Report

NATIONAL CONSULTATION ON OPEN EDUCATIONAL RESOURCES (OER) FOR SKILL DEVELOPMENT

Organised by

Commonwealth Educational Media Centre for Asia (CEMCA),

New Delhi

In Collaboration with

KNI Trust, Gurgaon

At

Hotel Roya Plaza, New Delhi

November 28, 2014

National Consultation on
**Open Educational Resources
for Skill Development**
:OERƒSD:
28 November, 2014, Hotel Royal Plaza, New Delhi
Organised by
**Commonwealth Educational Media Centre for Asia (CEMCA)
New Delhi**

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Executive Summary

Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi organized a day long National Consultation on Open Educational Resources (OER) for Skill Development at New Delhi on November 28, 2014. A total of 35 experts of OER and Skill Development from different parts of India participated in the consultation. The experts represented different educational institutions, TVET institutions, other private skill development organisations and government agencies such as National Skill Development Corporation (NSDC), National Skill Development Authority (NSDA) of Government of India, IL&FS, Bosch etc.

The basic objective of this consultation was to organize interaction among concerned policy makers, practitioners, knowledge and skill development providers, OER volunteers, academicians, livelihoods agencies. Professor Vinay Kumar Pathak, Vice Chancellor, Vardhaman Mahaveer Open University, Kota formally inaugurated the consultation and sketched the fact on importance of OER in skilling a huge number of Indian population. Professor V.S. Prasad, former Director NAAC delivered the keynote address. Explaining the philosophy of OER in his address, Prof. Prasad stated that education is a social function and knowledge is a public good, a public property and it should be a resource for everybody. Professor Rakesh Khurana, Chairman, KNI Trust gave an overview on the consultation. Dr. Sanjaya Mishra, Director, CEMCA enumerated the objectives of the consultation and facilitated the interactions among the expert participants.

Mr. R C M Reddy, Managing Director, IL&FS explained the concept of *Skill 2.0*, where the target is not only the dropouts but all the student community. Dr Sapna Poti of NSDC addressed the issue of the respect for skilling, while Ms. Ruchira Chandra of NSDA elaborated the National Policy on Skill Development, 2009 and other initiatives of the Government of India. Among the expert participants Dr. B. Chandrasekar, Mr. Varun Arya, Dr. N T Yaduraju, Mr. Viplav Baxi, Dr. Anjlee Prakash, Dr. Arupjyoti Choudhury, Dr. Asfa M Yasin, Mr. Navin Pathak, Dr. Chandrabhanu Pattanayak, Dr. O P Goel, Dr S.K. Soam, Mr Ajay Balakrishnan, Mr. Anurag Gupta shared their views on the areas like Skill Development – Challenges for India, Using OER for Skill Development, Learning Content in Sector Skills, Technology and OER: Case Studies.

A set of recommendations were taken by all the participants, where it was considered that OER provides an excellent route to deliver skill training to millions. Being digital and online, it can complement and supplement face-to-face training initiatives. People can use OER for learning, and attend hands on training sessions for polishing their skills. Moreover, creating a repository of OER on different levels and discipline areas would be huge resource that can be used by all the training institutions in the country without duplicating efforts on training materials. Dr. Ankuran Dutta, Programme Officer, CEMCA extended the vote of thanks to all the expert participants. CEMCA organized this consultation in collaboration with KNI Trust, Gurgaon.

Introduction

Recognising the importance of skill development in nation building and developing favourable socio economic conditions for economic growth, the Shangai consensus (2012) recommended governments to expand access to TVSD opportunities, adopt flexile pathways for accumulation, recognition and transfer of individual learning. Technology-enhanced flexible and blended approaches to TVSD can contribute to sustainable development.

Skill Development can play an important role in social and economic growth of India as It is one of the few countries in the world where the working age population will be far in excess of those dependent on them and. According to the World Bank report this trend will continue for at least three decades till 2040. To leverage the this demographic dividend   that will play a key role in strengthening the national economy, there has to be a concerted effort to equip and continuously upgrade the skills of the working age population.

In recognition of this need, the Government of India has adopted skill development as a national priority over the next 10 years. To create such an institutional base for skill development in India at the national level, a "Coordinated Action on Skill Development" with three-tier institutional structure consisting of the PM's National Council on Skill Development, the National Skill Development Coordination Board (NSDCB) and the National Skill Development Corporation (NSDC) was created in early 2008.

In the Central Government, around 20 Ministries are closely involved in skill development. These ministries mainly operate in one of two ways - through setting up own training capacity in specific sectors (examples of such ministries include Ministry of Labour and Employment, Ministry of Agriculture, Ministry of Health and Family Welfare etc.) or through providing per-trainee costs of training for specific target populations (examples of such ministries include Ministry of Rural Development, Ministry of Women and Child Development etc.).

Most State Governments also have set up State Skill Development Missions (SSDMs) as nodal bodies to anchor the skill development agenda in the State. SSDMs are expected to play a significant role in escalating the pace of skilling, through identification of key sectors for skill development in the State, as well as coordinating with Central Ministries and State Line Departments, as well as industry and private training organizations. Each State has adopted a structure of SSDM that best suits the local environment and the State vision for skill development. While some States have elected to form the SSDM as a Society or Corporation under the Chief Secretary or Chief Minister, others have housed it under relevant Departments such as Labour, Human Resource Development or Planning. Many states are starting to set year-wise targets for skill development, specifying the state budgetary allocation, and complementing Government efforts by encouraging private investment. (source http://www.skilldevelopment.gov.in/)

Skill Development is a focus area of the NDA Government also. In his maiden Independence Day speech, Prime Minister Mr. Narendra Modi invited companies across the world to make their products in India and create jobs in the labour-intensive manufacturing sectors. The common goal of

skilling India and fostering entrepreneurship can only be achieved through skill development and vocational education.

