

Telangana Repository of Open Educational Resources (TROER) - Technology Mediated Teacher Education Programme

1. Brief description of the innovation

The Department of School Education has created State Specific Repository of educational resources. The repository is named as Telangana Repository of Open Educational Resources (TROER). The objectives of creating TROER are;

- To store, preserve and provide access to a variety of digital resources to the students and teachers.
- To develop connected teacher forums in all the subject areas for professional exchange and for reflective practice through e-mail groups and attached to TROER.
- To facilitate the teachers to create and share contextual teaching and learning resources.
- To upload all the textbooks, teacher handbooks, children literature etc. and provide access to all.
- To upload the digital videos which are concept specific developed by the SIET to make use by the teachers in online mode.

2. Problem that the innovation aims to solve

- a) The teachers professional development is being attempted year after year through recurring training programmes with teacher hand books. There is no alternative sources of continuous professional development by way of accessing resources and to develop connected subject groups to share professional ideas and pose problems for clarification through e-mail groups. Much digital content is available on teaching learning practices, in the World Wide Web which need to be made access to the teachers by giving links to TROER. Therefore a whole range of teaching resources now made available with establishing a e platform

i.e. TROER. All the subject forums are connected through e-mail groups and attached to TROER.

- b) This initiative will address the problem of non availability of educational material to the teachers and students by way of making access of all the relevant digital content developed and selected by expert team of teachers and teacher educators.

3. Key features

- a) The TROER is using the powerful FOSS Media Wiki platform to support collaborative OER creation by teachers.
- b) The expert teachers and teacher educators are creating resources under all curricular and other areas. An expert resource group have been developed as editorial team to edit the digital content developed by the teachers before uploading it into TROER.
- c) The development and maintenance of TROER will be in collaboration of Department of IT and Electronics Government of Telangana where the department provided adequate cloud space and SWAN facility for uploading the digital content.
- d) The meta data for the digital resources is being developed and uploaded with resources.
- e) The CIET of NCERT, IT for Change are providing necessary support to undertaking technology mediated learning.
- f) The TROER will provide continuous support to the teachers for their professional development and for improved classroom processes.
- g) The TROER is the first state OER repository developed on the lines of NROER. All resources in the TROER will have metadata as per NROER for easy access by teachers
- h) The ICT Curriculum for the secondary schools and teacher hand books have been uploaded in the TROER.

TROER includes:

- Digital resources
- Reference books
- National level content with state curriculum Textbooks
- Teachers source books and Handbooks
- Question papers/ testing material

FORUMS

To share the content

- Subject forums
- Teacher forums
- E mail groups
- Social media groups

4. Impacts or benefits

The TROER Platform with a scale of teaching resources will support for continuous teacher professional development. All the new textbooks and teacher hand books developed under DPEP, SSA and RMSA, SCERT are being uploaded and helpful for the teachers to improve their teaching practice. The printing of the module for teacher training is not necessary and same are being upgraded in the TROER for teachers use. A lot of Resource Books for Teachers will be shared for the benefit of teachers and students. The curriculum, syllabus, academic standards, learning indicators in terms of expected outcomes in the TROER platform will be helpful for the parents and develop their awareness to take proper care of their children.

