644 09968674422	akgaba[at]ignou[dot]ac[dot]in
13	Dr. O P Dewal Indira Gandhi National Open University, Maidan Garhi, New Delhi		opdewal[at]gmail[dot]com
14	Prof. Saroj Pandey Director School of Education IGNOU, New Delhi	09911212565	spandey[at]ignou[dot]ac[dot]in
15	Prof. Amitav Mishra Professor (Special Education) School of Education, Indira Gandhi National Open University (IGNOU), Maidan Garhi, New Delhi, India	91+11+29572999 91+11+29534882	amitav[at]ignou[dot]ac[dot]in
16	Prof. Savithri Singh Principal Acharya Narendra Dev College (University of Delhi), Govindpuri, Kalkaji, New Delhi 110019	011-26294540	principal[at]andc[dot]du[dot]ac[dot]in
17	Prof. K Srinivas Professor ICT NUEPA, New Delhi	09650880208	drksvasu[at]gmail[dot]com ksrinivas[at]nuepa[dot]org
18	Dr. Gyanendra Tiwari Associate professor School of Education Amity University Noida	09871070488	gntiwari[at]amity[dot]edu gyantiwari2001[at]yahoo[dot]com
19	Dr. Debal C. Kar Librarian, Amberdkar University Delhi	9811392242	Debal[dot]kar[at]gmail[dot]com
20	Prof. Sanjay Kumar Jha	9555649989, 9971069609	skjha[at]ggn[dot]amity[dot]edu, doctorskj[at]gmail[dot]com

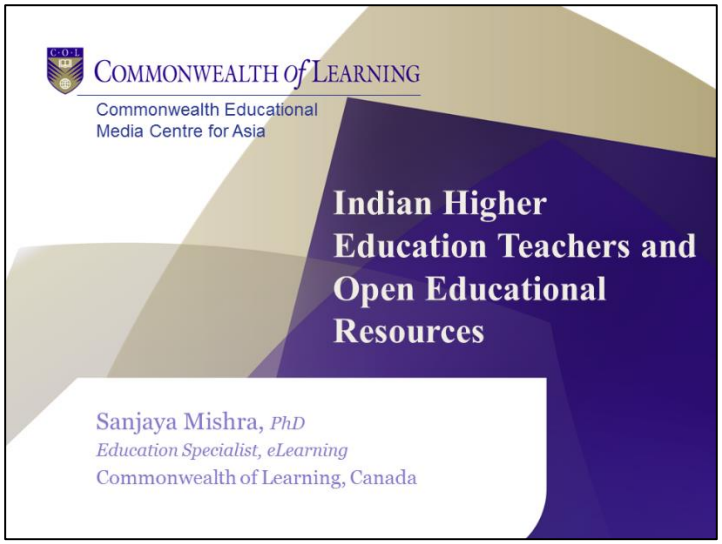
	Director (ASLA) & Professor (Linguistics) Amity Education Valley, Manesar Amity University, Gurgaon, Haryana, India		
21	Dr. Shantanu Ganguly, Fellow and Associate Editor (World Digital Library) Knowledge Management Division TERI India Habitat Centre Lodhi Road, New Delhi - 110003 | India	+91 9811330235	Shantanu[dot]Ganguly[at]teri[dot]res[dot]in
22	Prof Biswajit Das Centre for Culture Media and Governance, Jamia Millia Islamia		biswas[dot]das[at]gmail[dot]com
23	Dr T R Kem, Former Secretary UGC/Former Director CEC	9810282574	trkem[at]rediffmail[dot]com
24	Dr P Prakash, Additional Secretary , UGC, New Delhi	9810877588	asprakash96[at]gmail[dot]com
25	Dr Dev Swarup, Additional Secretary, UGC, New Delhi		devswarupugc[at]gmail[dot]com
26	Prof. Ram Chandra Director, Distance Education Skill Development Mewar University	07838062305	ramchandrasrd[at]gmail[dot]com
27	Dr. Aerum Khan, Assistant Professor CIET-NCERT New Mehrauli Road New Delhi-110016	9250733230	Aerum[dot]khan[at]ciet[dot]nic[dot]in
28	Dr. Yashpaul Sharma, Assistant Professor CIET- NCERT New Mehrauli Road New Delhi-110016	9911078294	Yesh[dot]sharma[at]ciet[dot]nic[dot]in
29	Ms. Jatinderjit Singh Indira Gandhi national Open University Maidan Garhi New Delhi -110068	9313158648	kaurjatinderjit[at]ignou[dot]ac[dot]in
30	Mr. Phet Sayo IDRC Jor Bagh New Delhi-3		psayo[at]idrc[dot]ca
31	Mr. B. K. Bhadri		bkbhadri[dot]edu[at]nic[dot]in

	MHRD, New Delhi		
32	Dr. G. Raviwbraw University of Madras Department of Journalism and Communication, Chennai	9442554807	gopalanrauindraan[at]gmail[dot]com

