

## TESS India MOOC: Enabling Teacher Educators and Teachers for Quality Education in Madhya Pradesh

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### ABSTRACT

*MOOCs (Massive Online Open Courses) are freely available, short courses, delivered online. They have the potential to engage a large numbers of learners at any one time. Online learning culture provides opportunities for collaboration, peer support and professional learning throughout careers. The TESS-India MOOC is designed as an open and free professional development opportunity of E- learning for teacher educators, Teachers and Trainee Teachers in the Indian context. It is a small task-oriented course of Six week Titled "Enhancing Teacher Education through OER: TESS-India" in English and further introduced first time in Hindi Medium on Edx Platform as-"OER के माध्यम से अध्यापक-शिक्षा का समृद्धिकरण (TESS-इंडिया)" focuses on OER engagement and use in teacher education - with a particular focus on the TESS-India OER. After having a Successful pilot with 46 Teacher Educators and Education officers of Madhya Pradesh, the MOOC was scaled up from 23<sup>rd</sup> November 2015 -15 January 2016 and 21<sup>st</sup> Nov. 2016-13<sup>th</sup> January 2017. About 846 Teacher Educators-Teachers from various TEIs i.e. IASE, SISE, CTE and DIET across the state has completed the course in English and 1600 has completed the MOOC in Hindi from Madhya Pradesh. The course explores how the teacher educators and teachers can experience self-learning, reflection, assimilation and articulation of new ideas by using OER in the design and delivery of teacher education programmes to help them bring about the transformation of classroom teaching-learning and promote E learning as well as use of IT in transformation of knowledge. Setting up a benchmark, it has provided a huge support in achieving the quality aspects in classroom teaching learning under Evaluation for improvement, a School Standard and Evaluation framework programme called "Shaala Siddhi" Hamari Shala Aise Ho" in the State. Present paper is an attempt to present an over view of the course taken up so far and its success and significance for Teacher Education.*

**Key Words:** MOOC, Teacher Education, TESS- India, OER,

### I INTRODUCTION

Massive open online course (MOOC) has been introduced by TESS- India (Teacher Education through School based Support in India) a project funded by UK Aid from the Department for International Development (DFID) and led by the Open University UK, to articulate the vision of teacher education in context of frame work of NCF 2005 and NCFTE 2009, for Professional development of Teacher Educators and Teachers. Teacher Educators from various TEIs i.e. IASE, SISE, CTE and DIET and teachers across the state has been participated successfully in the 6 weeks online course Titled "Enhancing Teacher Education through OER: TESS-India". The course has been successfully launched in Hindi "OER के माध्यम से अध्यापक-शिक्षा का समृद्धिकरण (TESS-इंडिया)" after considering a huge demand from Teacher fraternity. The course explores how the teacher educators and teachers can experience self-learning, reflection, assimilation and articulation of new ideas by using OER in the design and delivery of teacher education programmes to help them bring about the transformation of classroom teaching and learning. These innovative multi-lingual text and video OER aim to support teachers in developing participatory approaches through modeling links between theory and practice in classroom activities.

MOOCs provide learners with the possibility to undertake activities drawing on a range of available resources and tools. Online learning culture provides opportunities for collaboration, peer support and professional learning. Each MOOC is presented on a 'platform'. The TESS-India MOOC is presented on the **EdX platform** ([www.edx.org](http://www.edx.org)).

Ministry of Human Resource Development has also launched MOOC through **SWAYAM (Study Webs of Active-learning for Young Aspiring Minds.)** and **IIT BombayX** has provided platform to enable learners to learn from anywhere and promote self-learning.

