

# **Skill Development and Professional Development of Teacher Educators on and through OER**

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## **ABSTRACT**

Skill development and professional development of teacher educators on, and through, OER is the need of the hour. In this era of growing access and advancement of technology into teaching, learning and professional development of teacher educators, it becomes indispensable to talk about the experiences gained while endeavouring to develop skills and ensuring professional growth of them.

The current paper is based upon the programs held for the skill development and professional development of teacher educators on OER. In these programs, they were equipped with the conceptual outlook of OER, open licensing, classification, use and application, life cycle and exemplary OER for various needs. The main focuses were OER for teaching, learning and professional development.

A few of the OER used for teaching-learning were Edmodo, Classroom 2.0, Wikispaces, Moodle, Mahara, Cmap and Geogebra. Some OER repositories discussed were Merlot, Jorum, Bepress, Slideshare, Open Clipart, UNESCO BKK, COL, College Open Textbooks, Connexions, Oercommons, Openstax, Curriki and Global textbook project. The professional development faction had five elements viz. in-service training programme, academic association, collaboration and forum, journals and other resources, statistical tools; and web conferencing. The specific tools, dealt with, were OCL4ED and Coursera for in-service learning, Wikispaces as LMS, DOAJ as journal database, Open Journal Portal for creating journal, SOFA as statistical tool, S-project / R-project as statistical research tool and Big Blue Buttons as web conferencing platform.

This was amazing that teacher educators, irrespective of their age levels, subjects and locations, were keen to learn innovative ideas pertaining to OER, and having great enthusiasm for learning and using them for all possible purposes. In fact, they were very happy that this time they would be able to be in touch with not only their resource person, but their peers, too, even after completion of the training program.

## **SKILL DEVELOPMENT AND PROFESSIONAL DEVELOPMENT**

Skill development of teacher educators is the need of the hour, as the educational scenario is changing at an exponential rate as far as information and communication technologies (ICT) and other skills are concerned. Skill development means applying techniques to teach new skills and alternative, adaptive behaviours to reduce the frequency and severity of maladaptive behaviours (Cohen & Volkmar, 1997). For an instance, learning communicating through computers is an essential skill of current times. Skill development can also be seen as corollary to knowledge acquisition in order to put new skills into existing employees (Wordcraft, 2006). It can be understood as if the current teacher educators don't have a particular set of skills required for the current assignment, and then they are equipped with those skills through some programme.

As far as professional development is concerned, it is quite simply a means of supporting and preparing people in the workplace to understand more about their workplace, working environment, their job and how to do it better with a greater efficiency. It is a continuous and on-going process throughout working lives of people (Plymouth University, 2013). In simple words, professional development is nothing but enhancing efficiency of people for the job assigned; apart from whatever they have learnt during their earlier formal studies. The term, professional development, means a comprehensive, sustained and intensive approach to improving teachers' and administrators' effectiveness in raising student achievement (NJEA, 2009). Professional development of a teacher is also defined as activities that develop an individual's skills, knowledge, expertise and other characteristics as a teacher. One of the aspects of their work for which teachers most frequently say they require professional development is 'ICT teaching skills' (OECD, 2009). Teachers are aware that ICT teaching skills are a must and indispensable in current times, and they do require it for their professional development.

And since open educational resources (OER) is the recent and growing trend in the field of education, teachers and teacher-educators must be able to handle these with a greater efficiency for better teaching and learning. This efficiency can be evolved among them through skill development and professional development programmes.

## **OER AND SKILL DEVELOPMENT**

Before discussing about OER, we should learn about assumptions of OER. Some of the assumptions are, OER holds potential to increase availability of high quality, relevant and need-targeted learning materials, to reduce the cost of accessing educational materials, to allow adaptation of materials and possibly contribute to enabling learners to be active participants in educational processes, to achieve collaborative partnership of people working in communities of practice, preferably across/within institutions, to build capacity in higher education institutions by providing educators with access, at low or no cost, to the tools and content required to produce high quality educational materials, and to be successful and sustainable, development of OER cannot be a side-line activity within an institution (Ngugi & Butcher, 2012), OER can be leveraged to radically transform universities and increase the capacity and the quality of education from primary to tertiary education (MIT, 2010), and given access to the knowledge learners need or want, and given the ability to interact with other learners, they will evolve socially (Mason, 2013). About non-OER, McGreal (2012) reflects that, so called 'intellectual property' is disingenuous term, and it is nothing but 'privileged monopoly'.

There are critiques also of OER. Some of these, according to Knox (2013) are, an under-theorization of 'openness', in which the concepts of positive and negative liberty will be used to suggest a neglect of coherent theorisation concerning the practice of self-directed learning, the simultaneous privileging and rejection of institutional authority, where OER literature will be shown to endorse the reputations of established institutions while claiming liberation from them, the diminishing of the role of pedagogy, in which OER will be aligned with an un-theorised learner-centred model of education, humanistic assumptions of unproblematic self-direction and autonomy, and an alignment with the needs of capital, in which an interpretation of subjectivity will offer alternative perspectives on the notions of power and emancipation in OER discourse.

Beginning from the inception of the concept of OER, the widest definition of OER is adopted by Commonwealth of Learning (COL, 2010) as the materials that are offered freely and openly to use and adapt for teaching, learning, development and research. While OER are mainly shareable in digital formats (both online and via offline formats), COL sees OER not just synonymous with online resources, online learning or e-learning, and within the development context COL is working, these can also be in printable formats.