For skill development and to impart vocational education there is a dire need to develop enough Open educational resources in various skill sectors. Open Educational Resources can play an important role in realizing the dream of skilling India. Lots of initiatives have been taken so far in this direction and number of government and non-government organisations are contributing towards it. But keeping in view the enormity of population that needs to be trained and variety of areas that they need to be trained in, the different skill sectors should develop Open Educational Resources and Massive Open Online Courses to reach out to the huge population which has a great potential to contribute to the economic growth of the country.

CEMCA has been working continuously in creating awareness on OER for skill development and assisting different organisations to develop vocational courses. To further explore the opportunities in this area and to develop a road map on OER for skill development, CEMCA, New Delhi organised a National Consultation on Skill Development in collaboration with KNI trust Gurgaon at Hotel Royal Plaza on November 28, 2014.

Session 1: Inauguration

The National Consultation on Open Educational Resources for skill Development began with lighting of lamp by the dignitaries and a welcome address by Dr. Sanjaya Mishra, Director, CEMCA. Dr. Mishra also outlined the objectives of the national Consultation. He, in his address, mentioned that lot has been done in the field of skill development and there is a need for skill development. So the focus in this consultation should not be on the need to understand Skill Development but how to speed up and scale up the process. He said the objective of gathering here is to understand how Open Educational Resources can be forms of providing vocational educational training. He also apprised the audience about Commonwealth Educational Media Centre for Asia (CEMCA) which was established in year 1994 by Commonwealth of Learning (COL) in response to the needs expressed by the commonwealth countries of the Asian region for a more effective utilization of educational media resources for distance education.

He mentioned CEMCA has been working actively in two major areas Education and Livelihoods and health. He shared the work done by CEMCA in the field of community Radio, OER and skill development and vocational education. Quoting recently formulated OER policy in India by Ministry of Human Resource Development, he said the OER movement has started in India little late but at last. Earlier there was no representation from India when it came to OER, but now the initiatives like National Repository of Open Educational Resources and National Programme on Technology Enhanced Learning (NPTEL), the OER movement has gained momentum in India. He said the way OER has been used in the field of education to it should be used for skill development initiatives. He

also urged that people who are working on the content generation should work in collaboration for the better and effective results.

Innovation is the key to Development

Prof. Rakesh Khurana, Chairman, KNI Trust, which was co-partner in the organization of this National Consultation, gave an overview. He emphasized on the fact that Innovations in organisations is an issue. Along with collaboration he shared with the audience how during Rajiv Gandhi regime Open learning developments world over reviewed, and law was enacted (distance learning law). He said such innovations have to be continuous if we wish to improve the quality of education and organisations have to be proactive with innovations. He mentioned the different skill sectors should offer courses on the platforms like coursesra and edX. Besides we need to have our own platform in India to offer MOOC in skill development and vocational education.

Need for content in regional languages

Prof. Vinay Kumar Pathak, Vice Chancellor Vardhman Mahaveer Open University, Kota in his inaugural address questioned the educational model in India, by raising the pertinent issues like young mind does not have skills, they do have lot of degrees diploma but without skill. He said 99% do not have any skill and that has brought us to this situation where we are talking about skill development. We have understood that the school and colleges curriculum do not offer any skills, hence there is a need for skill development and vocational education.

 He also stressed upon the fact that when it comes to E-learning there is a lack of content in regional languages. Lack of knowledge in regional languages especially in the field of skill development causes a disconnect between who knows and who needs to be trained. He said OER created in vernacular language can bridge this gap. About OER he said, OER model tell us that we are using Public money so it should come in public. Since lot of material is not available as OER so many success stories in the skill development go unnoticed. He suggested that recommendations coming out from this consultation should be shared with the government.

Develop common understanding of OER

Prof. VS Prasad, former Director, NAAC, in his speech as guest of honour stressed that it is important to develop shared understanding of nature and scope of OER. He emphasized the need for Research and development, public debate, literature in regional languages in the field of OER to bring about the common understanding of the subject. He said OER can be leveraged for skill development as this would flexibility in learning unlike conventional method of teaching. He said OER can be used for lifelong learning and upgradation of skills. He also raised the issue of Quality concerns and mentioned TIPS framework to assess the quality of OER . He urged that there should be more discussion and critical thinking on quality of OER. He said more literature is required for the assessment of quality of OERs.

Dr. Ankuran Dutta, Programme Officer and Coordinator of the programme thanked the speakers for their inputs.

Session 2: Skill Development: Challenges for India

Align with Make in India

Mr. RCM Reddy, MD, IL & FS talked about un-employability of educated youth. He said not even ten percent of the students of engineering colleges are employable. Calling un-employability of educated a stark reality, he said, vocational skills had to transcend the need category. If we have to take advantage of demographic dividend, we have to equip them with some skills. For skill development, we should not only target the one who we think need but we should target entire population.

He said if we align with the GOI dream of Make in India, there lies an immense possibilities and opportunities for skill development and vocational education. We need to identify the products that can be manufactured in India and then align skill development initiatives with the emerging market needs, he said.

He suggested that the Skill Development institute should be embedded and placed with university campuses and should work on PPP model and government can plan to have skill development institutes. He said offering skill development courses is not enough, we need to create whole ecosystem around skill development which should cater to the variety of needs of all stakeholders.