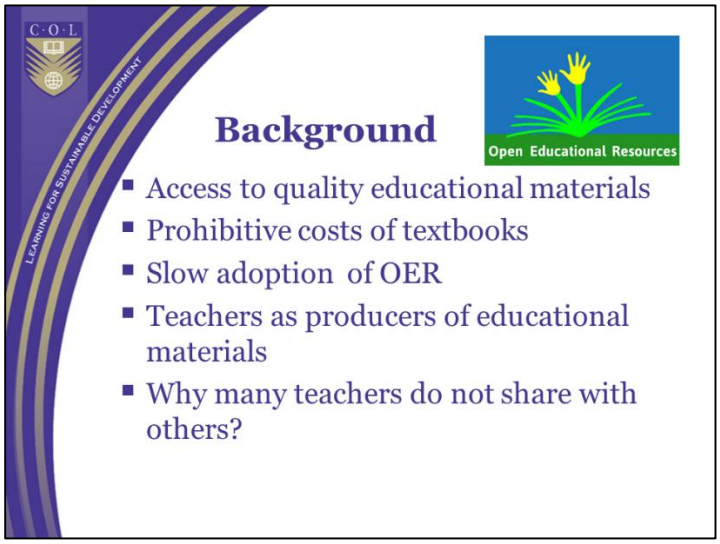
Appendix III

Presentations of the key findings by Dr. Sanjaya Mishra

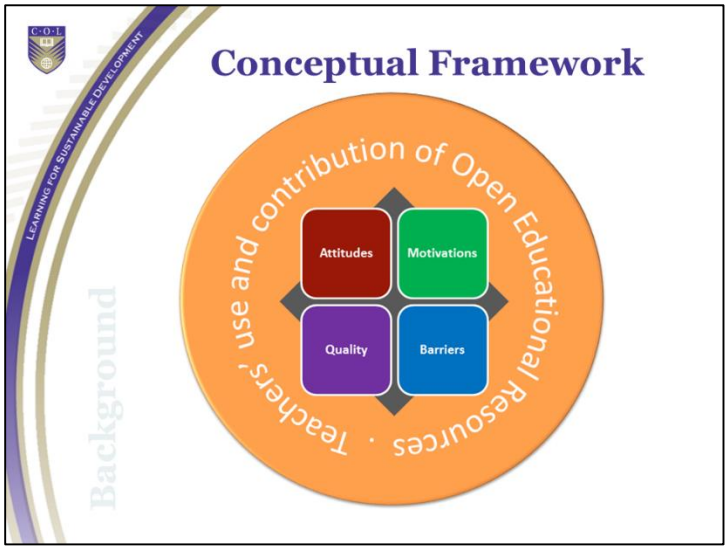
Slide 1



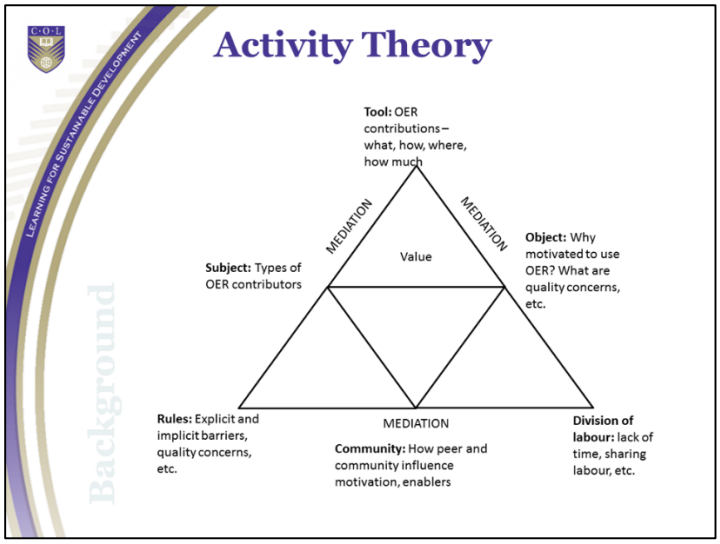
Slide 2



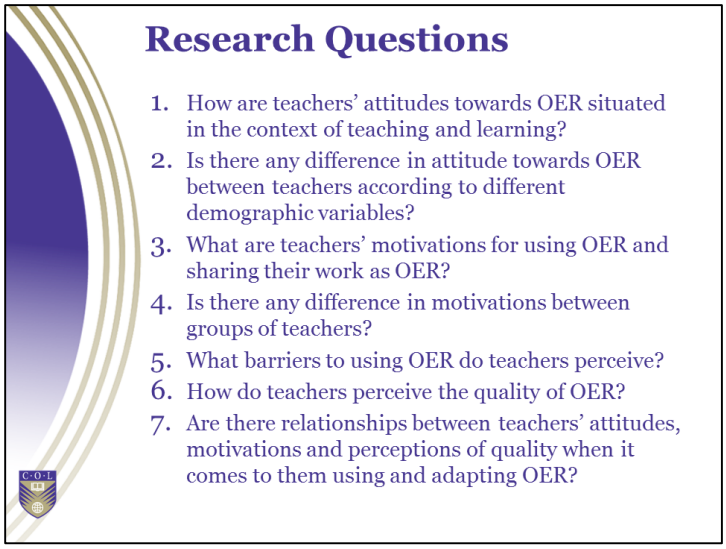
Slide 3



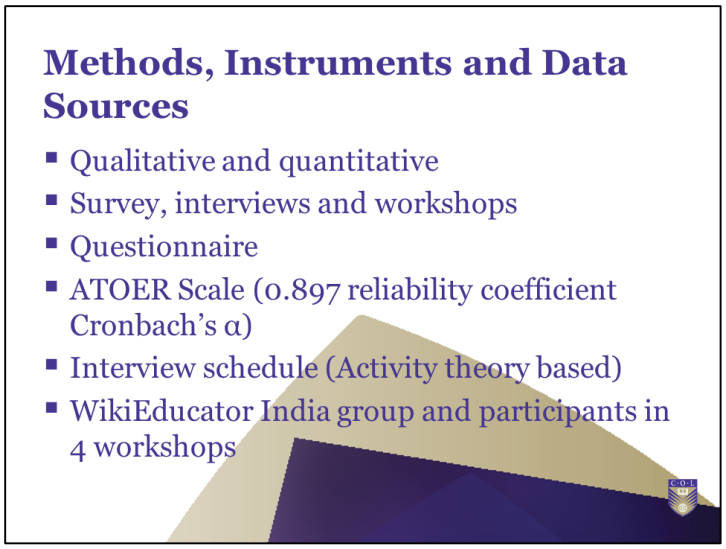
Slide 4



Slide 5



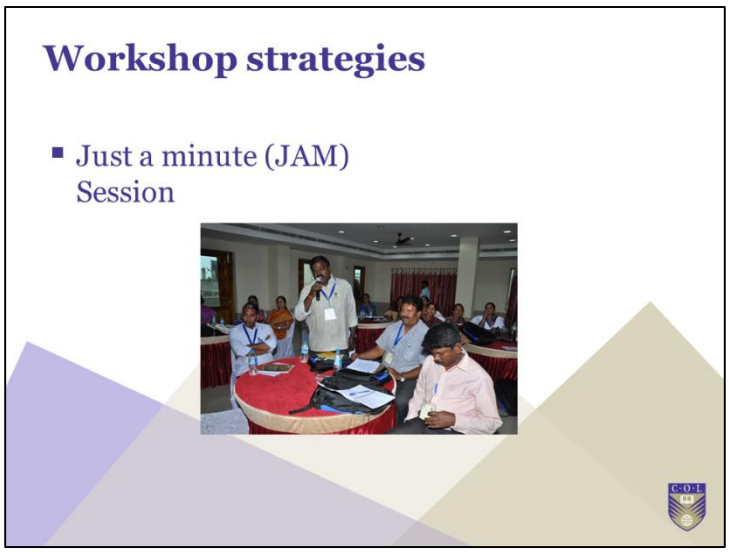
Slide 6



Slide 7

Slide 8

Slide 9



Slide 10

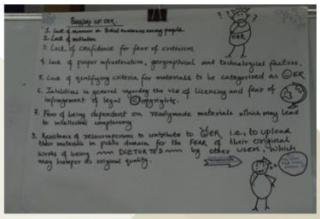
Workshop strategies

- Interactive Q & A session on Motivations

Slide 11

Workshop strategies

- Group Discussion on Barriers to OER

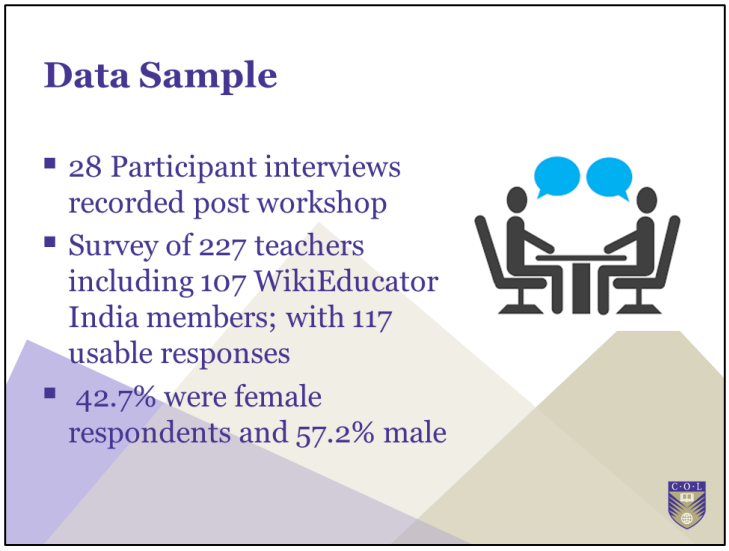


Slide 12

Workshop strategies

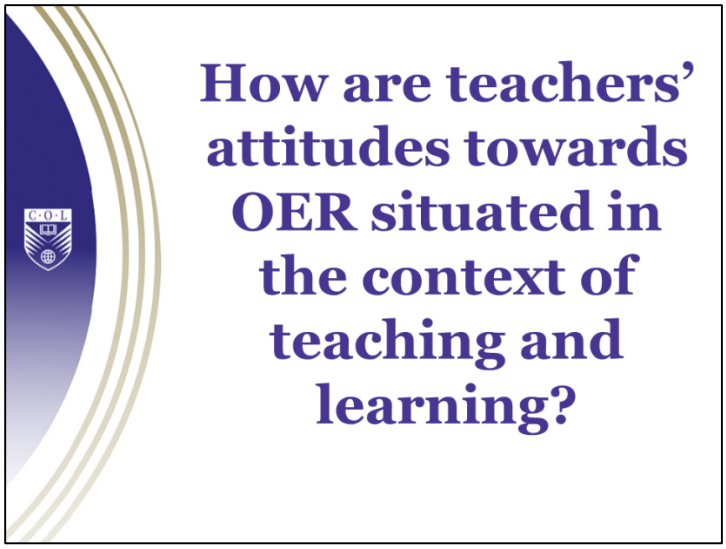
- Debate on Quality
- Audio recording of views of participants

Slide 13



Slide 14

Slide 15



Slide 16

Attitudes towards OER

Sharing Attitudes	Mean
It gives me pleasure if someone adopts/adapts my educational resources.	4.65
Sharing helps me to get feedback.	4.58
Sharing of educational resources improves my professional respect.	4.54
Sharing enhances my personal and organizational reputation.	4.5
Sharing enhances my confidence, as I see myself as part of a larger community.	4.46
OER increase my network and sphere of influence.	4.42
OER improve my chance of recognition at a global level.	4.41
When others use my OER, it improves my sense of achievement.	4.4
Sharing of educational resources increases my profile amongst peers and others.	4.33
OER help to disseminate my ideas.	4.29
I believe that sharing educational materials as OER will encourage others to do so as well.	4.27
OER promote collaboration and consortia.	4.25
As a teacher, it is my responsibility to share all educational resources created by me.	4.06

Slide 17

Attitudes towards OER

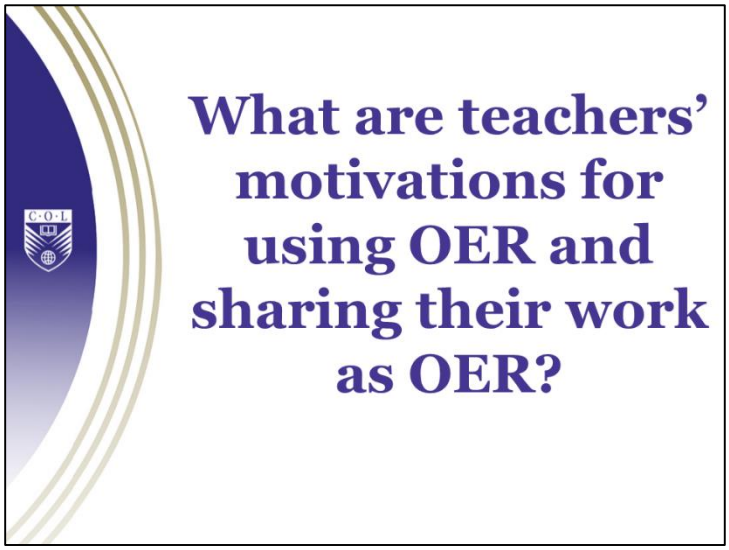
Adaptation attitudes	Mean
My own competencies and knowledge towards OER help me to participate or adopt OER.	4.19
I adopt OER for my teaching as they fulfil academic requirement of my students.	4.12
I am efficient in information communication technology (ICT) skills to adopt and use OER.	4.09
I have knowledge of intellectual property rights to understand OER.	3.72

Slide 18

Key Findings on Attitudes

- Teachers had positive attitudes towards OER, and their attitudes did not differ significantly across demographic variables
- Attitude towards **sharing** was stronger than towards **adapting** materials developed by others
- Share for the pleasure of sharing and to disseminate their ideas to others.
- Sharing is a responsibility for teachers, and they felt happy to share their work and receive feedback from others
- Sharing would lead to reciprocal behaviour
- Teachers were not strongly positive towards adaptation of OER

Slide 19



Slide 20

Motivation for OER

Statements (Motivation to Use and Adapt OER)	Mean
Social/Altruistic	
Sharing knowledge is a basic academic value.	4.7
OER will help developing countries increase access to education.	4.55
Learning	
OER give me opportunities to learn new things.	4.51
OER cater to the innate desire to learn, improve and progress.	4.48
Access, Cost and Time	
OER provide access to the best materials and teachers.	3.9
OER are less expensive.	4.4
OER save my time.	4.27
Collaboration	
OER provide us with opportunities to establish new partnerships.	4.25
I like to be involved in peer production of OER.	4.22
Individual Benefits	
OER improve professional image.	4.18
OER increase my self-confidence.	4.11
Involvement in OER will bring me recognition.	4.05

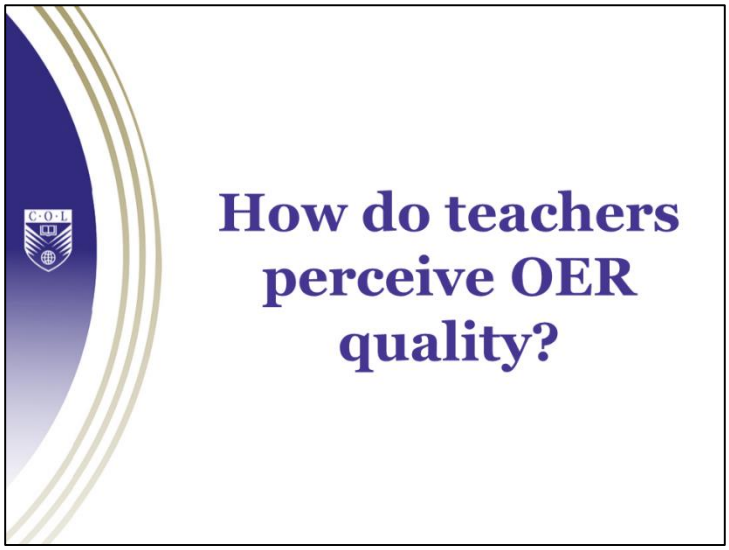
Significant difference in motivation found amongst different age groups, and qualifications.

Slide 21

Key Findings on Motivation

- Teachers are highly motivated to share educational materials as OER
- Largely motivated to use and share for altruistic reasons
- Motivated to use OER due to the learning opportunities offered by OER, and the possibility of saving money and time
- Collaboration opportunities for OER work is also a motivating factor
- Other motivating factors include: opportunities for improving self-confidence, recognition and professional image.
- Motivations not significantly different across different groups of variables, except for age and highest qualification.

