

# **Consultant Orientation Handbook 2015**



Name.....

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This handbook has been prepared by the TESS-India academic team to support the orientation and training of TESS-India consultants.

### Welcome!



TESS-India was initiated in 2012 at the request of the Government of India to help address the issue of teacher quality. As increasing numbers of children across India attend school, the challenge is to ensure a productive learning experience for each child. Recent data indicates large numbers of children achieve poor learning gains for each year in school (ASER, 2014). Investment in teachers is critical to improving these children's learning, and targeting teacher training is a significant goal of the Government of India (MHRD, 2014). TESS-India offers a pioneering teacher education response to these challenges in its multilingual Open Educational Resources (OER) toolkit comprising text and video materials available in multiple formats to support the professional learning of primary and secondary teachers of Literacy, Maths, English and Science. TESS-India harnesses the attributes of 'open' in both the outputs – OER - and in its ways of working, offering a unique approach to teacher change at scale.

TESS-India is funded by UKAid from the UK Government. As a multiple stakeholder partnership led by the Open University from the UK, TESS-India is working with the Ministry of Human Resource Development (MHRD) and Departments of Education in seven states across India<sup>1</sup>. Collaboration is central to the TESS-India model and over 200 Indian and international teacher education experts, policy makers and teachers were involved in the creation and adaptation of the OER and large numbers of Indian teacher educators are now incorporating the OER into their pre-service and in-service teacher education programmes, aiming to sustainably strengthen and improve systems at relatively low cost.

Your role is to support this process, helping teacher educators and teachers to adopt and use more participatory interactive approaches in their classrooms and lecture halls through the use of the TESS-India OER. Realising the potential of the OER at scale will not be easy. Courage, conviction and resilience are needed to disrupt historically embedded practices of teacher education and to value the capacity for action of teachers and teacher educators. The limited success of many previous ideas and initiatives has led to a prevalent 'deficit' view of teachers but activity on social media platforms, for example, demonstrates that teachers have an appetite and enthusiasm for these new forms of interaction. The challenge is to harness this energy and new ways of working to transform enacted practice in teacher education.

We look forward to working with you in this exciting endeavour. Thank you for your contribution.

Inde Willede

Freda Wolfenden Academic Director



<sup>1</sup> In this first phase TESS-India is working in Assam, Bihar, Karnataka, Madhya Pradesh, Odisha, Utter Pradesh and West Bengal.

### The TESS-India Consultant Orientation

Some of you will be familiar with the TESS-India Open Educational Resources (TI OER) but many of you will be new to this OER resource bank and the pedagogic approach of the OER. For most of you the ways of working of TESS-India will be different to your usual practices. Our emphasis is on collaborative working through interactive participatory workshops and follow up activities. To support you in your role we are providing orientation sessions and at the end of the sessions our aim is that you will be able to:

- Articulate and recognise the pedagogic approach of the TI OER
- Be familiar with the TI OER: teacher development, key resources and audio
- Demonstrate confidence and capability to design and facilitate an interactive participatory workshop

The orientation has been organised in two parts:

- 1. Preparatory online activity (12 hours study)
- 2. Face-to-face workshop mode ( 2 days)

**Consultants will be expected to complete Part 1 prior to the workshops and bring evidence of their engagement with the online materials to the workshops.** This booklet outlines the preparatory online activity.

Please read through the booklet now and decide how you will work through the activities. Use the pages at the end of the booklet to note your questions and queries.

### **Getting started with the Online Activities**

The online activities are all in a MOOC (Massive Open Online Course) called 'Enhancing Teacher Education through OER'. To do the activities you will need reliable internet access and an email address. In order to access the MOOC go to <u>https://www.edx.org/course/enhancing-teacher-education-through-oer-oecx-tess101x</u> click the 'Enrol Now' button on the right hand side of the screen.

You will be prompted to register with edX, complete the form, once registered you need to verify your account. It is normally a link sent to your email. You will now be able to access the course. We suggest you note here the email address you use for the MOOC and your user name / password.

The MOOC is no longer running as a supported course so you will not be able to achieve a certificate. As part of your consultant orientation we require you to study a selection of activities from the MOOC and to make note of your responses and thoughts. This is referred to as the evidence. Please bring this to the face-to-face workshop - we will be using your notes.

We have given each activity a timing, if you are unable to complete the activity in this time please leave and move to the next activity. It is most important that you look at all the activities.