Skilling India at Speed and Scale: a technology approach

Dr. B Chandrasekar, Registrar, RCB Hyderabad discussed the skills landscape with specific context to India. *He also shared the* challenges in the present Skills Development Scenario. He talked about 4 key challenges that Indian economy faced in the last decade which include Challenge to Sustain Economic Growth, Inclusive Growth Challenge, Demographic Challenge and Employability Challenge of Educated.

While discussing the Case study of IL&FS Model, he made a case of how scaling can help in achieving the numbers. He suggested one must ensure:
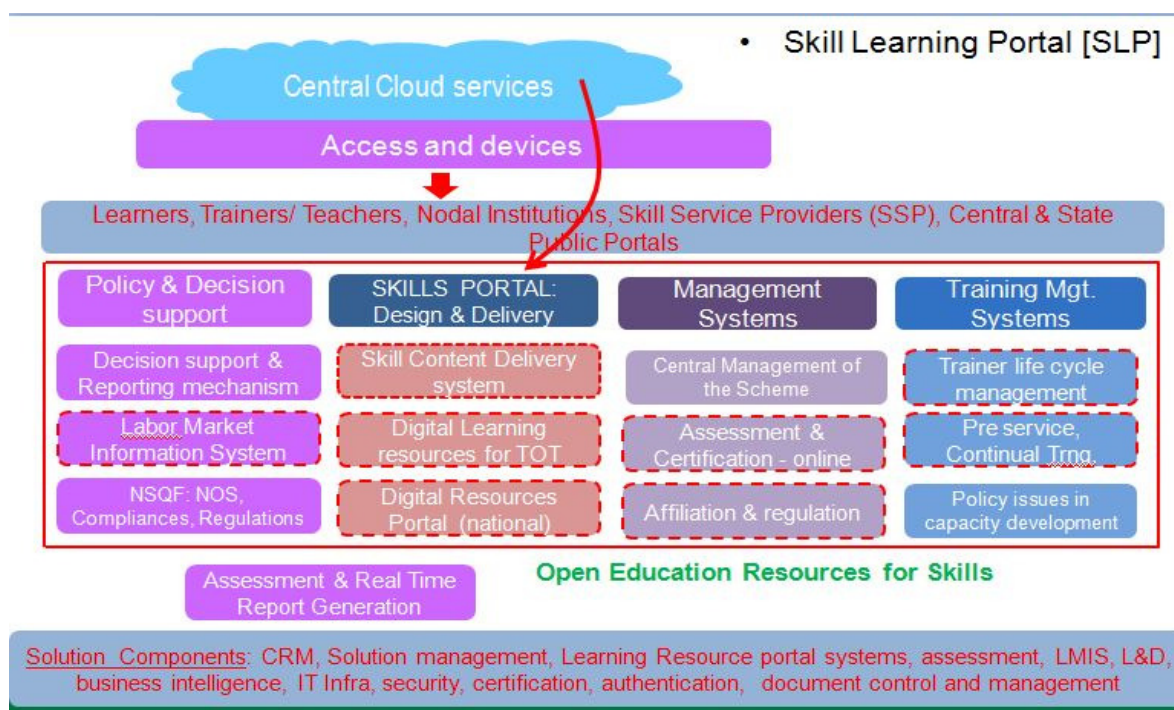
- employability of skills training in partnerships with key stakeholders – STP, SSCs, Industry/ Employers, Streamline the skills development programmes in the light of new strategy
- Increase the skilled workforce with formal certification ensuring employability
- Increase the percentage of workforce receiving training from existing 10% to 25% in the formal sector
- It means doubling the Annual Training Capacity to 4.5 million per annum

Recommendations

- Institutional mechanism for Skill Development & training delivery
- Programme Design across Skills Trades/ Courses that meet the market needs
- Availability teaching learning resources (pedagogy) that meet the learner requirements (ICT enabled...OER)
- Partnership within the Skill Training Ecosystem (for each phase – program design, industry linkages, placement partnerships

He also suggested to have a skill development portal and how OER can be used for skill development.

This presentation is available at : http://www.slideshare.net/CEMCA/skilling-india-at-speed-and-scale-a-technology-approach-by-dr-chandrasekhar

OER & ICT tools are more likely to unfold their innovative capacity if applied in a strategic way for large scale skill training ...

Identify the need	Defiine the ecosystem	Propose the right strategy
• What is the main objective to promote the use of OER, e.g. literacy, capacity building, bridging the digital divide, advancing specific skills, employability & efficiencey etc…? • Which ICT tools are most appropriate to meet the needs?	• Who is involved in promoting, implemeting and delivering the usage of the appropriate OER? • What regulations/ processes need to be addressed? • How can coordination be ensured and who should have authority/ responsibility over it?	• What should be the key thrusts of your strategy to integrate OER for skills & ICT in schooling? • What is the right timing and milestones? • How and when should you assess outcomes?
Start simple and demand driven	Identity and coordinate with Skills Training ecosystem	Formulate ideal strategy and identify outcomes

Respect for skilling

Dr Sapna Poti, Principal- MIS & Monitoring, NSDC discussed the issues faced in vocational education. To begin with she talked about the respect for the field. The field does not garner respect from the society as people generally feel those who cannot complete or have access to formal education, they are the one who opt for skill development or vocational education. She said there are number of courses available. If we really want students to take up these courses they have to be offered free of cost and there should be incentive schemes for the influencers. She said that there are myriad of govt schemes available in skill development and there is an urgent need to consolidate those schemes to bring about uniformity. She also raised' her concern about quality assurance and suggested that the sectors councils need to intervene in this. She also talked about content development for different purposes it could be for enrichment or for employment. According to her

certification is another area of concern as certification has some worth but who provides certification is something that needs to be looked into.