Slide 22



Slide 23

Perceptions of Quality OER

Statements	Mean
If OER are **appropriate** in their content, I prefer to use them.	4.46
OER are free resources available through open licences.	4.41
OER bring down the cost of learning materials.	4.37
I prefer to use OER from **trustworthy** sources.	4.37
OER saves teachers' time.	4.23
Open licensing of OER enables **continuous quality improvements**.	4.17
I use trustworthy OER from **reputed institutions**.	4.09
I often use OER, which **fulfil the pedagogical needs** of the teaching-learning process.	4.07
OER help developing countries obtain quality materials.	4.05
OER **need localisation**.	3.97
I don't need permission to reuse OER.	3.76
Lack of **peer review** of OER makes them susceptible to poor quality.	3.74
The quality of OER is questionable.	3.49

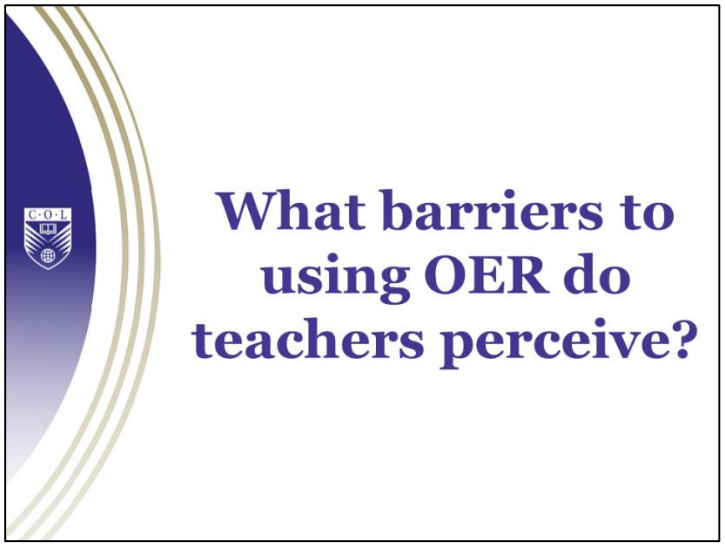
Significant difference in perceptions of quality between contributors and non-contributors

Slide 24

Key Findings on Quality

- Personal criteria of appropriateness to measure OER quality
- Trustworthiness of OER sources and reputation of the source are important consideration when deciding about quality
- To be considered quality materials, OER should support the pedagogical needs of the teaching and learning processes
- An open licence is itself an indicator of quality, as it provides the opportunity for continuous improvement of the resource
- OER need to be localised and adapted to specific contexts to be fit for purpose
- OER should undergo the rigour of peer review to be considered quality materials
- Quality assurance of OER should be the responsibility of those who prepare the materials, and institutions should create mechanisms to assure quality

Slide 25



Slide 26

Top 5 Barriers

- Lack of understanding of intellectual property licences, copyright and Creative Commons licences. (47%)
- Current workload. (43.59%)
- Lack of recognition and rewards system for developing OER. (40.17%)
- Lack of technological support to resolve my problems. (32.48%)
- Lack of financial resources at the institution to invest in OER. (29.91%)

Slide 27

Barriers and Gender

Rank	Male	Female
1	Lack of recognition and reward (43.28%)	Lack of knowledge of copyright and licensing issues (54%)
2	Lack of time (41.7%)	Lack of time (46%)
	Lack of knowledge of copyright and licensing (41.7%)	

No significant difference statistically

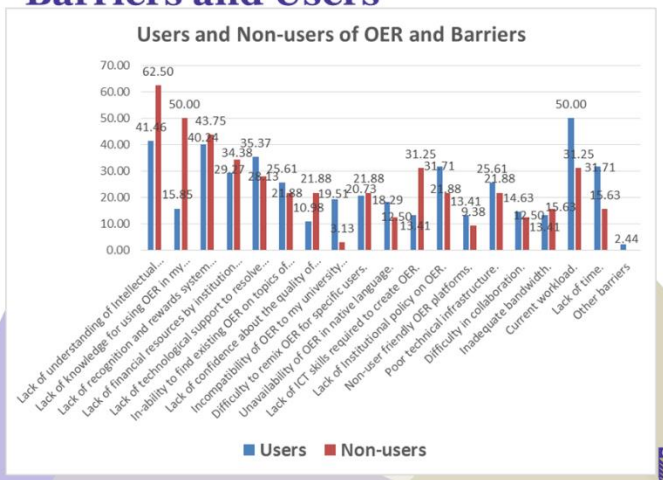
Slide 28

Barriers and Age

Rank	<35 Years	36-50 Years	51and above Years
1	Lack of knowledge of copyright and licensing to be the top barrier (58.33%)	Bandwidth issues (50%)	Current workload (90%)
2	lack of recognition and reward (48.33%)	Lack of ICT Skills (36.36%)	Lack of knowledge about using OER for teaching and learning (60%)

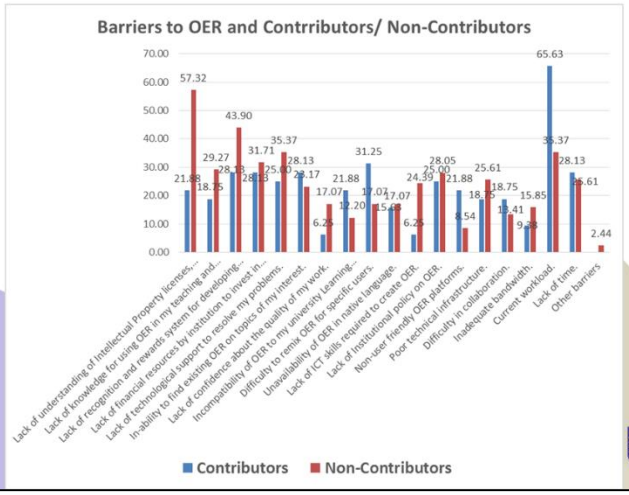
Slide 29

Barriers and Users



Slide 30

Barriers and Contributors



Slide 31

Key Findings on Barriers

- Poor understanding about licensing and copyright issues
- Current workload
- OER not integrated into work practice and seen as additional burden
- Lack of recognition and reward system for OER
- No OER policy in institutions
- Poor technical support and bandwidth

Slide 32

Are there relationships amongst teachers' attitudes, motivations and perceptions of OER quality?

Slide 33

Regression Findings

- Only motivation and attitudes are moderately correlated (r = 0.45), not significant at 0.05 level
- Multiple and step-wise regression indicated several items of motivations and quality correlated to attitudes towards OER

Slide 34

Items related to positive attitudes

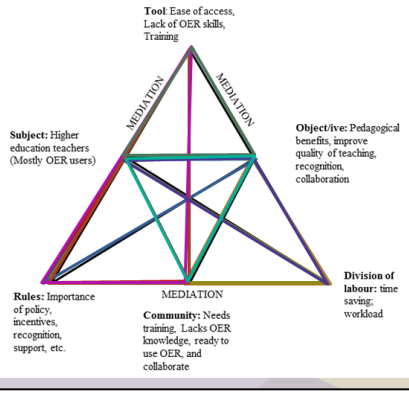
- Motivation Items:
  - OER provides us with opportunities for establishing new partnerships.
  - OER gives me opportunities to learn new things.
  - Involvement in OER will bring me recognition.
  - I like receiving comments and feedback from experts and senior colleagues on OER I have created.
  - I know about my intellectual property rights under Creative Commons licences.
  - Through OER, I can reach disadvantaged communities.
  - OER will help developing countries increase access to education.
- Quality Items:
  - OER saves teachers' time.
  - I do not need permission to use OER.

Slide 35

Activity Theory

Slide 36

Analysis of Triads

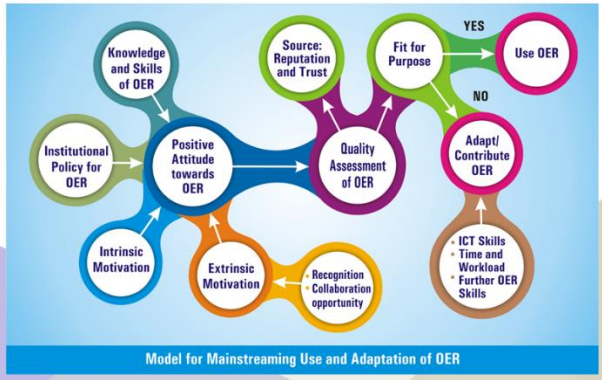


Slide 37

Model for OER Adoption

Slide 38

Proposed Model



Slide 39

Recommendations

Slide 40

Slide 41

Annex IV

Commentary on Monograph

Mishra, S. (2017). *Promoting Use and Contribution of Open Educational Resources.* New Delhi: CEMCA.

Professor Santosh Panda
Indira Gandhi National Open University

The current movement toward Open Educational Resources (OERs) has a long historical precedence in the open education movements including that of the provision of equality of educational opportunity, recognising though that two individuals, nor even twins, learn the same way. This later became a more contentious issue for the designers of OERs as well as the planners with regard to respectively: how best to serve the individual learning styles of learners, and what could be the cost-efficiency of alternative learning resources, including OERs.

The above unresolved issues notwithstanding, the practice of OERs (and subsequently MOOCs as a part of OER and the OER movement), starting from UNESCO's coinage of the term ad MIT's opening up of large number of courses for free, and subsequent initiatives by UKOU, IGNOU, COL, EdX, Coursera, Udacity, Khan Academy and many others, has generated considerable enthusiasm in policy makers as well as academic leaders and teachers. 'Open sharing' has been a foundational issue for large scale use of OERs; and it is as much personal as systemic. Therefore, it is imperative that these and a multitude of dimensions need to be rigorously examined through research for its effective / productive use. The now-recognised debate on adoption and use of ICT through "dominant diffusion model of the past, and the social shaping model of the recent times" may help us appreciate how best OERs can be leveraged to derive the most utility.

It is in this context that the current review of the research undertaken by Dr Mishra could be located. Teachers, as practitioners, are a sceptical lot, who need to be convinced that it is worth doing; need to be facilitated how best to do; and most importantly, need a 'system' within which such a seamless activity can be undertaken. These are critical issues which need to be addressed; and the current research assumes considerable significance in as much as it has tried, for the first time, to comprehensively examine the issue from a variety of dimensions.

The research, as part of ROER4D network and funded by IDRC, is very timely, and addresses as to how best OERs can be used/ reused more effectively by both contributors and non-users. The study was conducted on 148 Indian college and university teachers (though, finally, 117 questionnaires and interviews could be analysed), who attended four interactive workshops on OERs by CEMCA at four regions of the country. The interactive sessions included: just-a-minute sessions, interactive quiz sessions, snowball sessions, and panel discussions. A structured Attitude Towards Open Educational Resources (ATOER) scale, developed by Mishra et al (2016), was used in this study. The scale was further standardised through factor analysis, and 17 statements (13 on sharing, and 4 on adaptation) were finally used. The study

focused on four variables: attitudes, motivations, barriers, and quality—within a well-structured research framework derived from the Activity Theory of Engestrom (1987) and the idea of mediating tool advocated by Vygotsky (1978).

While fully establishing the reliability and validity of the research instruments, the researcher has also adopted appropriate statistical tools to analyse data—both quantitative and qualitative. The quadrant used for analysis included: contributor-noncontributor-user-nonuser. The findings suggest that: i) though teachers generally have positive attitude toward OER and are happy to 'share', they are not as much willing to use OERs of others; ii) the most important user-motivation was willingness to share, followed by learning opportunities, collaboration and professional image, though 'learning effectiveness of students' could not be identifies as a motivator; iii) for perception of quality of OERs, authenticity was a major factor, followed by appropriateness to current teaching-learning and localisation of content; iv) the major barriers included lack of knowledge about licensing and copyright issues, current teaching workload, lack of technical support, and absence of OER policy; and v) the regression analysis results suggest that the displayed positive attitude was highly influenced by opportunities of partnership, learning and recognition opportunities, and the philosophy of reaching-the-unreached.

This is a comprehensive and well-designed study, and was conducted within a well-articulated framework, useful for both policy analysis as well institutional and faculty adoption of OERs. More research though is needed to further crystalise how best OERs can address the twin pillars of higher education in India today—numbers on one hand, to increase GER; and quality on the other hand, to achieve employability and happy living. Some research outputs by the reviewer, in collaboration with colleagues from Asia (Chen & Panda, 2012; Santosh & Panda, 2016; Santosh & Panda, 2017), may be of use to interpret the findings of Dr Mishra in-context.