### II THE TESS-INDIA MOOC – AN OVERVIEW

The TESS-India MOOC has been designed as an open and free professional development opportunity for teacher educators in the Indian context. It is a small task-oriented course Titled "Enhancing Teacher Education through OER: TESS-India" and "OER के माध्यम से अध्यापक-शिक्षा का समृद्धिकरण (TESS-इंडिया)" focuses on OER engagement and use in teacher education, with a particular focus on the TESS-India OER. The TESS-India MOOC follows a participatory pedagogic model congruent with the pedagogy of the TESS-India

OER and characterized by four key features of networked learning experiences:

- (a) Aggregation (filtering, selecting and gathering personally meaningful resources – OER for use in their teacher education practice)
- (b) Remixing (interpreting the OER, bringing to them personal perspectives and insights)
- (c) Repurposing (reshaping the OER to meet needs within their own practice)
- (d) Feeding Forward (sharing the adapted OER with other participants and commenting on other participants' shared OER).

The MOOC does not comprise lectures, but rather short pieces to read and activities for participants to undertake on their own and in collaboration with other participants. Participants on TESS-India MOOC are expected to study for approximately 4 hours a week over a 6 week period. It is possible to download material and work off-line, but to participate fully and gain the benefits from collaborative learning participants need access to the internet for the duration of the course. The organization of Contact class during each week is another significant aspect of MOOC in Indian context.

### III AN OVERVIEW OF THE COURSE

TESS India MOOC Titled” **Enhancing Teacher Education through OER** “has been designed as to keep Teachers and Teacher Educators engaged and make them enabled to reflect and think over the modalities and approach for better classroom transaction In the TESS India MOOC, introduced in Hindi , from 21<sup>st</sup> November 2016 to 13<sup>th</sup> January 2017 Each week, participants has completed a number of activities such as reviewing your learning (a short quiz), presenting your ideas about a video and giving feedback (a peer review exercise), adapting an OER (a peer review exercise) and course quiz, make the learning interesting. The pre-course and post course survey were also there as a part of the course. An overview of the week by week content and approach of the Course has been described under:

- (a) **Week 1: Developing a vision and introducing key concepts** The purpose of this MOOC was to help teacher educators, Teachers and Trainee teachers to understand that if they are expecting for a change, then they need to change as well. Week 1 examines the international and national context for teacher education and develops the vision for participatory teaching and learning. It

encourages teacher educators to develop a vision for the classrooms. The activities introduced in this week helps them to develop this vision and introduce the concept of an OER in general and TESS-India in particular.

- (b) **Week 2: Focusing on active learning and the TESS-India OER**-The week, Focused on active learning – how to recognize it in practice and the skills that teachers need to support active learning in their classroom. Week 2 provides an opportunity teacher educator to engage with the TESS-India OER – the key resources, the teacher development OER and the videos. Although TESS India OER is written for teachers to use in the classroom, they can also be used by teacher educators working with pre-service or in-service teachers.
- (c) **Week 3: Using video to support teacher learning**-Week 3 introduces video as a tool to support teacher education. TESS- India has developed 55 Short duration Videos for Elementary and Secondary level to demonstrate the ideal classroom situation in practice. The focus of this week was on using the TESS-India videos to help teachers move towards more participatory practice. Video can be a very helpful tool, while watching video it is expected to notice particular features. The teacher educators need to think about how they can use video effectively. These videos can be access through online and/or through Pen drive, DVDs and SD cards, provided to all TEIs and Teachers across the state. In this week the assignment and giving feedback has been a demanding and new concept.
- (d) **Week 4: Developing your own practice with OER**-The activities of this week challenge the relationship between the teacher and the teacher educator. Week 4 explored how OER can help teacher educators to develop their own practice and support teachers in developing theirs. Participants has been asked to plan a teaching session by choosing a TESS-India OER (Key resource, video, teacher development OER or School leadership OER).Use of IT and A/V resources for planning a lesson makes the participants familiar to act with technology and E-learning content.
- (e) **Week 5: Finding and adapting OER**-There are many OER available on the internet. They are all free and can be used and reused. Week 5 Encourage Teachers and Teacher Educators to explore a range of OER that suits to their context. It introduces teacher educators to the potential – and challenges – of using other OER. Depending on the copyright license, they

can be adapted and shared. Participants have been introduced to a process diagram, which explain, how OER can be used.