She also talked about the central repository of skilling and collation of data base of all the initiatives happening at national & state level that includes database of skilled people, employment opportunities, researches, resources, schemes, implementation agencies etc. She also suggested skillpedia i.e. Wikipedia of skills and innovations in skilling which includes mobile apps and other new technologies.

She suggested that Impact studies especially third party evaluation on what is happening and difference these initiatives have made to GDP and income generation by the individuals needs to be conducted.

Role of NSDA in skill development

Ms Ruchira Chandra, Consultant, NSDA talked about fives issues revolving around skill development in India which includes rationalization of skill development schemes, engagement with states, NSQF , getting youth interested and leveraging technology- Labour Market Information System.

Rationalization of skill development schemes
Background
- Skill development numbers being reported include schemes that have a duration of a few hours to years; some have defined outcomes, others do not – a very mixed basket
- Implications
- ✓Implementation problems and confusion amongst beneficiaries and implementation agencies
- ✓Difficult to assure outcomes for very short duration programmes
- ✓Lack of clarity about what is actually happening in skill development space – numbers being reported may be grossly exaggerated
- Initiative to address the issue- Rationalization of all government schemes
- Defining skill development
- ✓Fresh Entrants: Min 200 hours of training. At least 70% of batch to be placed in wage employment with remuneration equal or higher than semi skilled wages in the relevant sector.
- ✓Re-skilling: Min 80 hours trainings + increase in remuneration
- ✓Recognition of prior learning
- ✓Formal Education Courses (NSQF level 5 and above)
- ✓Extension work (min 32 hours) would be recorded separately
- Rationalisation of parameters
- ✓Cost
- ✓Duration
- ✓Outcomes
- ✓Monitoring

Engagement with states

Skill Development Structure in States

- Under the National Policy on Skill Development, 2009, State Govts were advised to set-up State Level Missions for Skill Development to provide inter-sectoral coordination and an integrated approach to skill development
- Most States have set up SSDMs, which generally consist of a two-tiered structure – a policy making body usually chaired by the Chief Minister, and an executive body, usually chaired by the Chief Secretary
- Type of set up- Society/Mission/Section 25 Company
- Actual performance varies across States. Some of the key issues:
- SSDM often attached to the Labour or Planning Department with no clarity of roles
- The Mission Director is often an officer who holds many other charges – the skill development charge is almost always an additional charge
- Lack of sufficient seniority of officers handling SSDMs – they are unable to effectively coordinate with other departments

NSQF

Implementation schedule of NSQF

Immediately after NSQF notification	After the 3rd anniversary date of NSQF notification	After the 5th anniversary date of the notification of the NSQF
• All other Frameworks (like the NVEQF) would be superceded by NSQF • NSQF compliant courses will receive Govt. funding on a preferential basis	• Govt. funding –only for NSQF-compliant courses • Recruitment rules of the GOI & PSUs of the Central Govt. shall define eligibility criteria for all positions in terms of NSQF levels – States encouraged to amend the same	• Mandatory for all training/educational programmes/courses to be NSQF-compliant • All training & educational institutions shall define eligibility criteria for admission to various courses in terms of NSQF levels

Status

What has been done	Way forward
• 2 sectoral discussions in collaboration with the Planning Commission - Allied healthcare sector and Tourism and Hospitality sector • State engagement Assam, Odisha, Bihar, Haryana	• Mobility pathways in the allied healthcare sector • 3 state workshops in the Meghalaya, Mizoram and Manipur • Secretariat for NSQF for implementation of the Qualification Framework

This presentation is available at : http://www.slideshare.net/CEMCA/ role-of-nsda-in-skill-development-by-ms-ruchira-chandra

Getting youth interested

Challenges

- Supposed social bias against vocational education & blue collar jobs
- Barriers to access and addressing the specific needs of the youth specially girls for achieving inclusive growth
- Lack of training infrastructure in hinterland
- Cost & benefits of getting skill training

Initiatives to address the issue
- Understanding the issue - Study by Leapridge on identifying the challenges in mobilization of the candidates
- Providing progression pathways in terms of the NSQF
- Facilitating recognition of prior learning
- Advocacy for skill development- Institution of Rashtriya Kaushal Evam Udyamita Purashkar

Initiatives for Consideration
- Redesignation of skill development/ vocational education/technical education" as "career education"
- Introducing the PM's Skill Development Fellowship Scheme