We need to focus also on some very interesting findings vis-à-vis unanswered questions. Why does a positive attitude toward OER not lead to actual use of OERs? Is professional ethics anything to do with use of OERs? Could important motivation factors include: i) factoring of OERs in the API and promotion? ii) who shares the cost of developing OERs?; iii) when one's own OER is sharable, why bring in the issue of authentication of OERs developed by others? How could private and some profit-making institutions could use OERs to their advantage, and why public institutions are lagging behind? The researcher's quadrant of types of OER practitioners (Figure on page 12) further suggests that it is important to study a very important part of the quadrant, i.e. why does one think of contributing, but not using OERs—this is very disturbing. Further, the model for promoting OERs in India (Figure on page 119) is highly appreciated. Experience tells us that lack of a 'SYSTEM' is the major constraint in so far as use of ICT, including MOOCs and OERs, in India is concerned. The system and culture of seamless facilitation and blending of ICTs and OERs in teaching-learning, professional development including performance appraisal, and institutional accreditation is lacking. Should we articulate more and further research on this!

References

Chen, Q & Panda, S. (2012). Needs for and utilization of open educational resources in distance education: A Chinese survey. *Educational Media International*, 2, 1-16.

Engestrom, Y. (1987). *Learning by Expanding: An activity-theoretical approach to developmental research.* Helsinki, Finland: Orienta-Konsultit.

Panda, S. & Santosh, S. (2017). Faculty perception of openness and attitude towards open sharing at the Indian national open university. *International Review of Research in Distance and Online Learning*. (forthcoming)

Santosh, S. & Panda, S. (2016). Sharing of knowledge among faculty in a mega open university. *Open Praxis*, 8(3), 247-264. (ICDE)

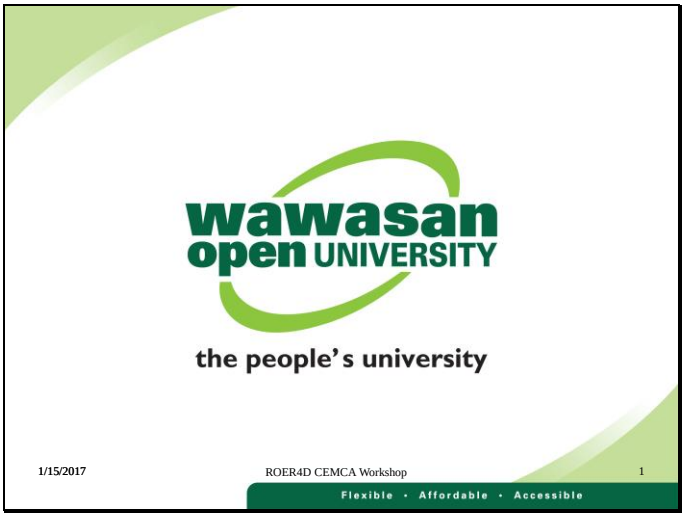
Vygotsky, L. (1978). *Mind in Society.* Cambridge, MA: Harvard University Press.

(Professor Santosh Panda is a professor of distance education, Staff Training & Research Institute, Indira Gandhi National Open University. In the past, he has been: Director, STRIDE & Director, Inter-University Consortium, IGNOU; Director, Association of Indian Universities; Director of Flexible Learning Centre, The University of the South Pacific; a senior Fulbright Scholar, USA; and Chairperson, National Council for Teacher Education, Government of India. Email: spanda@ignou.ac.in).

Annex V

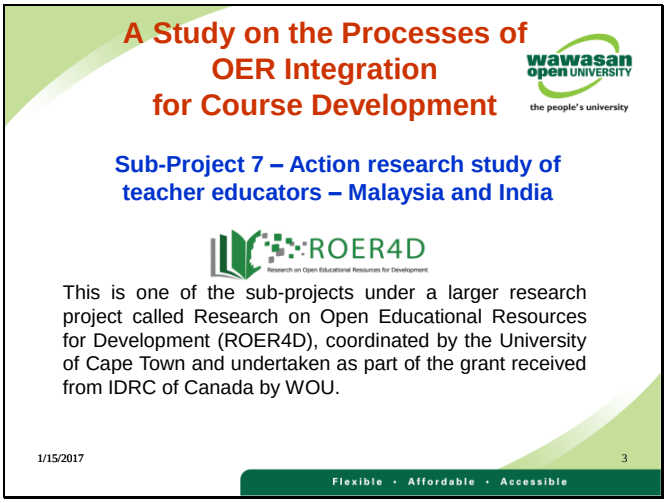
A Study on the Adoption and Integration of OER Materials in Self-Instructional Course Development by Prof., M.B. Menon

Slide 1



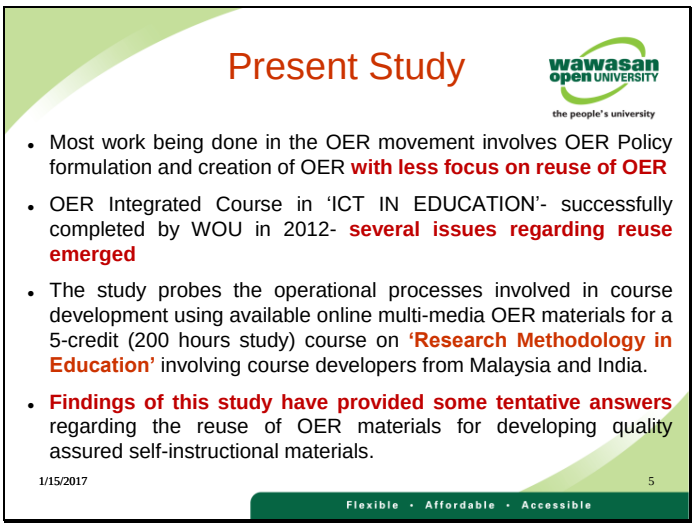
Slide 2

Slide 3

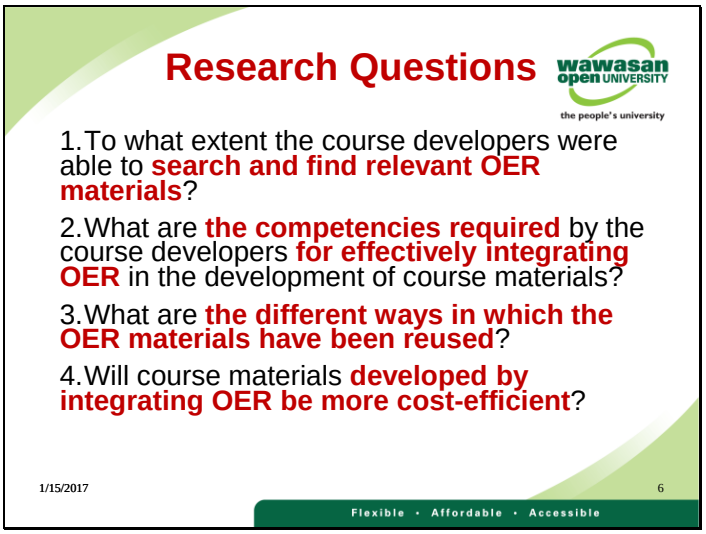


Slide 4

Slide 5



Slide 6



Slide 7

Research Questions

6. Will course users (learners) engagement in studying through OER integration **impact on their conceptual knowledge of OER and Attitude towards OER?**

7. Will the use of OER integrated course materials expected to be of high **quality from learners' perspective?**

This presentation focusses mainly on the first part of the study responding to the first FOUR Research Questions.

Slide 8

Specific Objectives

The present study will have the following specific objectives:

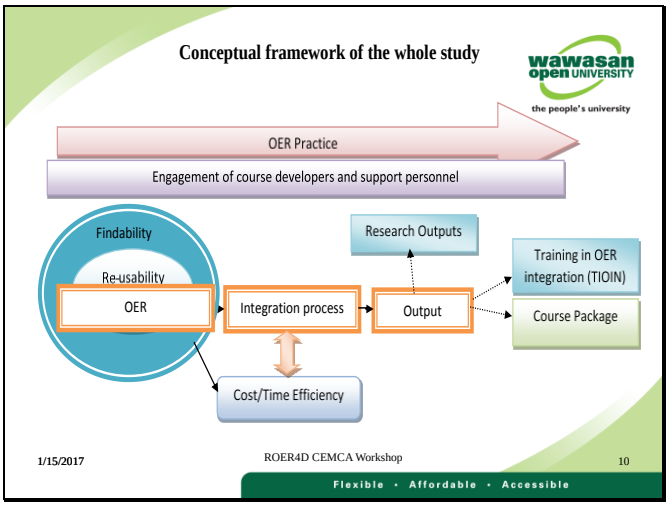
- To study the ***findability*** in searching for and identifying appropriately licenced online multi-media OER materials to suit the curriculum of the selected course
- To identify the various ***factors/competencies facilitating re-usability and ways of reusing OER*** for developing a new course by adopting and integrating relevant OER materials.
- To study the ***cost/time efficiency*** of developing an OER integrated course materials.

Slide 9

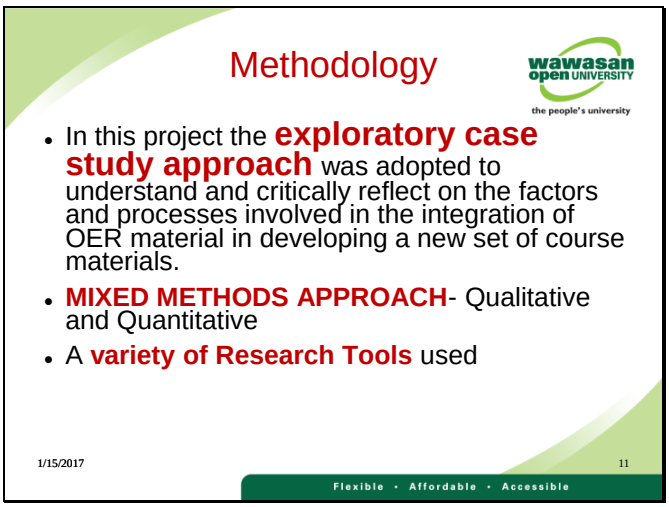
Definition of variables

- **'Findability' is "the ability of users to identify an appropriate web site and navigate the pages of the site to discover and retrieve relevant information resources" (Peter Morville, 2005)**
- **'Reusability' is an essential feature (set of competencies) for OER designers having the facility and flexibility for adopting and/or adapting them. (Okada, 2012)**
- **'Cost/Time Efficiency': relates to a comparison of what is actually produced or performed (OER-integrated course development) with what can be achieved with the same consumption of resources in terms of money and time.**

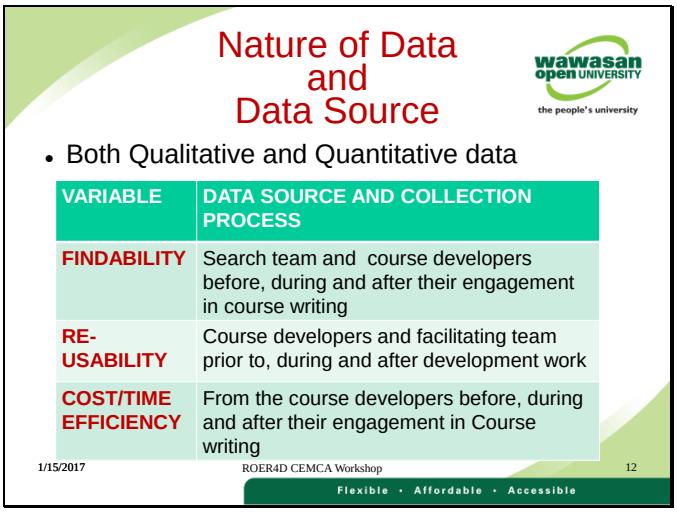
Slide 10



Slide 11



Slide 12



Slide 13

Research Tools

Variable	Tools
Findability	❖ Search LOG ❖ Group reflections Questions
Re-usability	❖ Course development LOG ❖ Written Format for individual reflection on OER use ❖ Rating scale on a set of evaluation criteria ❖ Narratives by course developers ❖ Focus group discussions ❖ Semi-structured interviews
Cost/Time efficiency	❖ Course development LOG ❖ Individual Reflection Questions

1/15/2017 13

Flexible • Affordable • Accessible

Slide 14

FINDABILITY

Findability data were collected from three sources viz. log records of the search team, narratives of the authors and observations and interviews/focus group discussions conducted by the research team.