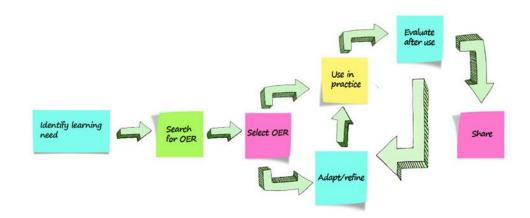
You will find the activities in 'courseware'. When viewing the content you will navigate through the weeks and sections using the vertical navigation on the left hand side (a) when in each section you can navigate to each page using the horizontal navigation (b) at the top.

(a)			(b)
Getting started Week 1: Visions for teaching and learning	Course Documents	TESS-India OER Instructo	0
Introduction A global vision for teaching and learning? What needs to change? Open Educational Resources Introducing TESS-India	Activity 1.7: Ass learning	signment 1 – Revi	iewing your
TESS-India pedagogy Reviewing your learning Week 1 Our soue jul 12, 2015 at 0000 UTC Activity completion checklist	(Allow approximately 20 minutes) To complete the first week of the M covered. This is part of the 'Portfolio		
Neek 2: Active learning	QUESTION 1 (1/1 point)		STAFF DEBUG INFO



## Activity 1: What are OER? Time: 60 Minutes

Activity: Complete activity 1.4 (in week 1 of the MOOC) and read the associated text. <u>http://tinyurl.com/TESS-activity1</u>



**Evidence:** Note here (or in an online or hardcopy learning journal) your questions on OER and notes on at least one OER site.

### Activity 2: Introduction to TESS-India Time: 60 Minutes



Activity: Complete activity 1.5 (in week 1 of the MOOC) and read the associated text. (You will find the TESS-India website at www.tess-india.edu.in

#### http://tinyurl.com/TESS-activity2

**Evidence:** Note here (or in an online or hardcopy learning journal) the 2-3 TESS-India OER you have chosen and your reasons for choosing them.



# Activity 3: The TESS-India Pedagogy Time: 120 Minutes

Activity: Complete activities 1.6 and 1.7 (in week 1 of the MOOC) and also read the associated text. Activity 1.7 tests your understanding of OER; your score isn't important. If you submit an incorrect answer please make sure you click on 'show answer' to see the explanation.

#### http://tinyurl.com/TESS-activity3



Evidence: Note here (or in an online or hardcopy learning journal) your responses to the 'reflection point' and your answer to question 2 in activity 1.6.



# Activity 4: Active Learning Time: 60 Minutes

Activity: Read the introduction to week 2 and undertake activity 2.1.

#### http://tinyurl.com/TESS-activity4

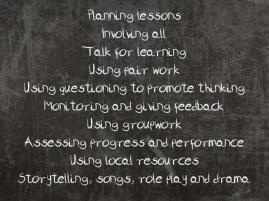
Evidence: Note here (or in an online or hardcopy learning journal) your responses to questions 2 and 3 in activity 2.1



### Activity 5: TESS-India Key Resources Time: 120 Minutes

Activity: Study activity 2.2 (reading the Key Resources and viewing a selection of the TESS-India video clips).

http://tinyurl.com/TESS-activity5



**Evidence:** Choose 4 Key Resources and write a short summary (50 words) of each of these Key Resources.



# Activity 6: TESS-India OER in detail Time: 90 Minutes

Activity: Study activity 2.3 and the text on 'key messages' of the OER.

http://tinyurl.com/TESS-activity-6

**Evidence:** Note here (or in an online or hardcopy learning journal) your answers to questions 3.6 and 7 in activity 2.3.



# Activity 7: Using TESS-India OER with teachers Time: 90 Minutes

Activity: Read the associated text and attempt activity 4.3 (week 4)

http://tinyurl.com/TESS-activity7

Evidence: Note here (or in an online or hardcopy learning journal) your ideas for questions 4 and 5 in activity 4.3

# Activity 8: Sharing TESS-India OER Time: 90 Minutes



Activity: In week 6 read activity 6.2 'Presenting to colleagues' and develop an interactive session to introduce TESS-India OER to your colleagues.

http://tinyurl.com/TESS-activity8

**Evidence:** Record your draft plan for an interactive session with colleagues on TESS-India.

# Activity 9: Reflecting on your learning Time: 30 Minutes



Activity: Think about the 8 activities you have undertaken on the TESS-India MOOC: What have you learnt? What surprised you? What puzzled you? What excited you? What did you enjoy? What did you find difficult?