Leveraging technology- Labour Market Information System (LMIS)
- National Steering Committee of LMIS set by Department of Economic Affairs, housed in National Skill Development Agency (NSDA)
- 1st Module of LMIS for Registry of training providers built and launched
- Creation of a searchable directory of all training providers with details of training centers and courses in the form of Citizen Information Portal
- State & Ministry approved/ empanelled/ registered/ accredited training providers on NSDA website
- Identification of Information Gaps that exists in the eco-system e.g. Assessment of the training capacity of the country and how much is needed (sector-wise). To address the issue, discussions are going with National Statistical Commission (NSC) on survey of training providers integration of the various sub-systems that have been created by individual ministries/states
- Arriving at common classification of codes to be used across the stakeholders
- Accreditation norms for training providers finalized
- Classification of Online Education Resources (OER) into sectors and according to the various various levels of NSQF, with assistance from the Sector Skill Council. OER you tube channel launched
- System Study being undertaken by National Institute for Smart Government (NISG) to develop LMIS under the e- Bharat initiative
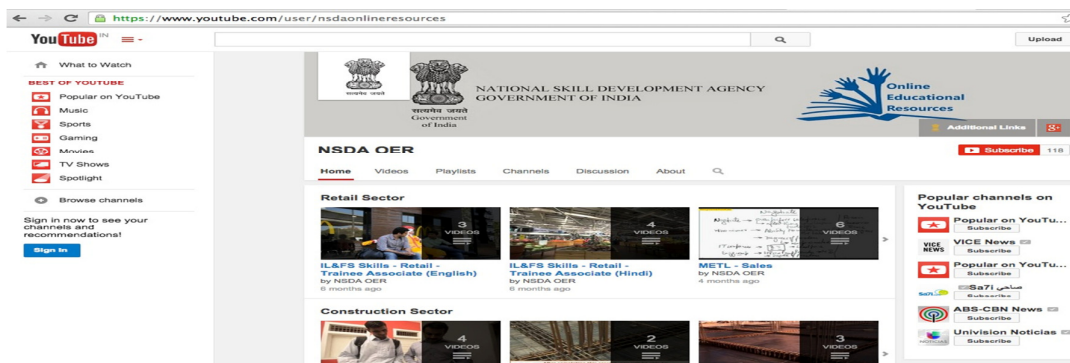
Reference: https://www.youtube.com/user/nsdaonlineresources

Skill Development Potential and Ground Realities

 Mr. Varun Arya. Director, Arawali Institute of management Jodhpur discussed the ground realities in the colleges and universities and how the skill development and vocational education subject is handled in these institutes. He also talked about lack of infrastructure and resources to run skill development courses.

Session 3: Using OER for Skill Development

Dr. N T Yaduraju, former Director, NRCWS, Jabalpur discussed how OERs have been used in Agriculture field. He discussed various examples of OER in agriculture like ICAR & ICRISAT initiatives. He also talked about the role of mobile apps and how it can be of great help in extension education.

This presentation is available at : http://www.slideshare.net/CEMCA/ open-educational-resources-in-agriculture-by-mr-n-t-yaduraju

Re envisioning OERs

Mr. Viplav Baxi discussed various OER initiatives in schools education (NROER , K-OER , NIOS, TESS, HBCSE/TIFR) higher education (NPTEL , CEC, ePG-Pathshala) vocational education (SAVE, MOVE, NMEICT-projects, NIOS). He discussed various aspects of OERs which included OER as policy, OER as technology, OER as a Platform and OER as heutagogy which includes enabling self-directed learners, enabling distributed learning, enabling decentralized sites of creation and mechanisms for aggregation, remixing/repurposing and forwarding. He stressed upon the fact that to further the cause of OER there is great need to create OER communities and research and development in this area.

This presentation is available at : http://www.slideshare.net/CEMCA/ oers-in-india-by-mr-viplav-baxi

OER for Professional Development of Teachers
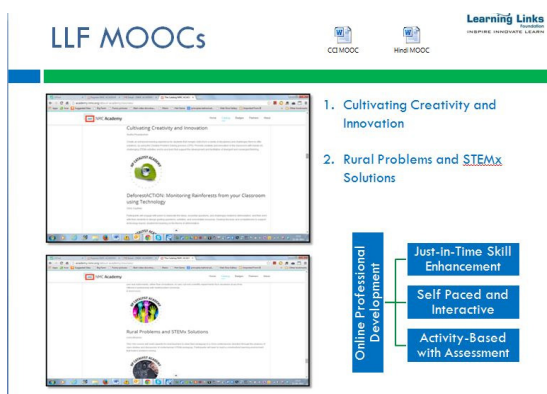
Ms Anjlee Prakash, Learnling Links Foundation (LLF) discussed how OER can lead to the professional development of teachers. She shared with the audience different initiatives which LLF has taken in the past. She also shared a case study of Massive Open Online Course (MOOC) offered by LLF to foster creativity and innovation amongst students. The **Cultivating Creativity and Innovation** course (CCI) prepares teachers to create a progressive learning environment in their classrooms that offers opportunities to explore, discover, understand, experiment and create.

This presentation is available at : http://www.slideshare.net/CEMCA/ open-educational-resources-professional-development-for-teachers-by-dr-anjlee-prakash

This session was chaired by Dr. Arupjyoti Choudhury, Dean (Academic), K K Handiqui State Open University, Guwahati.

Session 4: Learning Contents in Sector Skills

Dr Asfa M Yasin, Professor, PSSCIVE, NCERT shared with the audience work done by NCERT in the field of vocational education. She informed that the vocational courses on automobiles, IT &ITES, Retail, Security and healthcare etc were developed by NCERT. Teachers and students' handbook for the same has also been developed. She said a lot of work has been done but a lot further needs to be achieved which are possible in collaboration with industries.

Mr. Navin Pathak, Progia LLC discussed about the way one can utilize OERs available on the web and create their own. He also discussed how one can make many while working with OERs. Dr. Chandrabhanu Pattanayak, Director, Institute of Knowledge Society, Odisha shared various skill development initiatives in terms of courses at Centurion University. He also urged that the OER should also be developed in regional languages.

Dr. O.P Goel, GM, CSR, Bosch Ltd shared how Bosch contributes to skill development. He shared that the Bosch Vocational training centre was established in 1961 and since then the have been contributing to skill development.