SEARCH TEAM CONSISTING OF LIBRARY STAFF

FINDINGS OF THE SEARCH TEAM SUBSTANTIATED BY THE COURSE DEVELOPERS

1/15/2017 14

Flexible • Affordable • Accessible

Slide 15

FINDABILITY

FORMAT

Format	Number of Resources identified	Percentage
PDF	54	22.78
HTML	153	64.57
Word	8	3.38
PPT	11	4.64
Video	11	4.64
TOTAL	237	

1/15/2017 15

Flexible • Affordable • Accessible

Slide 16

FINDABILITY

LICENCE TYPE

LICENCE TYPE	No of Resources	Percentage
CC-BY	49	20.68
CC-BY-SA	61	25.74
CC-BY-NC-SA	74	31.22
CC-BY-NC-ND	5	2.11
Restricted Copyright	32	13.50
Non-OER/Not stated	13	5.49
Public domain	3	1.27
TOTAL	237	

1/15/2017 16

Flexible · Affordable · Accessible

Slide 17

FINDABILITY

Time taken

FINDABILITY TIME	No of Resources	Percentage
Less than 10 minutes	75	31.65
10 minutes	58	24.47
15 minutes	38	16.03
20 minutes	35	14.77
25 minutes	6	2.53
30 minutes	24	10.13
More than 30 minutes	1	0.42
TOTAL	237	

1/15/2 17

Flexible · Affordable · Accessible

Slide 18

FINDABILITY -According to Course developers

	1. Availability	2. Variety- Media	3. Variety - Text types	4. Relevance	5. Openness	6. Quality	7. Communication Friendliness	8. Format Suitability	CONSOLIDATED AVERAGE RATING
Pre-CDW Average rating	5.4	4.8	5.2	4.2	3.6	4.2	4.8	3.6	**4.47**
Post-CDW Average rating	5.0	4.2	5.0	4.4	4.4	4.4	4.2	4.0	**4.52**
CONSOLODATED AVERAGE RATING	5.2	4.5	5.1	4.6	4.0	4.3	4.5	3.8	**4.5**

1/15/2017 18

Flexible · Affordable · Accessible

Slide 19

REUSABILITY

- On the part of COURSE DEVELOPERS
- A **triangulation** of findings from the content analysis and coding of the reflections and observations of the course developers prior to, during and after the course development wokshops- Recordings of individual and focus group discussions, interviews as well as diary recordings and their written log records and findability ratings was carried out. Analysis of the recorded observations of the facilitators regarding the course development process was also carried out

1/15/2017 19

Flexible · Affordable · Accessible

Slide 20

Content Analysis and Coding Process

- Stage 1: Content analysis identification of emerging common and high occurring 'factors' of a few recording selected from each course developer- This led to the identification of initial list of codes

1. **Subject Content Expertise**
2. **Content Specific Pedagogy**
3. **Instructional Design/Template**
4. **Learner needs and learning context**
5. **OER and Open Licence Awareness**
6. **OER Search and Reuse Skills**
7. **Language competency**
8. **Learning materials Writing skills**
9. **IT related skills**

1/15/2017 ROER4D CEMCA Workshop 20

Flexible · Affordable · Accessible

Slide 21

Content Analysis and Coding Process

- Stage 2: Applying the initial factors on the remaining data
  - INITIAL LIST

1. Subject Content Expertise
2. Pedagogy Suiting Content----------
3. Instructional Design/Template-----
4. Learner needs and learning context-
5. OER and Open Licence Awareness
6. OER Search and Reuse Skills
7. Language competency----------
8. Learning materials Writing skills----
9. IT related skills

FINAL LIST of CODES

- Subject Content Expertise (SCE)
- Content Specific Pedagogy (CSP)
- Local Learning Environment (LLE)
- OER Conceptual Awareness (OCA)
- OER Reuse Expertise (ORE)
- Language and Writing Skills (LWS)
- IT Skills (ITS)

1/15/2017 ROER4D CEMCA Workshop 21

Flexible · Affordable · Accessible

Slide 22

Content Analysis and Coding Process

- Stage 3: Endorsement of the final codes with the Course Developers and Facilitators
- The resultant factors that emerged from the findings indicated 7 competency areas which would facilitate the effective findability and integration OER materials to develop a quality assured course material.
- 3 Content and Learning Related Competencies
- 2 OER related competencies
- 1 Generic communication related competency
- 1 Generic IT use related competency

Slide 23

Sample extracts from narratives of course developers (emerging codes are indicated in brackets)

Extract from Course Developer-1: Initially I felt that I missed quite a bit of the orientation to writing through the OER approach (OCA & ORE), but I caught up later. I think that there are mainly two components to this work: one is the access to relevant materials on the internet and two, the ability/skill to adapt other OER materials (ORE) to our need/purpose (LLE). As for the first one, although I had lots of materials to start with, until I learnt to make sense of how I can re-use/purpose/fashion it (ORE). I was very tempted to write my own as I have been teaching the content for many years (SCE). My own repertoire in the area wasn't too bad given my several years of handling this course face-to-face (CSE & LLE), but realized that other materials in variety of media can only enhance the quality of presentation (QE) and would help in catering to the needs of all learners (LLE)

Slide 24

Sample extracts from narratives

Extract from Course Developer-2: I needed two kinds of resources to suit the needs of the instructional design (CSP & LLE) and the conducive pedagogy (CSP) for such a subject two kinds of resources, one on explanations on the logic of an analysis procedure and the second on illustrations and exercises for practice. My good understanding of the subject content (SCE) and my long teaching experience (CSP) would have helped in identifying the relevant content without much difficulty. And I was well oriented in OER related concepts (OCA) and also had some experience of reusing OER (ORE). Some parts were largely written by me (NCR) with some inputs from OER materials and these were easily available. More than one resource can be used for the same content (MIX) , the textual part could be reused with alterations/ adaptations (ADA) but the video/audio material could not be due to the fact that it required additional technical skills which I did not possess (ADO & ADA).

Slide 25

Sample extracts from narratives

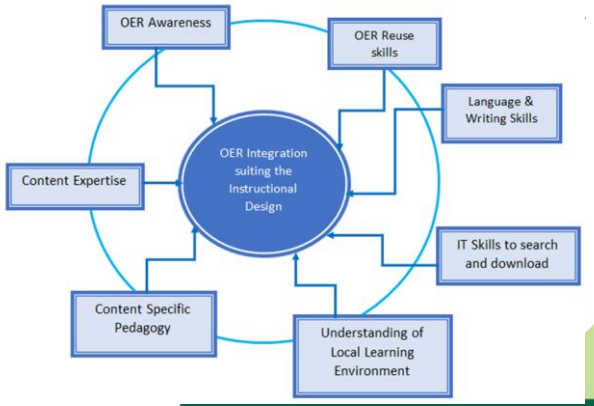
Extract from course developer-3: The strategies used for development of resource based course material is largely linked to the model as adopted a situated learning design, as evolved by the group (CSP & LLE). This decision was important and did give the required guidance at the time of OER use. The group was adequately given orientation by the organiser on how to locate and use the existing web-based resources (OCA & ORE). I was already aware of OER concepts (OCA). The workshops organised gave me sound footing on locating the relevant web-based resources to accomplish the task on developing the module (OCA & ORE). It was also a challenging task to ensure that these materials meet the standard norm to be characterised as OER and free from copyright (ORE). It is always essential that the writer of the module has acquired necessary competencies on understanding of the subject matter and also has specialisation thereupon (SCE). Understanding of how to transact this content in a teaching situation (SCP) to suit the needs of a group of learners (LLE) is very necessary. The resource person engaged in writing such module should have positive mind set and mastery on using new technology, especially competencies on locating right type of web-based resources (ITS).

1/15/2017 ROER4D CEMCA Workshop 25

Flexible · Affordable · Accessible

Slide 26

COMPETENCIES/FACTORS INFLUENCING EFFECTIVE REUSABILITY



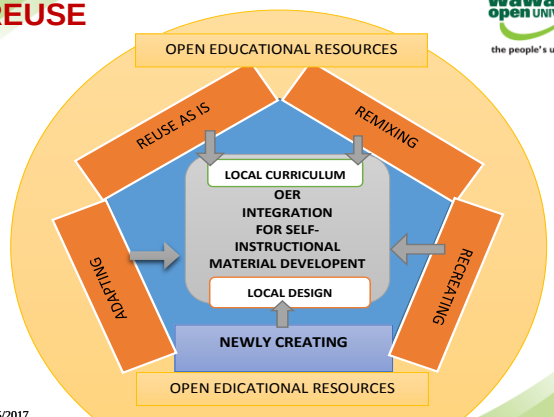
1/15/

Flexible · Affordable · Accessible

Slide 27

DIFFERENT WAYS OF REUSE

the people's university



1/15/2017 27

· Accessible

Slide 28

Cost-Efficiency

- Course Developers had **expressed their thinking about cost-efficiency** based on their experience of finding and reusing and integrating OER for course development.
- When **a large chunk of OER text materials** (such as an open book or an entire course) **are available** in advance **it became easier and less time consuming** to use these materials and contextulise/localise them.
- Using **a large number of smaller reusable learning objects (RLOs) took more time**.
- **Expertise in 7 competencies** including 5 core competencies and 2 supportive competencies emerged in the study enhanced the cost efficiency of OER based course development

1/15/2017 28

Flexible · Affordable · Accessible

Slide 29

Cost-Efficiency

- When OER materials are **collected in advance for each concept or a section of the module** by experienced and competent persons, **the course writers took less time to integrate**
- The search team reported that **over 80% of relevant OER materials could be searched, discovered and down loaded within 20 minutes in each case, of which over 55 % took only less than 10 minutes.**
- There is a conclusive agreement among course developers that **using OER enhanced the quality of the course produced in several ways**