- (f) **Week 6: Integrating OER into teacher education-**The week 6 emphasized on moving forward with the ideas in the MOOC and planning for the future. It focuses on moving forward by encouraging Teacher Educators, Teachers and Traine Teachers to make a plan to include OER into their normal work and teacher educator programme. The stress is on participants developing the habit of planning their teaching to include more modeling of active learning approaches. Participants are encouraged to communicate what they have learnt to their colleagues and to integrate the use of TESS-India OER and others they have found, into teacher education programmes. For instance, the key resources could be used to support 'methods' teaching; teacher development OER could be used to support subject pedagogy and the videos could be used in a variety of ways.

#### IV PILOTING OF MOOC IN MP

TESS India MOOC was piloted in 2015 (28 May-12 July 2015) with Administrative officers associated to Policy making and its implementation, Teacher Educators from selected TEIs i.e. IASE, CTE and DIETs across the state. These Nominated participants were facilitated by two state level facilitators in contact class, which was conducted each week. Participants were guided and provided support by the facilitators and course

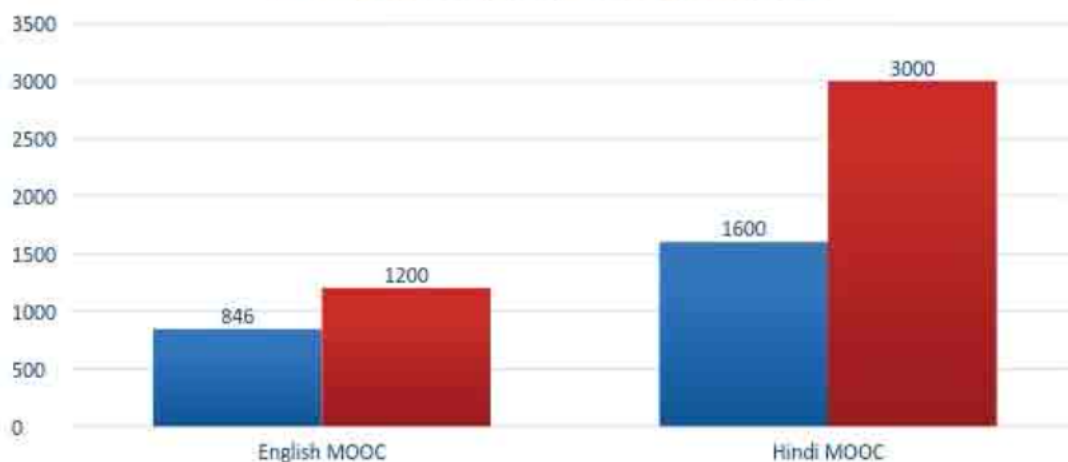
assignments were completed by the participants in group to strengthen group and peer learning. Pedagogy practices were taken place to understand the use of OER. It was focused on to explore the values and pedagogy underpinning teacher education OER from TESS-India and other repositories and learn how one can adapt and incorporate these OER for their own contexts and students. It was a complete package of learning with peer-assessed activities and on-line quizzes to consolidate learning. The pilot had a huge success and 39 out of 46 participants completed the course and obtained their certificates online.

#### V SCALE UP FIRST PHASE

After going through with a successful piloting the MOOC was launched across the state from 23<sup>rd</sup> November 2015 -15 January 2016. Teacher Educators from all the DIETs, CTEs and IASEs has been covered in this Phase. A group of District level facilitators was trained in Bhopal. Two Teacher Educators from each DIET and CTE were trained on course content to deliver and guide rest of the participants, in their respective districts through contact classes. Regular Interaction and follow up with DIETs and CTEs through Video conferencing supported this comprehensively.