OER can also be understood as teaching, learning or research materials, which can be learning content and tools, that are in the public domain or released with an intellectual property license that allows for free use, adaptation, and distribution (UNESCO, 2002).

OER can be online as well as offline, digital as well as printed, content as well as a tool or platform. Thus, an OER is simply an educational resource, in any format, that incorporates a licence that facilitates reuse, and potentially adaptation, without first requesting permission from the copyright holder (Butcher, 2011). It means the copyright is left by the author or owner of the resource.

Since OER is a newer concept in teaching-learning, in many countries, teacher and teacher educators are required not only to get acquainted with the conceptual overview, in-depth understanding and underpinning philosophy of the OER, but also to have proper hands-on-experience for using and applying these, so that they can be confident while applying it at their workplace in order to keep pace with the current era. This understanding and skill can be developed through skill development and professional development programmes.

## **ABOUT THE PROGRAMME**

The programme consisted of around thirty participants, who were working as teacher educators in various parts of the India. They were oriented about OER, exemplary OER for teaching, learning and professional development through a face-to-face interaction followed by distant communication platforms. Various OER were discussed and used during the programme, which were offline as well as online, content as well as tools and softwares as well as interactive-platforms. The programme was organised by National Council of Educational Research and Training (NCERT, a body under the Ministry of Human Resource Development of Government of India, which is heartily acknowledged here), and the author acted as content-developer and resource person to impart the training to the teacher educators. The face-to-face interaction was arranged for five days. And, they were communicated that they can share their problems, difficulties, views, experiences and feedback, when they apply these OER, learnt, at their workplace, too, through these and other platforms.

## **OER USED**

The teaching-learning focussed OER discussed were Edmodo, Classroom 2.0, Wikispaces, Moodle, Mahara (Kanvaria, 2013), Cmap and Geogebra. Some OER repositories discussed were

Merlot, Jorum, Bepress, Slideshare, Open Clipart, UNESCO BKK, COL, College Open Textbooks, Connexions, Oercommons, Openstax, Curriki and Global textbook project. The professional development faction had five elements viz. in-service training programme, academic association, collaboration and forum, journals and other resources, statistical tools; and web conferencing. The specific tools, dealt with, were OCL4ED and Coursera for in-service learning, Wikispaces as LMS, DOAJ as journal database, Open Journal Portal for creating journal, SOFA as statistical tool, S-project / R-project as statistical research tool and Big Blue Buttons as web conferencing platform.

## **OBSERVATIONS**

Some of the observations are:

While downloading and installing softwares, teacher educators were very much worried about download. Most of the times, they were sharing that it's not working. But, in fact, it was the internet speed, which was the reason for slow download and making them impatient. Hence, the resource person decided to get them involved in multitasking, which meant opening and working other software or tool, while the download was going on. Amazingly, this enhanced their patience and efficiency through other tasks, though this did not improve the download speed.

While talking about OER, its concept, recent development in the field, use and application of OER, it came to arise that they were having no awareness about OER. This made them handicap in utilizing and promoting OER (Kanvaria, 2012) for teaching and learning, though these were felt, later, as indispensable for teaching learning by the teacher educators themselves, too.

Once, when teacher educators learnt about significance of OER in education and professional development, they were enthusiastic, self-motivated and pro-active learners for learning and practising more and more about OER, especially those, which were very useful for teaching viz. Edmodo, etc.

Gradually, using and applying OER, during the programme, made teacher educators more confident. They felt that it made them more capable and efficient for applying these later, too, at their workplace. They all accepted that their learners were using more technology than them for various purposes, and they were feeling a little bit of shy using the technology, earlier. The reason they shared that they were feeling incapable of operating, using and dealing with technology. But, the hands-on-experience activity turned them to be more capable, confident and efficient after practising and using OER.

While discussing later, they were told to compare the theoretical discussion about OER and hands-on-experience practices held during the programmes. Anonymously, all of them reflected that it was the hands-on experience, which made them more capable. Earlier, too, they were having a little bit knowledge of a few technologies like mobile, email, etc., but they were getting difficulties in handling those. Hence, they shared that hands-on-experience must be preferred over the theoretical discussions about tools and OER.

## **LEARNING FROM THE ACTIVITIES**

A few of the learning from the programme, and later distant discussions, are:

1. Multitasking improves efficiency and patience among learners while working on slow connections.
2. Lack of awareness is the biggest hurdle in applying and using OERs in teaching and learning.
3. Teacher educators' readiness is at the significant level at learning OERs and using these later for distant communication and interaction.
4. Teacher educators find themselves more capable, confident and efficient after practicing and using OER.
5. Hands-on-experience practices must be given preference over theoretical discussion while teaching and learning about OER.

## **SUMMARY**

OER are very fruitful for teachers and teacher educators, who, due to a distance, are not able to have face-to-face interaction with resource person and field experts. They have several difficulties pertaining to teaching and learning, while are at their workplace. OER provide them free and almost without boundaries platforms to be in touch with the experts. Teacher educators are keen to learn and use technology and recent trends, but the lack of proper awareness about OER and lack of such programmes are the biggest hurdles in their path and successful professional achievements. Multitasking, awareness, enrichment, proper support and hands-on-experience activities during such programmes make them more capable of sharing and obtaining solutions to their problems through distant mode. This also makes them confident and empowered to explore further OER available for

their specific needs, and later share and discuss these with their colleagues at distant places, working at other places.

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