**Evidence:** Note down 3 key learning points from your study with the TESS-India MOOC activities and any questions or queries you have for the workshops.

Don't forget to bring this learning record to the workshop.

### **Appendix A: OER Titles**

#### **Elementary English**

- EE 01 Classroom routines
- EE 02 Songs, rhymes and word play
- EE 03 Letters and sounds of English
- EE 04 Mark-making and early writing
- EE 05 Storytelling
- EE 06 Shared reading
- EE 07 Planning around a text
- EE 08 Promoting the reading environment
- EE 09 English and subject content integration
- EE 10 Using the textbook creatively
- EE 11 Learning English in the creative arts
- EE 12 The learning environment
- EE 13 Developing and monitoring reading
- EE 14 Developing and monitoring writing
- EE 15 Community resources for English

#### Secondary English

- SE 01 Local resources for teaching English
- SE 02 Using more English in your classroom
- SE 03 Building your students' confidence to speak English
- SE 04 Supporting reading for understanding
- SE 05 Whole-class reading routines
- SE 06 Supporting independent writing in English
- SE 07 Whole-class writing routines
- SE 08 Strategies for teaching listening
- SE 09 Supporting speaking in English: pair and group work
- SE 10 English grammar in action
- SE 11 Strategies for teaching vocabulary
- SE 12 Promoting reading for pleasure
- SE 13 Supporting language learning through formative assessment
- SE 14 Developing your English
- SE 15 Using resources beyond the textbook



#### **Elementary Maths**

- EM 01 Using number games: developing number sense
- EM 02 Using structured resources to develop understanding: place value
- EM 03 Using a number line and the expression 'Imagine if ...' positive and negative numbers
- EM 04 Mathematical stories: word problems
- EM 05 Asking questions that challenge thinking: fractions
- EM 06 Making students believe they CAN do mathematics: operations on fractions
- EM 07 Using manipulatives: decomposition and regrouping
- EM 08 Using real-life contexts: the formal division algorithm
- EM 09 Comparing and contrasting tasks: volume and capacity
- EM 10 Using rich tasks: area and perimeter
- EM 11 Physical representation in mathematics: handling data
- EM 12 Learning through talking: variables and constants
- EM 13 Conjecturing and generalising in mathematics: introducing algebra
- EM 14 Using embodiment, manipulatives and real-life examples: teaching about angles
- EM 15 Creative thinking in mathematics: proportional reasoning

#### Secondary Maths

- SM 01 Using visualisation: algebraic identities
- SM 02 Developing mathematical reasoning: mathematical proof
- SM 03 Visualising, comparing and contrasting: number systems
- SM 04 Connecting mathematics: finding factors and multiples
- SM 05 Building mathematical resilience: similarity and congruency in triangles
- SM 06 Cooperative learning and mathematical talk: triangles
- SM 07 Creating contexts for abstract mathematics: equations
- SM 08 Enacting vocabulary and asking questions: exploring the circle
- SM 09 Hands-on learning and embodiment: constructions in geometry
- SM 10 Tackling mathematical anxiety: combination shapes and solids
- SM 11 Learning from misconceptions: algebraic expressions
- SM 12 Developing creative thinking in mathematics: trigonometry
- SM 13 Reading, writing and modelling mathematics: word problems
- SM 14 Thinking mathematically: estimation
- SM 15 Developing stories: understanding graphs

#### **Elementary Science**

- ES 01 Brainstorming: sound
- ES 02 Pair work: life processes
- ES 03 Using group work: floating and sinking

- ES 04 Using demonstration: food
- ES 05 Concept mapping: water
- ES 06 Teacher's questioning: forces
- ES 07 Pupils' questioning: sorting and classifying things
- ES 08 Observing patterns: shadows and night & day
- ES 09 Practical investigation: change
- ES 10 Using stories: environment
- ES 11 Using games: electricity
- ES 12 Alternative conceptions: heat and temperature
- ES 13 Developing the learning environment
- ES 14 Discussion in science: malnutrition
- ES 15 Using the community: environmental issues