Future action plan

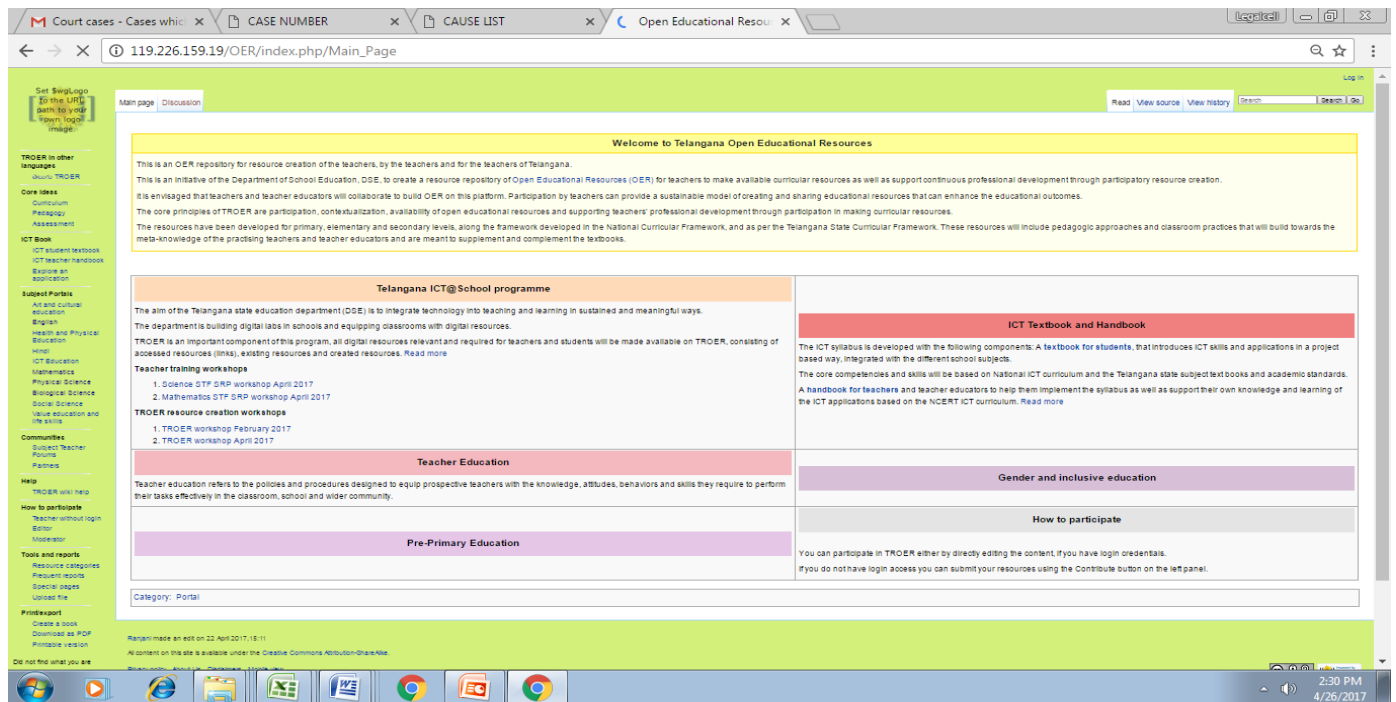
- Development of digital material for primary and secondary schools in English , Telugu and Urdu medium.
- Development of audio material in languages.

- Orientations and trainings on:
- Digital lessons
- ICT curriculum
- Digitization of Text books and other resources
- Development of an App for all the issues related to the content.
- To introduce Massive Open Online Courses(MOOC's)

5. Sustainability and scaling up

Updation, improvement of resources and uploading into TROER is a regular phenomenon. This is just started and lot of work is before us to develop TROER with more digital resources and link to popular websites in different subject areas along with professional forums across the globe.

Images of TROER Pages (Screen Shots of TROER Home Page and subject wise pages)



119.226.159.19/OER/index.php/English

English

If you wish to contribute to Telangana Repository Open Educational Resources, [Click here](#)

Welcome to the English language portal

This is a page for English teaching learning

History of English A page with information on the English language Dummy text Dummy text Dummy text Dummy text Dummy text	English language teaching Nature of language Nature of child:How do children learn language Learning mother tongue versus learning foreign language/second language Theories of language learning Language policies in India	English curriculum and syllabus Vision Why teach English Objectives of teaching English Objectives of teaching English
Pedagogy of English English as second language How children learn Teaching learning strategies Approaches	Discourses and learning indicators Nature of language Nature of child:How do children learn language Learning mother tongue versus learning foreign language/second language Theories of language learning Language policies in India	Textbooks English Philosophy of the textbooks Themes/Lessons Academic standards and learning indicators Themes Unit structure
English language resources Audios	Teacher professional development English Teacher reflections,	Assessments in English Types of assessment

119.226.159.19/OER/index.php/Mathematics

Mathematics

Mathematics is the queen of sciences.