1/15/2017 29

Flexible · Affordable · Accessible

Slide 30

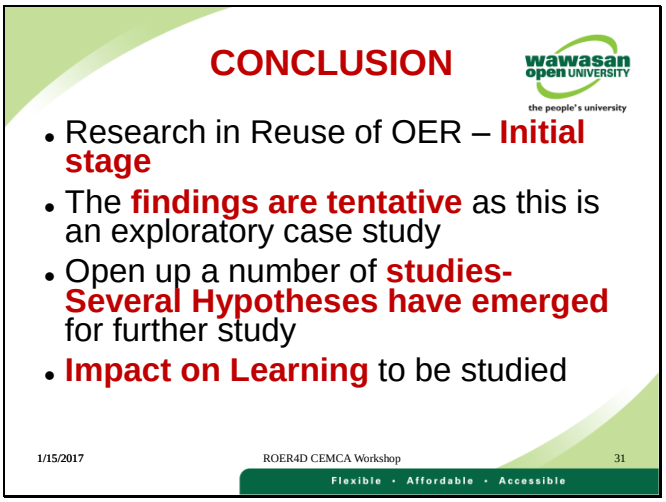
RESULTANT OUTPUTS FROM THE SUB-PROJECT

- **A package of Self-instructional Learning Material for a 5-Credit (200 hrs study hours) Course in Research Methodology at Post-Graduate Level- to be released with CC-BY-SA Licence**
- **Standardised Research Tools- to be released soon:**
  - OER Conceptual Understanding Questionnaire (OER-CUQ)
  - OER Attitude Scale for Course Developers (OERAS-CD)
  - OER Attitude Scale for Course Learners (OERAS-CL)
  - OER Quality Assessment Scale (OER-QAS)
- **Training in OER Integration (TROIN) – 2 day Training Workshop for Course Developers and support personnel in 'OER Search, Reuse and Integration**

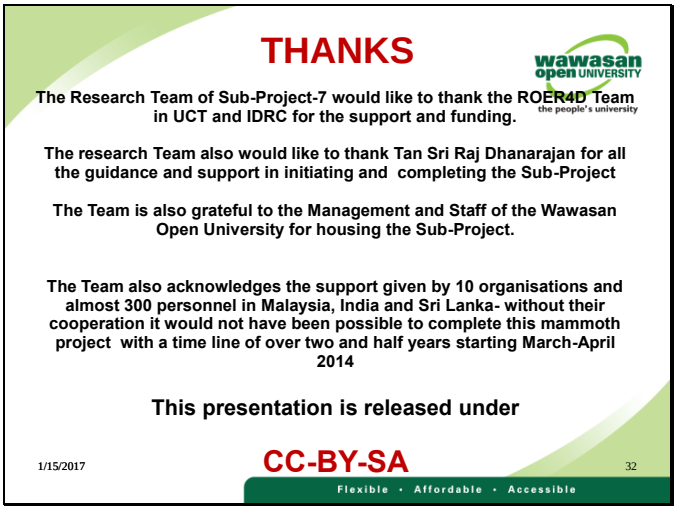
1/15/2017 ROER4D CEMCA Workshop 30

Flexible · Affordable · Accessible

Slide 31



Slide 32



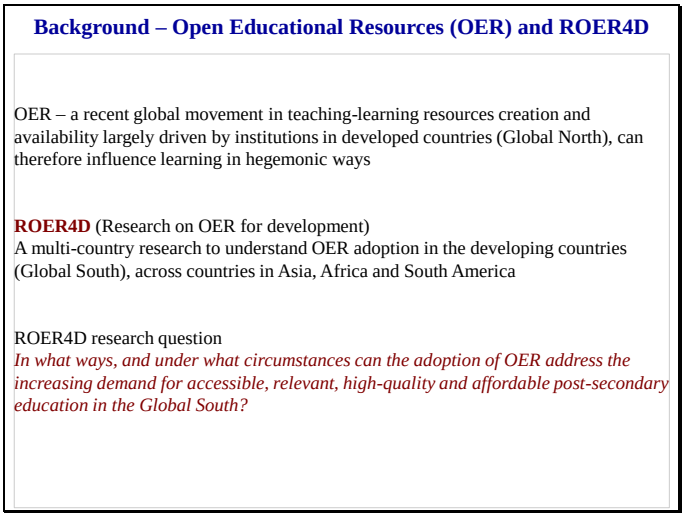
Slide 33

Annex VI

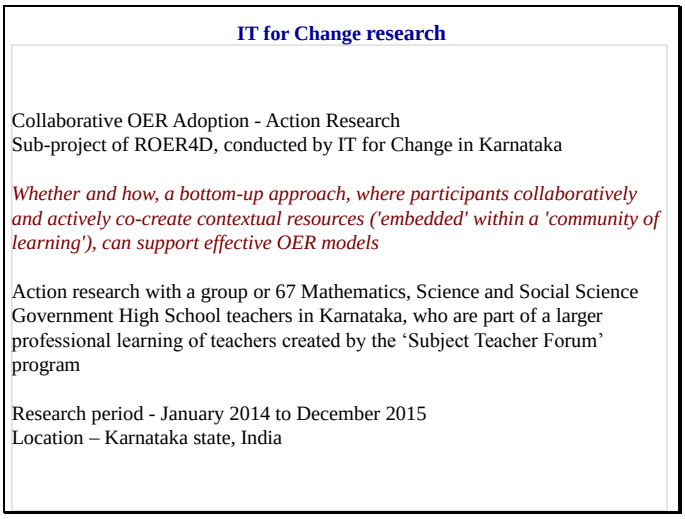
Teacher Professional Learning Communities: a collaborative adoption approach to OER in Karnataka by Kasinathan Gurumurthy

Slide 1

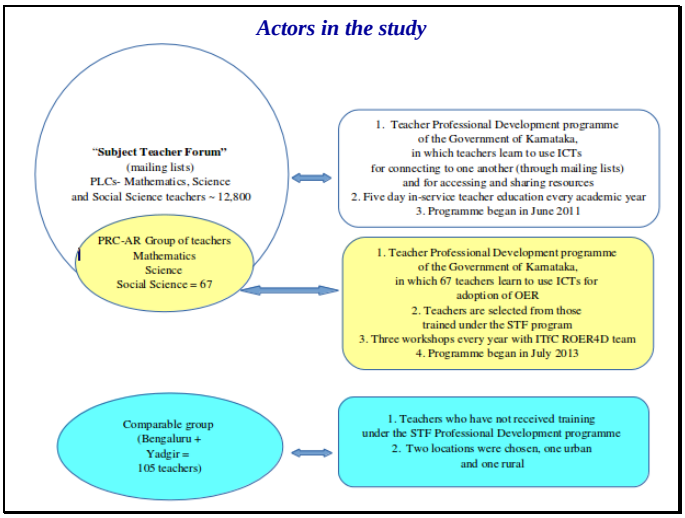
Slide 2



Slide 3



Slide 4



Slide 5

Context to the our research

OER adoption constrained by

Techno-social context
ICT program penetration high in high schools but actual availability poor
Teachers use of ICTs poor, outsourced model of implementation
Proprietary software environment

Pedagogical context
"Text book" culture / Teacher as a minor technician
Free supply of textbooks to all teachers and students

Socio-cultural context
Linguistic diversity
Text books created at state level may not be able to address local contexts

Slide 6

Literature review

Cultural factors impact OER use and adoption. (Ngimwa & Wilson, 2012)

- Actual adoption of OER seems marginal in the global South. Thakrar, Zinn & Wolfenden, 2009 and Hatakka 2009

- There is need to avoid a culture of dependency; African institutions must be more than consumers; they also need to be generators of new knowledge and the means of sharing that knowledge" Ngugi 2011.

Contextual OER

- How effective are OERs outside of the context they are created? Ferreira (2008)

- There is a risk that language barriers and cultural differences could consign less developed countries to the role of OER consumers rather than contributors to the expansion of knowledge. Paul Albright 2006

Collaborative OER

- OER creation through collaborative design. Sapire and Reed (2011)
Processes of peer review, feedback to improve teacher capability. Petrides, Jimes, Middleton-Detzner & Howell, 2010

- "Teachers' engagement with OER has the potential to support enhanced teacher collaboration and curriculum development activities as well as information sharing about resources, practices, and teaching challenges by encouraging a shift in focus from materials production to mentorship and facilitation." (Ossiannilsson & Creelman, 2012).

Slide 7

Methodology

Qualitative

.Focus Group Discussions with COA teachers

–Sharing beliefs and perspectives on OER, TPD and PLC

.Key Informant Interviews with teachers and officials

–Factors favouring and constraining the development of an effective OER model based on PRC processes amongst teachers

.Mail analysis of the mails shared in the PLC forums / mailing lists

–Reuse, creation, revision, remixing, re-distribution of resources by COA teachers in the PLC mailing lists

.KOER content analysis

–Creation, and sharing of resources by COA teachers on the KOER wiki portal

Slide 8

Methodology

Mixed Method approach

Quantitative

.Closed ended questionnaire for participating teachers and comparable group of teachers

Qualitative

.Focus Group Discussions with COA teachers

–Sharing beliefs and perspectives on OER, TPD and PLC

.Key Informant Interviews with teachers and officials

–Factors favouring and constraining the development of an effective OER model based on PRC processes amongst teachers

.Mail analysis of the mails shared in the PLC forums / mailing lists

–Reuse, creation, revision, remixing, re-distribution of resources by COA teachers in the PLC mailing lists

.KOER content analysis

Slide 9

Findings - Questionnaire

Questionnaire administered to COA group and comparable group of teachers
Part 1 – To ascertain if the two groups are comparable
Age, academic qualifications, work experience, subjects taught of both groups similar.
Hence the groups are comparable.

Part 2- If the COA processes have impacted the COA teachers
Use of ICTs by COA group significantly higher
Use of computers and Internet
Computers and Internet for fulfilling learning needs

Use of digital resources
Use of ICTs for preparing to teach and for teaching students
Adaptation of learning materials
Professional networking

This suggests that the COA processes have positively impacted the technology use, use of OER and teacher networking habits of the COA teachers

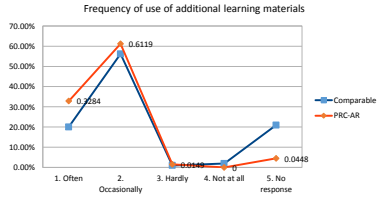
Slide 10

Usage of computers	Usage period (1-3years)	Percentage	Usage period (> 3 years)	Percentage
Comparable	0	0%	4	3.81%
PRC-AR	12	17.91%	44	65.67%

Usage of Internet	Usage period (1-3years)	Percentage	Usage period (> 3 years)	Percentage
Comparable	1	0.95''%	3	2.86%
PRC-AR	9	13.437%	45	67.16%

Computers for fulfilling learning needs	Usage period (1-3years)	Percentage	Usage period (> 3 years)	Percentage
Comparable	0	0%	1	0.95%
PRC-AR	11	16.42%	34	50.75%

Findings – Questionnaire Comparison between COA (PRC-AR) and Comparable groups



Slide 11

Use of ICTs for teaching students	Yes	Percentage	No	Percentage	No response	Percentage
Comparable	0	0%	47	44.76%	58	55.23%
PRC-AR	43	64.18%	5	7.46%	19	28.36%

Findings – Questionnaire Comparison between COA and Comparable groups

Professional networking	Comparable	Percentage	PRC-AR	Percentage
Interaction with teachers in your school	13	12.38%	65	97%
Interaction with teachers in your *taluka* (block)	9	8.57%	65	97%
Interaction with teachers in your district	11	10.48%	64	95%
Interaction with teachers beyond your district	11	10.48%	55	82%

Table: Creating resources in collaboration with others

Comparable	Percentage	PRC-AR	Percentage
6	5.71%	50	74.63%

	Creating learning materials	Percentage	Sharing learning materials	Percentage
Comparable	62	59.05%	68	64.76%
PRC-AR	59	88.06%	65	97.01%

Slide 12

Findings – FGD and Key Informant Interviews

Resources must be free (i.e. at no or low cost) and open to revision for use in the classroom.