Key points regarding Bosch Vocational Training Centre

- Students every year, 7 trades
- o Course duration : 3 to 4 years
- o German Dual Model (20:30:50)
- o 219 Gold medals won
- o 48 times Best Establishment Award (12 times in a row)
- Learners employed Globally
- o (> 600 in Australia alone)

1 vocational training at Glance at Bosch

This presentations of this session are available at : http://www.slideshare.net/CEMCA/

Session 5: Technology and OER: Case Studies

This session was chaired by Dr. S. K. Soam, Head ICM Division, NAARM, Hyderabad. There were four presentations on different case studies.

Case Study 1 Pratham Mobile App

by Mr. Anurag Gupta, CEO - A Little World Pvt. Ltd

Objective: To deliver services in rural areas

To operate at density in Districts we selected 4 Women Micro-Entrepreneurs who were formed as a **Joint Liability Group** in each Gram Panchayat.

Each woman micro-Entrepreneur bought a 4" NFC phone (target Rs. 4000) as basic starting equipment. Aadhar FP scanner was added as an option for Rs. 2500.

Pratham provideed applications. Illustration shows the launch screen of such a phone.

Villagers enlisted as Members. Rs. 30 for RFID card; Rs. 10 / month Membership Fee.

Income potential between Rs. 800-6000 / month.

Key Challenge: The target women micro-entrepreneurs are <u>completely illiterate</u>.

Case Study 2 Wadhwani Foundation

By Mr. Ajay Goel, Wadhwani Foundation

Objective: *Accelerating economic development in emerging economies:* creating Jobs for Millions

Wadhwani Foundation was founded by Dr. Romesh Wadhwani, Founder/Chairman of Symphony Technology Group, in 2003.

Initiatives include:

- Job creation through Entrepreneurship
- Employability through Skill Development
- Innovation through Research
- Empowering the Disabled
- Promoting Indo-US Trade
- Employability through Skill Development: WF's Skills Development Network (SDN) arms industry, VET providers, schools, and colleges with technology-enabled job training curriculum.
- Builds capacity through blended e-learning courseware, faculty development, and program support

Case study 3 OER PORTAL

by Prof. Rakesh Khurana, Chairman, KNI Trust

Professor Khurana mentioned about an ongoing project on OER for Skill Development portal.

For detail, please visit: http://www.kni.in/nsqf/

Case study 4 Ammachi Labs

by Mr. Ajay Balakrishnan, Manager, Content Development, Ammachi Labs

Sakshat Amrita Vocational Education (SAVE) Project: Ammachi labs has developed an end to end training model, from curriculum development to full training courses, including simulator software and hardware design, for deploying vocational educational courses to the masses.

Ammachi labs has been designated as the Technical Lead for the National Consortium on Vocational Education initiated by the National Mission on Education through ICT, MHRD, Govt. of India.

Women Empowerment Project funded by the United Nations has been hailed as the most successful project funded by the UN in India. The project has trained over 3605 women in under 3 years in various trades such as plumbing, carpentry, fabric painting, organic cultivation and others all using innovative technology such as haptic simulators and computerized vocational education developed in-house at Ammachi Labs.

The women 83% of who are self employed, have earned a total of over 28 Lacs within just the first three months of completion of the training.

An outstanding example is the Kickstarter Crowd Funding Project initiated by the Women Empowerment trainees of Kerala and Uttarkashi, who have received funding of 16,571 British Pounds for their "Secret" pillows (pillows that double in to blankets).
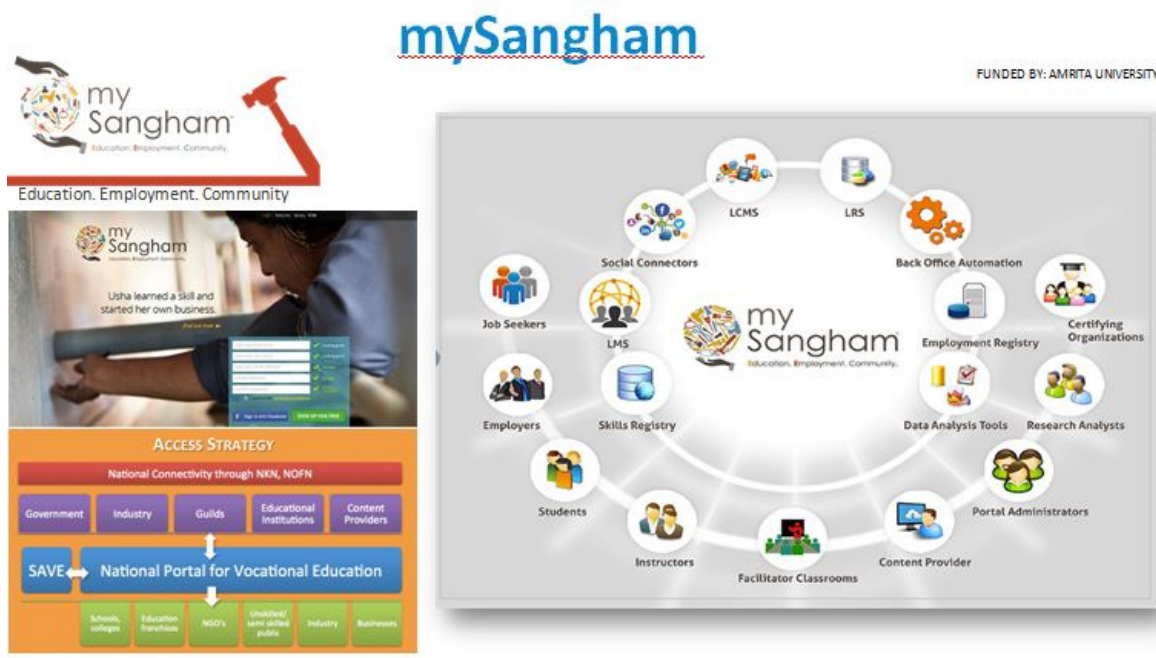
The MOVE Project, another successful initiative that has mobile vehicles to carry education to the remotest and most inaccessible locations of the country has been instrumental in training over 700 of the 3000+ trainees of the WE project