Use of Whatsapp to communicate the instructions, experiences on practicing assignments and activities and sharing ideas made it more interesting and peer supportive. Registration Hand Book and Course Technical Guidelines both in Hindi were developed by TESS India to support

#### Participation from DIETs in MOOC



the Teachers and Teacher Educators to get them enrolled and complete the course successfully. As a result apart from Teacher Educators from TEIs,

Teachers and Traine Teachers also registered themselves for the course. A total 846 nominated participants has been completed the course and

obtain the certificate. Many more participants completed the course as they could not be able to track by the DIETs and their enrollment details were not available with DIETs so the actual no's might be more than that was expected in the State. Participants of 18 Private Teacher Education colleges from Jabalpur also took part in the course and more than 350 got the opportunity to complete the course.

## VI "OER के माध्यम से अध्यापक- शिक्षा का समृद्धिकरण (TESS- इंडिया)" TESS-INDIA MOOC IN HINDI

This has been a great initiative took place by Open University UK through TESS India project by introducing MOOC first time in Hindi. All in all

more than 3000 Teacher Educators, Teachers and Trainee Teachers has enrolled them self in the course from Madhya Pradesh and about 1600 completed the course successfully. Under the ages of State Education Department and facilitation provided by 6 State level MOOC facilitators (Earlier trained by Open University Experts) and 70 District level facilitators made the Hindi MOOC a grand popularity among the Teacher fraternity especially in Trainee Teachers across the State in many TEIs.



## VII THE LEARNING OUTCOMES OF TESS-INDIA MOOC

Engaging in the MOOC enabled the teacher educators and teachers with opportunities to learn to:

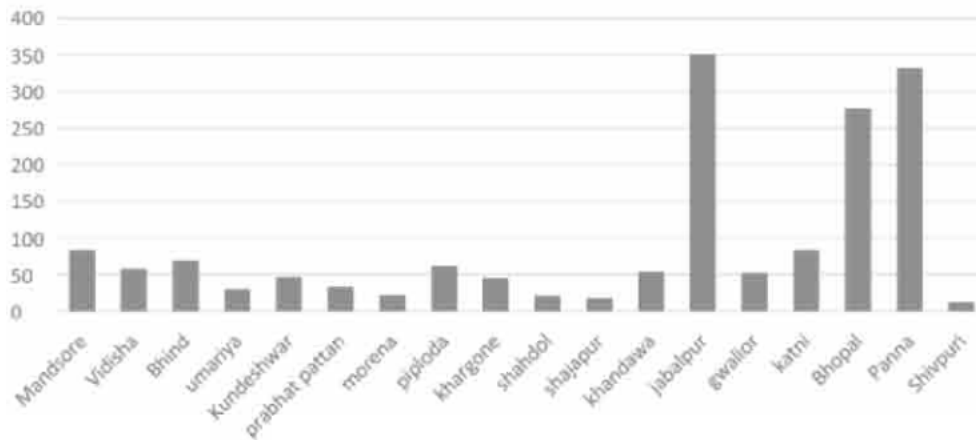
- (a) Recognized and modeled active, learner-centered teaching approaches.
- (b) The participants familiarized with the TESS-India OER and their potential to support teaching and teacher education.
- (c) Used OER (including the TESS-India OER) to plan and enact activities that promote teacher professional learning and pedagogic change.
- (d) They came to know how to select and use OER to meet their own professional learning needs.
- (e) TESS India Videos created a high demand in the field. MOOC has proved the path to use TESS India AV clips as well as other Educational videos to witness a better transformation of knowledge between Teacher and children.
- (f) TESS India has received some significant feedback on MOOC. Teacher Educators and Teachers took this very positively to enhance their professional skill over use of IT, E-learning promotion of E- Governance in Education system and Pedagogy of Teaching learning. Some of them felt difficulties in participating in Course discussion (an open

forum to share their views and ideas) while expressing their thoughts in English and this ultimately has emerge a great demand from participants and state education officials for MOOC to be introduced in Hindi for the majority of Hindi speaking people.