#### **Secondary Science**

- SS 01 Pair work: atoms and molecules, and chemical reactions
- SS 02 Reading in the science classroom: heredity and evolution
- SS 03 Mind mapping and concept mapping: acids, bases and salts
- SS 04 Using local resources: life processes
- SS 05 Community approaches: science education and environmental issues
- SS 06 Using games: the Periodic Table
- SS 07 Questioning: why do we fall ill?
- SS 08 Language in the science classroom: cells
- SS 09 Probing understanding: work and energy
- SS 10 Using physical models: teaching electricity to Class X
- SS 11 Brainstorming: forces and laws of motion
- SS 12 Building mental models: teaching carbon & its compounds to Class X
- SS 13 Practical work and investigations: teaching gravitation to Class IX
- SS 14 Effective demonstrations: teaching light and vision to Class X
- SS 15 Effective project work: sources of energy

#### Language and Literacy

- LL 01 School-home communication
- LL 02 A language-rich classroom
- LL 03 Speaking and listening
- LL 04 Early reading
- LL 05 Storytelling
- LL 06 Reading for pleasure
- LL 07 Reading for information

LL 08 - Knowing and using children's literature LL 09 - Authentic writing LL 10 - Using local resources LL 11 - Language, literacy and citizenship LL 12 - Multilingualism in the classroom LL 13 - Pair work for language and literacy LL 14 - Integrating language, literacy and subject learning LL 15 - Monitoring, assessment and feedback

### **Appendix B: Key Resources**

N.B. These resources are not localised, but translated for each state.

- Planning lessons
- Involving all
- Talk for learning
- Using pair work
- Using questioning to promote thinking
- Monitoring and giving feedback
- Using group work
- Assessing progress and performance
- Using local resources
- Storytelling, songs, role play and drama

# **Appendix C: OER Sections**

Introduces the teaching approach and the curriculum topic of the unit
These are learning expectations for the teacher and highlight the key opportunities for professional development and learning in the unit.
This section explains why the teaching approach is important in supporting student learning.
These are activities to be carried out by the teacher. Most of them are activities for the teacher to do in the classroom, with their students, but some involve working collaboratively with colleagues, or involve preparing for classroom activities
These are first-hand accounts, by teachers, of their experience of carrying out the activities described, similar activities, preparatory activities or follow-up activities. The case studies are used to show how teachers respond to some of the challenges facing teachers in India such as large, multi-lingual and multi-grade classes, and a lack of resources. In particular they demonstrate inclusive practices, how to elicit prior knowledge, and how to make the teaching relevant to students' lives.
This encourages the teacher to reflect purposefully on their existing practice or experience, or on what they have noticed when carrying out the activities or discussing the case studies. It is this sort of reflection that will lead to learning for the teacher.
The narrative reinforces the benefits of the approaches and techniques that are the focus of the OER. It shows how different aspects of the approach link together and complement each other. The purpose of the narrative is to support the teacher in being able to develop their learning and their pedagogic practice in different curriculum contexts.
This provides a brief review of the technique covered in the unit and encourage the teacher to take forward their learning, revisiting the ideas in different curriculum contexts.

Resources	These contain material to support the teacher in carrying out the activities. They may contain more detail about the approach (e.g. material from one of the key resources), support for subject knowledge development, classroom resources, links to the NCF, or further examples of similar classroom activities.
Additional	These are intended to empower the teacher by encouraging
	them to take their learning beyond the OER and to engage
resources	
	with other resources to support their developing professional
	practice. In particular, this is an opportunity to support subject
	knowledge development and to raise awareness of resources
	available in India and internationally.
References/Bibliog	These include references used by the authors and other
raphy	recommended readings for the teacher to extend their
	academic understanding of the issues highlighted in the unit.

# Appendix D: Some examples of proposed use of TESS-India OER

- For discussion in Head Teachers' forum and subject teachers' forum.
- For exemplification and teaching the MA in Education programme
- Orientation for the DIET faculty, school teacher, educational administration.
- Incorporating 2-3 seminars in a teacher training module. Sensitise the teacher on the utility of the material, how to use the material in classroom process, how the materials will help her/ him to design the activity and to use the web.
- School Libraries; give each school library a set of TESS-India OER for self-access by teachers.
- In-service training program: TESS-India OER used during content enrichment program according to the subject.
- ICT Kiosks at DIETS enabling teachers to browse and print the OER for use in their own classrooms.
- Incorporate the OER in micro teaching and simulation teaching lessons of teacher education programmes