This presentation is available at : http://www.slideshare.net/CEMCA/ open-educational-resources-professional-development-for-teachers-by-dr-anjlee-prakash

Session 6: Discussions and Recommendations

The Open Session was chaired by Dr Sanjaya Mishra and Prof. Rakesh Khurana. The participants have discussed on different areas of skill development and Open Educational Resources. At the end of the discussion session, Dr. Sanjaya Mishra, Director, CEMCA spoke about the major recommendations prepared from the deliberations of the experts and participants.

Recommendations

Noting the contemporary developments in education, including the World Open Educational Resource (OER) Congress organized by the Commonwealth of Learning and United Nations Educational Scientific and Cultural Organization that released the 2012 OER Paris Declaration;

Recognizing the potential of OERs to promote access to quality teaching, learning and research materials in Indian languages for skill development in blended learning scenarios;

Realizing that various governmental, non-governmental and private sector organizations are engaged in skill development and content creation for skill development;

Noting the need for increased collaboration amongst technical and vocational skill development institutions in India to scale development of skills;

Appreciating of the efforts of National Skill Development Corporation (NSDC), National Skill Development Agency (NSDA), Ministries of Government of India and the states, and the newly started Ministry of Skill Development and Entrepreneurship for creation of content to strengthen quality skill development;

Recognizing the significance and lack of skill development educational materials in Indian languages;

Highlighting the importance of preservation of local and indigenous knowledge and skills for crafts and heritage;

Taking note of the available technologies and open license mechanisms to share skill development materials;

Recognizing that release of skill development materials in open license will support skill development of additional number of individuals and create an environment of sharing and further development knowledge; and

Understanding that the open license options of Creative Commons provide a legitimate option for creators/authors of skill development resources within the framework of the exiting Copyright laws.

The participants of the workshop on "Open Educational Resources for Skill Development" held on 28 November 2014 at New Delhi after detailed deliberations recommend the following for promotion and use of Open Educational Resources (OER) to improve access to quality education and training for skill development.

For the Government:

1. *Release* all contents developed for skill developments in an appropriate open license;
2. *Include* a policy on sharing of all research and teaching materials using a suitable open license whenever "public funds" are used;
3. *Provide* increased support for creation of OERs, including in all Indian languages;
4. *Support* development of OER repositories for skill development using open technologies and formats;

For Skill Development Education and Training Providers:

1. *Adopt* policies on 'Open Educational Resources' to share skill development content;
2. *Create* contents for skill development using open formats and technologies;
3. *Develop* capacities of teachers and educational administrators to appreciate, create, and use high quality OER;
4. *Develop* institutional open repositories for sharing of teaching, learning and research materials;
5. *Develop* programmes using available OER;
6. *Recognize* prior learning and create environment for assessment and certification of skill using OER;
7. *Network* with other Skill Development Education and Training providers to collaborate and avoid duplication of efforts; and
8. *Join* and contribute to consortia-based approach to promote skill development;

For Business and Industry:

1. *Support* OER for skill development through Corporate Social Responsibility programmes;
2. *Develop* OERs in their respective domain/sector and release these in appropriate open licenses;
3. *Promote* collaboration and consortia for OER for skill development.

Photographs of the Consultation are available at
https://www.flickr.com/photos/84936186@N02/sets/72157649590243095/

Agenda

National Consultation on

Open Educational Resources *for* Skill Development

: **O E R ƒ S D** :

Organised by
Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi
In Collaboration with: **KNI Trust, Gurgaon**
Venue: Hotel Royal Plaza, New Delhi
Date: November 28, 2014

Time	Session	Format	Facilitator/Presenter
9:30-10:00	Registration		
10:00-10:45	**Inauguration of the National Consultation**	Plenary session	Lighting of lamp
	Welcome and objectives of the National Consultation		Dr Sanjaya Mishra Director, CEMCA
	Overview on the National Consultation		Prof. Rakesh Khurana Chairman, KNI Trust
	Inauguration by the Chief Guest		Prof. Vinay Pathak, Vice Chancellor, Vardhaman Mahaveer Open University, Kota
	Speech by Guest of honour		Prof. V S Prasad, Former Director, NAAC
	Vote of Thanks		Dr. Ankuran Dutta Programme Officer, CEMCA
10:45-11:15	Health Break		
11:15-12:15	**Skill Development – Challenges for India**	Plenary presentation and discussions	*Panel Chair*: Mr. R C M Reddy, MD, IL&FS • *Skilling India at Speed and Scale*: Dr. B. Chandrasekar, Registrar, RCB, Faridabad • *Skill Development: Challenges for India*: Mr. Rajiv Mathur, Head–Standards & QA, NSDC, New Delhi • *Role of NSDA in Skill Development*: Ms. Ruchira Chandra, Consultant, NSDA, New Delhi • *Skill Development : Potential and Ground Realities*: Mr. Varun Arya, Director, Arawali Institute of Management, Jodhpur