- (g) The Teachers not only from Urban but also from rural areas adapted to the use of IT while doing activities and assignment as well as understand the pedagogy of TESS India OER, this make them enable to identify and use better practices in their classroom to enhance teaching learning.
- (h) Creation and use of WhatsApp group supported the learning take place and strengthening the network as well as communication with participants.
- (i) The roles of Contact classes were incredible, as an offline communication and guidance provided through live contact classes. This enabled the facilitators to provide support to the participants to complete their task within time frame and provided an opportunity to share, interact with each other on pedagogy and learn the use of IT.

- (j) Going through with activities of MOOC and Demonstration of TESS India Videos build a pathway to the Trainee Teachers in term of visualizing the actual class room scenario i.e. classroom management, teaching pedagogy, involve children in class, assessment of children, this helped them significantly during their 40 days internship programme.
- (k) TESS India Hindi MOOC has reinforce the relation between Student Teachers and Teachers, as far as Teacher Education is concern. Student teachers feel very comfortable to ask the solution to their problems, face to face, on phone or through WhatsApp etc. to their DIET Teacher Educators and district facilitators.
- (l) In turn this led to a great support and worked as a vehicle for the much expected Evaluation for improvement a School Standard and Evaluation framework programme of NUEPA titled "Shaala Siddhi" Hamari Shala Aise Ho" in the State. The TESS India OER and Videos directly support to the Domain 2 and 5 of Shaala Siddhi therefore teachers were motivated to participate in the course and learn the pedagogy to practice in their classroom.

Participants Completed Hindi MOOC through DIETs



- (m) District facilitators were highly dedicated towards facilitating the MOOC to the participants. Panna Bhopal, Katni, Mandsore, Bhind, Vidisha, Piploda, Gwalior, Khandwa, Khargone, Kundeshwar, Shivpuri, Jabalpur,

Prabhatpattan, Umaria and Shahdol DIET's has shown their great efforts to move the teachers and trainee teachers towards Hindi MOOC and facilitate the contact class.



- (n) State lead facilitators and all district facilitators were rewarded with special Certificate (apart from online certificate) and Badges, by Director Rajya Shiksha Kendra, as an appreciation to their excessive efforts.
- (o) Assignments and activities of Hindi MOOC attracted participants especially teacher trainees to learn and practice innovative and participatory way of teaching – learning process to become a sensible teacher.
- (p) Efforts from few teachers have been highly appreciable as they are visited Cyber Cafe to complete their weekly activities and assignments due to non-availability of computers and internet connections in their respective areas.
- (q) Extension of date to complete the assignment put an extra motivation to the participants as they had a continuous request for reopen the assignment to attempt , due to some official engagements some of them were found them self-unable to complete the assignment on time.
- (r) SISE Jabalpur taking lead to cater Govt. teachers as well as teachers from Private TE Institutions to complete the MOOC. Based on receiving of international certificates and MOOC by its Teaching staff, Teachers and Teacher Educators the Institute awarded with 'A' grade NAAC accreditation in the field of academic excellence.

### VIII CONCLUSION

TESS India MOOC course of 6 week duration has set up a bench mark for professional development of Teachers, Teacher Educators and the resource persons from different districts and blocks in teaching pedagogy and leveraged them with use of IT skill that is ultimately significant for active teaching learning in the classrooms.

Open University UK-TESS India project is looking forward to introduce specially designed MOOC for

subject teachers, for their professional development in term of subject knowledge and to apply pedagogy of participatory learning in their respective subjects. Noteworthy to say that teacher educators and teachers from even far remote areas across the state has been benefited and can get advantage in coming years of doing many more MOOC course in Hindi, to learn about real classroom practice. It has meet out the requirements of the Teachers and Teacher educators, to learn and provide them practical knowledge and deep understanding over active participatory method of classroom transaction for improving the quality of education in the state.

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