Resources should be available in local languages to be contextually relevant.

Resources also need to be relevant to what is being taught and learner levels and needs.

Resources can help to increase content knowledge, supplement textbooks and even increase (student) interest in the subject

Resources shared and learning undertaken through a PLC were valuable processes available to them to update their knowledge

The use of digital methods in OER adoption helped teachers to create resources in different formats, using different editors and tools learnt in the workshops, and also share it with their peers over the mailing-lists

Slide 13

Month	PRC-AR (Mathematics and Science group)	Total PLC (Maths science group)
August 2014	142	1004
February 2015	56	2295
August 2015	298	3156
Total	**496**	**6455**

Findings – Mail analysis

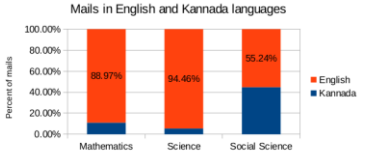


Table: Mails shared by PRC-AR teachers

Groups	PRC-AR	PLC members	Percentage	Mails shared by PRC-AR teachers	Total mails in the PLC mailing list	Percentage
Mathematics and Science	44	9,563	0.46%	3,397	50,264	6.76%
Social Science	23	3,319	0.69%	3,930	25,199	15.6%
Total	**67**	**12,882**	0.52%	**7,327**	**75,463**	9.7%

Slide 14

Analyses by type of mails

Focus area	Number	Percentage%
Count - Asking for help / seeking information or/ resources	21	4.57%
Count - Sharing resources – Reuse (including review comments)	56	12.20%
Count - Sharing resources – **Created**	102	22.22%
Count - Sharing resources – **Revised**	3	0.65%
Count - Sharing resources – **Remixed**	2	0.44%
Total mails	**184**	**42.70%**
Count - Others	275	59.91%
Total	**459**	**100.00%**

Analyses by OER processes

OER process	Number	Percentage
Count - Sharing resources – Accessed	56	34.43%
Count - Sharing resources – Created (incl specific resource ideas)	102	62.58%
Count - Sharing resources – Revised	3	1.84%
Count - Sharing resources – Remixed	2	1.23%
Total (also same as Re-distribute)	163	100.00%

Slide 15

Analyses by type of OER and formats

Nature of resource based on copyright	Number	Percentage
Explicit non-OERs	3	1.84%
Implicit non-OERs	0	0.00%
Implicit OERs	144	88.34%
Explicit OERs	16	9.82%
Total	163	100.00%

Slide 16

Findings - KOER content - summary statistics

KOER analytics	English KOER	Kannada KOER	Ratio of Kannada to English
Total web page views	1.67 million+	0.65 million+	38.92
Web pages created	4,400+	3,000+	68.18
Resource files uploaded	2,500+	1,500+	60.00
Users/ editors	285	346	121.40
	English Wikipedia	**Kannada Wikipedia**	
Number of articles	4.9 million+	16 500+	0.34

Subject	Number of resource pages created	Concept maps	Additional web links from the Internet	Audios/ videos/ images	Text materials (lesson plans)	Simulations/ animations (Geogebra)
Mathematics (English)	39	24	22	18	23	8
Science (English)	56	21	25	23	16	4
Mathematics (Kannada)	42	9	7	6	5	2
Science (Kannada)	51	21	14	44	15	1

Slide 17

Analyses - Impact of programme on the techno-social structure

1. Systemic integration of ICTs into TPD and resource creation programmes of the Education Department
Teacher training program conducted in ICT Labs in state and districts
Materials created and shared on digital networks

2. Capacity building for handling digital technologies and building agency.
Purchase of personal devices
Installation of FOSS operating system bundled with educational tools
'I want to buy laptop' and 'frequently asked questions' on the KOER portal

3. Creating a free and open environment.
Connecting public software and public education
Multiple tools learnt and used for resource creation
Resources in multiple (open) formats shared

Challenges
ICT infrastructure maintenance and availability still inadequate
Comfort and competence in use of ICTs, a time consuming process for many

Slide 18

Analyses- Impact of programme on the Techno-pedagogic structures

.COA processes enable creating and sharing resources
.Design of resources
.Being able to contribute in smaller units and sharing/ accessing
.Possibilities of remixing multiple formats of resources
(made possible in a Mediawiki platform)

.Impact of OER processes on TPD
–PRC group teachers reported far greater engagement with resource adoption than comparable group
–Reported higher use of additional materials
–Their conception of what is a resource has changed – documenting activities, processes and sharing
–Questioning the textbook culture
–Combining methods and formats and sharing
.Recording of a mapping lesson
.Digitizing in different ways and sharing

Slide 19

Techno-pedagogic structures – Teacher Agency

- Influence of the interactions between the COA group and PLC on TPD

–The mailing lists have emerged as spaces where teachers are taking ownership, self-regulating their conversations and moderating interactions.

–Within this context, the teacher community is responding to the various needs and priorities of teachers in terms of classroom resources and materials, and many contentious issues are publicly debated.

–The mailing groups operate as 'always available' spaces for teachers to raise issues they consider important.

–Such any time, anywhere possibilities of "co-presence" has implications for supporting collective agency of the members.

Slide 20

Impact on the socio-cultural structure

1. 'Implicit' OER in the Indian public school system context
Teachers intend to share for review and revision and re-use but do not explicity state open license

2. OER creation in the local language
Kannada Wikipedia is 0.34% of English Wikipedia; FOR KOER it is 68%

3. Response to learner socio-cultural context
Creation of 'foundation' materials in Mathematics and Kannada

Slide 21

Conclusion

Participatory resource creation, a model for teacher professional development and OER adoption

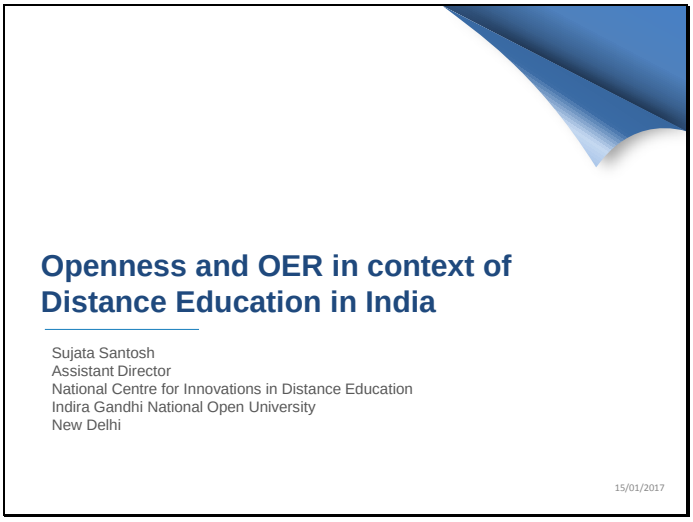
Next phase of research
Use of OER in classroom processes
Study of the PLC interactions
Adapting the program in other states to refine the model

Policy required to actively support a free and open technology environment, which would include support for OER

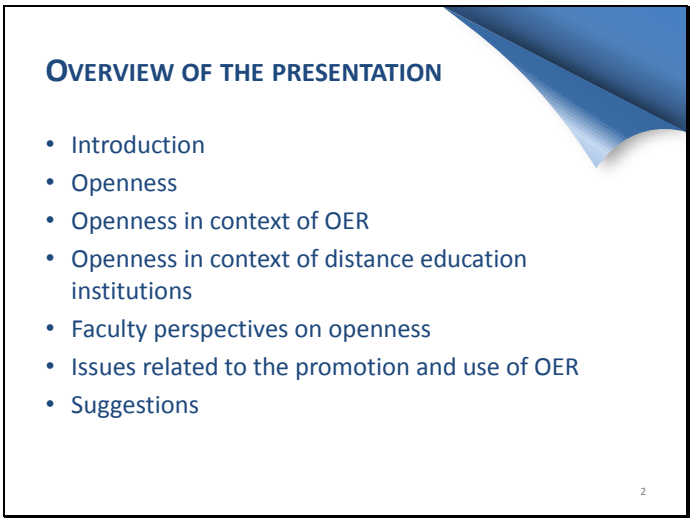
Annex VII

Openness and OER in the Context of Distance Education in India by Sujatha Santosh

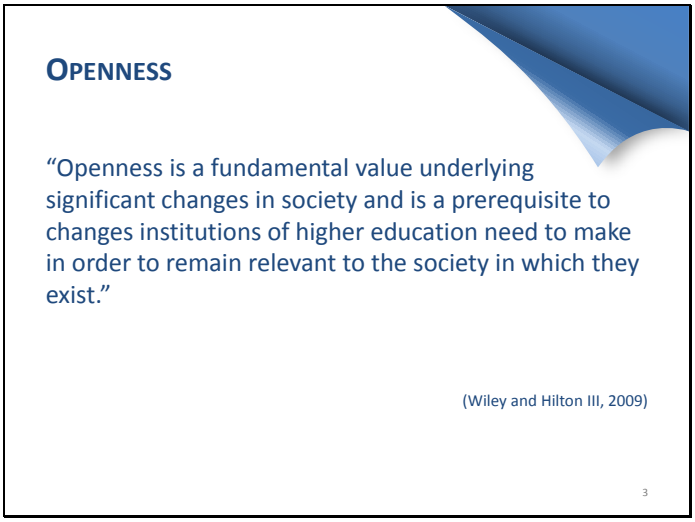
Slide 1



Slide 2



Slide 3



Slide 4

Different Meanings of Openness

- **Open access** refers to unrestricted online access to research publications
- **Open source software** refers to software whose source code is made available under a license for modification or enhancement by anyone
- **open content** refers to content that is licensed and can be distributed and re-used freely
- **open educational resources**- the term OER was coined in 2002 and refers to the application of open source principles to educational content
- **open courseware** refers to publicly available educational materials offered by college or university as courses.
- **open textbooks** refers to an openly-licensed *textbook* offered online allowing users to read online, download, or print the book at no additional cost.
- **Open Data** refers to free sharing, use and re-use of data

(Weller, 2012)

4

Slide 5

Open Educational Resources (OER)

Commonwealth of Learning (COL) describes OER as "materials offered freely and openly to use and adapt for teaching, learning, development and research".

(COL, n. d.)

OERs are

- free and freely available
- suitable for all levels of education
- Modular
- Reusable
- Online

(Kanwar, Kodhandaraman, and Umar, 2010)

5

Slide 6

Key Focus of OER Movement

- Sharing
- Accessibility
- Reuse

(Peglar, 2012)

6

Slide 7

OPENNESS IN CONTEXT OF OER

- Notion of no cost or low cost to the user.
- Easy accessibility online.
- Availability for further distribution and reuse.