Welcome to the Mathematics home page

This page has resources for mathematics

History Indian mathematics Global Mathematics Milestones in mathematics	Nature and philosophy Nature of Mathematics Philosophy of Mathematics	Curriculum and syllabus aims why teach mathematics objectives academic standards learning indicators NCF SCF Teacher Paper
Pedagogy Introduction How children learn mathematics Teaching learning strategies Approaches Nature of Child Learning/Themes Mathematical language Problem solving, Reasoning and logic	Areas Number systems Algebra Geometry Data handling Introduction to measurement Introduction to acids Progression Probability Coordinate Geometry	Textbooks Philosophy of text books Importance of types of Exercises NCERT & other publications (Not in this class) (NIPUN)
Resources Videos Teacher hand books and other material e-mer e-mer Formative assessment tools e-mer Other Links Science magazines E-mer E-mer	Assessments Nature of CCE Progress of CCE Tools of CCE Formative assessment tools Summative assessment E-mer E-mer	Teacher professional development and forums Research papers and articles e-mer national level training seminars NGOs Teachers Medial and subject forums
Innovations From the field From schools and society Organizing field trips - organizing field trips e-mer e-mer	Students' work projects, projects, projects, projects activities Organizing field trips - organizing field trips e-mer	Mathematics 1. History 2. Nature and philosophy 3. Curriculum and syllabus (aims, why teach mathematics, objectives, academic standards, learning indicators) 4. Text books 5. Pedagogy - How children learn, Teaching learning strategies and approaches 6. Areas (Number systems, algebra, geometry, data interpretation and progression)

Physical Science

welcome to Physical Science home page

This page is for resources for physical science

History Indian science world science development science time line Important discoveries and inventions Life history of scientists	Nature and philosophy of science Nature and Scope Aims of teaching science How science is taught Science and Technology	Physical Science Curriculum and syllabus vision why teach Physical Science objectives academic standards learning indicators NCF SCF Position Paper
Pedagogy of science How children learn Teaching learning strategies and approaches Nature of Child learning Process	Themes in Physical Science Material How things work Moving things and people ideas Natural resources Natural Phenomenon	Textbooks of Physical Science philosophy unit structure Importance of sub titles state central, other publications (6th to 10th classes TM/EM/UM)
Resources videos teacher hand books and other modules nriiser siet Other Links Science magazines Science journals	Assessments in Science philosophy of CCE formative assessment-tools summative assessment blue print test/items	Teacher professional development and forums Science Research papers and articles state/national level training seminars NGOs teachers intellectual and subject forums
Innovations from the field from schools and society organizing field tips	Students' work in Physical Science projects, projects, projects, projects, activities inspire	Scientists and inventions chronological listing of discoveries and inventions

Waiting for 119.226.159.19...

Biological Science

Welcome to the Biological Science home page

This has resources for biological science

History Indian science world science development science time line Important discoveries	Nature and philosophy Nature and Scope Aims of teaching science How science is taught	Curriculum and syllabus vision why teach biology objectives academic standards learning indicators NCF SCF position papers
Pedagogy How children learn Teaching learning strategies and approaches	Themes Food world of living organisms what with living being are build Natural resources	Textbooks philosophy unit structure Importance of sub titles state, central, other publications 6th to 10th classes TM/EM/UM
Resources videos teacher hand books and other modules nriiser siet MANA TV websites	Assessment philosophy of CCE formative assessment-tools summative assessment-blue print test/items indicators	Teacher professional development and forums articles state national level training seminars social organisations NGOs intellectual and subject forums
Innovations from the field from schools and society organizing field tips	Students' work projects, activities inspire	Scientists and inventions chronological listing of discoveries and inventions Biologists-their success stories