12:15- 13:15	**Using OER for Skill Development**	Plenary presentation and discussions	*Panel Chair*: Dr. Arupjyoti Choudhury, Dean (Academic), KKHSOU, Guwahati • *Developing OER in Agriculture*: Dr. N T Yaduraju, Former Director, NRCWS, Jabalpur • *OER Scenario in India*: Mr. Viplav Baxi, Founder, LearnOS Consulting Services, New Delhi • *Open Courses for Skill Development:* Dr. Anjlee Prakash, Learning Links Foundation, New Delhi
13:15- 14:00	Lunch		
14:00- 15:10	**Learning Content in Sector Skills**	Plenary presentations and discussions	*Panel Chair*: Dr. Asfa M Yasin, Professor, PSS CIVE, NCRT, Bhopal • *Using OER for Skill Development*: Mr. Navin Pathak, Progia Open Learn Ware, New Delhi • *Skill Development Initiatives at Centurion University:* Dr. Chandrabhanu Pattanayak, Director, Institute of Knowledge Society, Bhubaneswar • *Skill Development at Bosch and Reflection on Use of OER*: Dr. O P Goel, GM, CSR, Bosch Ltd., Bengaluru
15:10-16:10	**Technology and OER: Case Studies**	Presentations and discussions	*Panel Chair*: Dr S.K. Soam, Head, ICM Division, NAARM, Hyderabad • *OER for Skill Development Portal (sharing of the KNI OER Portal)*: Prof. Rakesh Khurana, Chairman, KNI Trust, Gurgaon • *Technology for Skill Development*: Mr Ajay Balakrishnan, Manager - Content Development, Ammachi Labs, Amrita Vishwa Vidyapeetham, Kerala
16:10-16:30	Health Break		
16:30- 17:30	**Open House**	Open Discussions	*Session Chair*: Prof. Rakesh Khurana Chairman, KNI Trust (Select participants to share their ideas in the context of the theme of the national consultation)
17:30-18:00	**Closure valediction and Way Forward**	Plenary session	*Session Chairs*: Dr. Sanjaya Mishra Prof. Rakesh Khurana

List of Participants

S.No.	Name	Designation	Organisation	Address
1	Mr. Anurag Gupta	Founder	Zero Base Micro Finance Foundation	Mumbai
2	Mr. Shobhit Krishna	Vice- President	Educomp Solutions Ltd.	Gurgaon
3	Mr. Viplav Baxi	Founder	Learnos Consulting Services	New Delhi
4	Mr. N. Balasubramanian	Lead Trainer	Automative Skills Development Council	Bangalore
5	Mr. Sreeram K.		Amrita Educational Group	New Delhi
6	Mr. Shiva Kumar D		Amrita Educational Group	New Delhi
7	Dr. Anjlee Prakash	CEO	Learning Links Foundation	New Delhi
8	Ms. Nisha Dua	Project Director	Learning Links Foundation	New Delhi
9	Mr. Naveen Pathak		Progia Open Learn Ware	New Delhi
10	Mr. Ajay Balakrishnan	Manager - Content Development	Amrita Educational Group	Kerala
11	Mr. B. Chandrasekhar	Registrar	Regional Centre for Bio - Technology	New Delhi
12	Ms. Ruchira Chandra	Consultant (Information Systems)	National Skill Development Agency	
13	Prof. V.S. Prasad	Former Director	NAAC, Bangalore	Hyderabad
14	Mr. Nanjapur Yaduraju	Consultant	Formerly with ICRISAT	Bangalore
15	Mr. Sudhir Kumar Soam	Head,Infor. and Comm. Mgt	National Academy of Agricultural Research Management	Hyderabad
16	Dr. Asfa Yasin	Professor & Head	PSS Central Institute of Vocational Education, NCERT	Bhopal
17	Prof. Vinay Kumar Pathak	Vice- Chancellor	Vardhaman Mahaveer Open University	Rajasthan
18	Mr. Chandrabhanu Pattnayak	Director –Institute of Knowledge Society	Centurion University	Odisha
19	Mr. O.P. Goel	General Manager,CSR	Bosch Limited	Bangalore
20	Dr. Arupjyoti Choudhury	Dean, Academic	K K Handique State Open University	Assam
21	Mr. Pawan Kumar		IGNOU Community College	Panchkula
22	Mr. R C M Reddy	Managing Director	IL&FS	Delhi
23	Dr. Anubhuti Yadav	Associate Professor	IIMC	New Delhi
24	Dr Sapna Poti	Principal- MIS & Monitoring	National Skill Development Corporation	New Delhi
25	Mr. Ajay Goel	Director – Skill Development Network	Wadhwani Foundation	New Delhi
26	Mr. Sukanta Kumar Mahapatra	Academic Officer(Sociology)	National Institute of Open Schooling	Noida, U.P.
27	Mr. Varun Arya	Director	Aravali Institute of Management	Rajasthan
28	Mr. Sanjoy Day (NVR)		New Delhi	

	KNI TRUST			
29	Prof. Rakesh Khurana	Managing Trustee	KNI Trust	Gurgaon
30	Mr. Pradeep Kumar		Knowledge Network India Pvt. Ltd.	Gurgaon
31	Mr. Varun Kumar		Knowledge Network India Pvt. Ltd.	Gurgaon
32	Mr. Ram Ashre		Knowledge Network India Pvt. Ltd.	Gurgaon
33	Sanjay Singh		Knowledge Network India Pvt. Ltd.	Gurgaon
	CEMCA			
34	Dr. Sanjaya Mishra	Director	Commonwealth Educational Media Centre for Asia	New Delhi
35	Dr. Ankuran Dutta	Programme Officer, Livelihoods and Health	Commonwealth Educational Media Centre for Asia	New Delhi