(Sclater, 2011)

7

Slide 8

OPENNESS OF OER

OER five rights, known as the 5R principles (Wiley, 2014):

- **Retain** – the right to make, own, and control copies of the content
- **Reuse** – the right to use the content in a wide range of ways
- **Revise** – the right to adapt, adjust, modify, or alter the content itself
- **Remix** – the right to combine the original or revised content with other open content to create something new
- **Redistribute** – the right to share copies of the original content, your revisions, or your remixes with others

8

Slide 9

OPENNESS OF OER

"*open*" in OER must be perceived not merely from a technological perspective but also from a governance standpoint. The "*open*" should reflect the institutionalisation process which facilitates all types of stakeholders to participate on equal terms.

(Kanwar, Kodhandaraman, and Umar, 2010)

9

Slide 10

Cape Town Open Education Declaration

- ***Collaborative production:*** Educators and learners should participate in creating, using, adapting, and improving educational resources, embracing educational practices built around collaboration.
- ***Open content licenses:*** Educational resources should be freely shared through open licenses which facilitate use, revision, translation, improvement, and sharing.
- ***Open education policy:*** Governments, school boards, and colleges and universities should provide taxpayer- funded educational resources as open educational resources.

10

Slide 11

Openness in context of distance education institutions

- Breaking of physical boundaries
- No restriction on entry
- Availability of varied resources
- Wider choice of courses
- Innovation in course design and delivery
- Flexible approach to assessment and evaluation

11

Slide 12

Faculty Perspectives: A Survey

12

Slide 13

Faculty Perspectives: A Survey

- Sharing and Collaboration
- Open Access
- Open publishing
- Knowledge about CC Licenses
- Concerns about IPR and Copyright
- Training
- Ease of Use

13

Slide 14

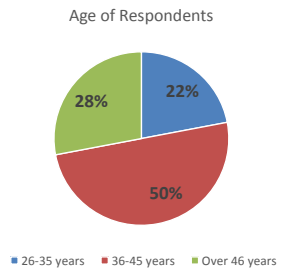
Faculty Perspectives: A Survey

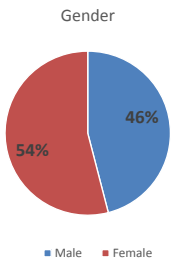
- Survey through questionnaire (in paper form) administered personally to interested faculty members (n=70) of the Indira Gandhi National Open University.
- Responses were received from 69 faculty members and academics of the university.
- The responses were measured on a three point scale – '1' (Yes), '2' (No) and '3'(Not Sure).

14

Slide 15

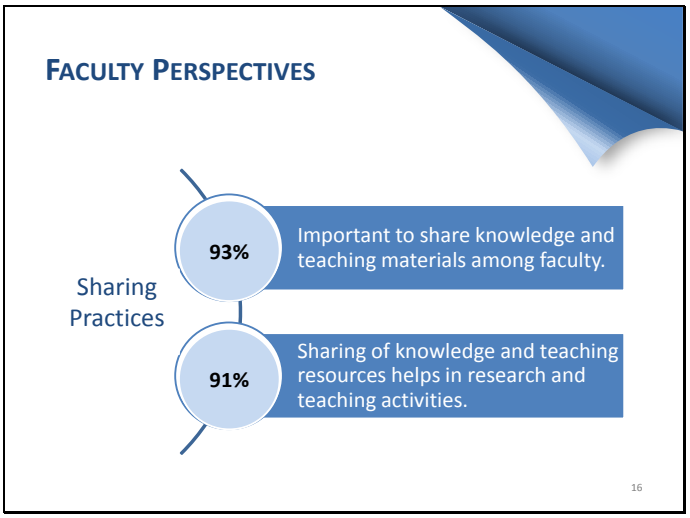
Respondent Profile



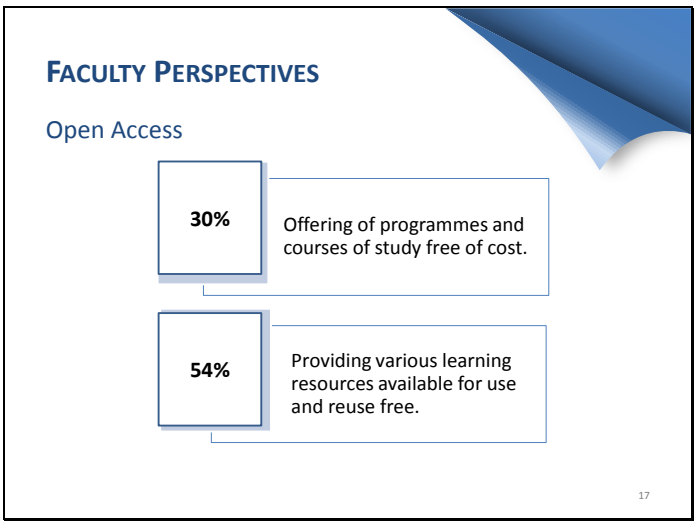


15

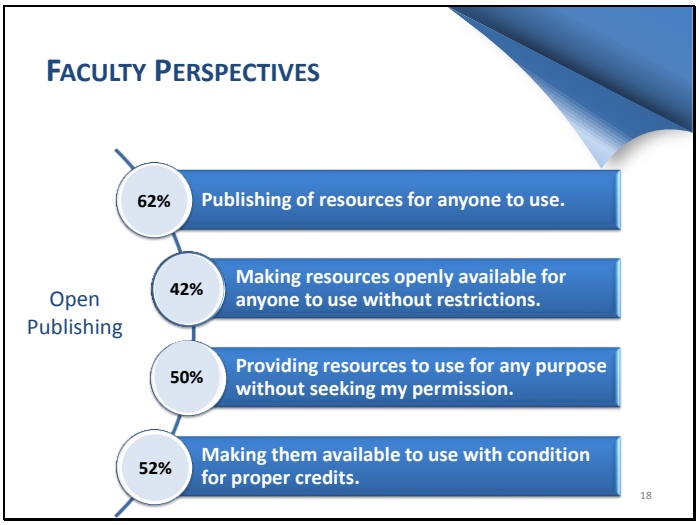
Slide 16



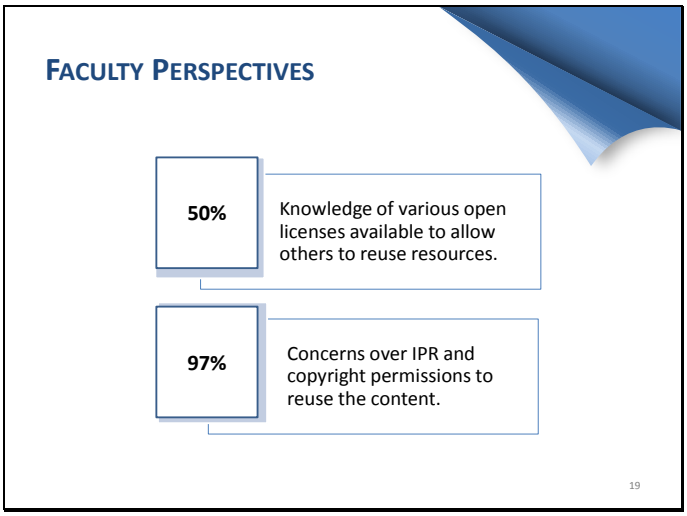
Slide 17



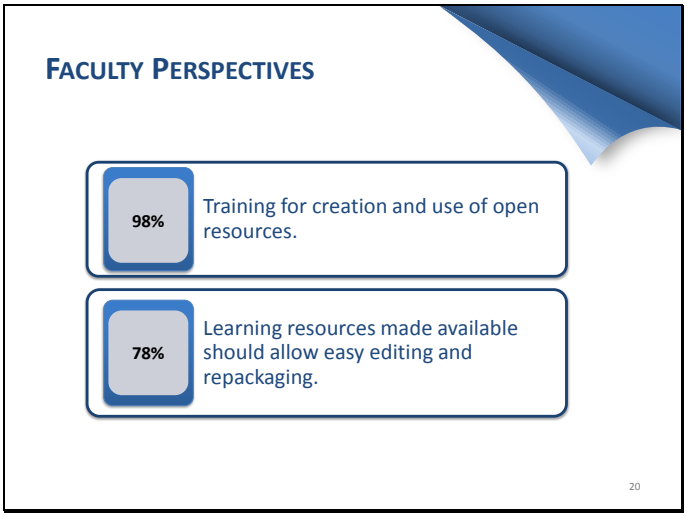
Slide 18



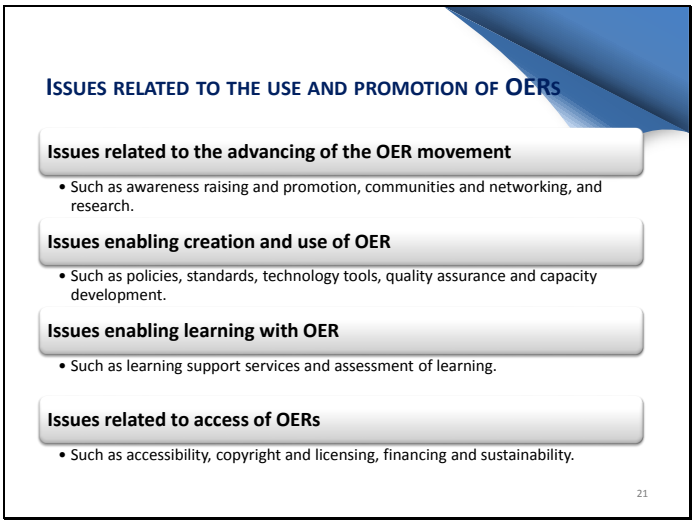
Slide 19



Slide 20



Slide 21



Slide 22

NEED FOR

- Infrastructure and technologies
- Awareness raising among the faculty
- Training related to the use and creation of OERs
- Awareness building about copyright and open licensing options
- Creation of practices for OER
- Institutional Policies for promotion of OER
- More channels and opportunities for interaction and exchange of ideas.
- Culture of openness and sharing in educational institutions
- Encouragement of collaboration and open sharing of knowledge

22

Slide 23

REFERENCES

- Cape Town Open Education Declaration (2007). *Cape Town Open education declaration: Unlocking the promise of open educational resources.* Cape Town: Open Society Institute. Retrieved from http://www.capetowndeclaration.org/read-the-declaration
- COL—Commonwealth of Learning (n.d.). *Open Educational Resources (OER).* Retrieved from http://www.col.org/resources/crsMaterials/Pages/OCw-OER.aspx
- Kanwar, A., Kodhandaraman, B., & Umar, A. (2010). Toward sustainable open educational resources:
- a perspective from the global south. *American Journal of Distance Education,* 24, 65–80.
- doi:10.1080/08923641003696588
- Pegler, C. (2012). Herzberg, hygiene and the motivation to reuse: Towards a three-factor theory to explain motivation to share and use OER. *Journal of Interactive Media in Education 2012, 1*(4). DOI: http://dx.doi.org/10.5334/2012-04
- Sclater, N. (2011). Open Educational Resources: Motivations, Logistics and Sustainability. In Content Management for E-Learning, edited by N. F. Ferrer and J. M. Alonso, 79–193. London: Springer.
- Wiley, D. (2014). The access compromise and the 5th R. [blog post]. Retrieved from http://opencontent.org/blog/archives/3221
- Wiley, D. & Hilton III, J. (2009). Openness, dynamic specialization, and the disaggregated future of higher education. *International Review of Research in Open and Distance Learning*, 10(5) 1-17. Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/768/1415

23

Slide 24

Thank You!

24