



Centre of
Excellence in
Teacher
Education



Annual Report 3

2023-24



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Excellence in
Teacher
Education

CETE/2024/Oct/RP/9

The Centre of Excellence in Teacher Education (CETE) at the Tata Institute of Social Sciences, Mumbai (bit.ly/cetewebsite), aims to enable Right to Quality Education for all children in India by helping teachers respond to diverse and changing needs. Built around the central premise that professional qualified teachers can create lasting impact, the centre focuses on empowering teachers, improving professional development standards, supporting the teacher education ecosystem, and advocating the strengthening of policy on teaching and teacher education. Research at the centre is on the themes of quality in teaching, policy and scaling innovations, inclusion, curriculum and pedagogy, and EdTech. Academic teaching programmes include B.Ed.-M.Ed., M.A. Education, doctoral research, short term programmes through blended learning, and online offerings to enhance capabilities of teachers and teacher education faculty (www.tissx.tiss.edu). Key field action projects are focused on improving inclusive teaching-learning at schools and employing technology thoughtfully in professional development of teachers. The Connected Learning Initiative (www.tiss.clix.edu), was awarded the UNESCO King Hamad Prize for the Use of ICTs in Education in 2018. CETE received seed support from the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, Government of India, and TATA TRUSTS.



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Report is available for download at <http://bit.ly/cetewebsite>,
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From the Centre Chair

The year 2023-24 has been a year of stability and focus on strategic impact.

The launch of our MA (Education & Technology), the release of the second Status of Teachers, Teaching & Teacher Education Report for India 2023 (SOTTER 23), our International collaborations, the second edition of the Rachana Fellowship and achievements of our students have made this a productive and fulfilling year for CETE. We are grateful to our partners and collaborations from institutions and various state governments for making the year fulfilling and successful.

Professor Shalini Bharat, Vice Chancellor of TISS, retired in September 2023. Professor Manoj Tiwari has taken over as Interim Vice Chancellor. We thank Professor Bharat for her support to CETE and wish her all the best.

Prof Padma Sarangapani,

Chairperson,

Centre of Excellence in Teacher Education,

Tata Institute of Social Sciences

Prof. Mythili Ramchand,

Co-Chairperson,

Centre of Excellence in Teacher Education,

Tata Institute of Social Sciences

CETE Advisory Council

Shankar Das, Pro-Vice Chancellor TISS

Aashu Calapa, Retired HR Professional

Amrita Patwardhan, Head - Education, TATA Trusts

Priya Subbaraman, Co-Founder of Dhiraa SkillDev Foundation

Nayantara Sabavala, Former Director, Program Design, TATA Trusts

Mona Kwatra, Co-Founder, 9CoLab Ventures Pvt. Ltd.

Vrinda Sarup, Retired IAS Officer

Rekha Pappu, Chairperson- School of Educational Studies, TISS Hyderabad

Shyam Menon, Executive Vice President, BML Munjal University

Rajesh Pawar, Global Digital Practices Leader

Centre Board Members for 2022-23

Padma M. Sarangapani, Professor and Chairperson

Mythili Ramchand, Professor and Co-Chairperson

Amina Charania, Associate Professor

Arindam Bose, Associate Professor

Bindu Thirumalai, Assistant Professor

Shamin Padalkar, Assistant Professor

G Nagarjuna, External Expert, Superannuated as Professor, HBCSE,

Radhika Misquitta, External Expert, Co-Principal, Gateway School, Mumbai, External Expert

Fayis PS, Student Representative (MA Education 2022-24)

CETE: 2023-24 Highlights

The Tata Institute of Social Sciences (TISS) was established in 1936. In 1964, the Institute was declared Deemed to be a University under Section 3 of the University Grants Commission Act (UGC), 1956. TISS is an institution of excellence in the area of applied social sciences. TISS continually responds to changing social realities through the development and application of knowledge, towards creating a people-centred, ecologically sustainable and just society that promotes and protects dignity, equality, social justice and human rights for all.

The **Centre of Excellence in Teacher Education (CETE)** is an independent centre at the Tata Institute of Social Sciences (TISS), Mumbai. Established with a seed grant from the Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, Government of India (2018-2019) and TATA TRUSTS, with continued support from the TATA TRUSTS as founding partner.

CETE's Vision and Mission is innovation and improvement in teacher education, and school and higher education pedagogy and curriculum. The Centre's vision is aligned with United Nations 'Sustainable Development Goal 4' which is to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." The Centre envisages its role as a "Catalyst for Transformation in Teacher Education" through multiple activities. It aims to accomplish this through five core areas: Academic Programmes, Field Action Projects, Research, Policy Advocacy, Partnerships and Collaborations.



Founding Partner

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Seeded by

TATA TRUSTS
&



Highlights of 2023-2024

In the academic year 2023-2024, the Centre's schedule was packed with existing and new programmes for students, events, and activities focusing on teacher professional development, technology and education, academic leadership, education discipline and inclusive education, involving many international and national educators.

Professor Shalini Bharat demitted office in September 2023. We acknowledge her support for and interest in the work of the Centre. Professor Manoj Tiwari who took over as interim Vice Chancellor has ensured that the Centre's work continues and contributes to the National agenda of teacher development.

50 students were admitted into the MA (Education) and BEd MEd AND Phd programmes at CETE in 2023-24.

The MA (Education & Technology) was launched with 7 students enrolling in the programme.

Student Activities

The annual cultural festival SIFAR, organised by the students, was held on March 8 and 9, with exciting events including workshops, quizzes, stalls and saw enthusiastic participation from the TISS community.

A second alumni meeting was held this year, and numerous suggestions were made by the alumni, including getting involved in coaching current students for employment.





The year concluded with 50 students graduating from CETE programmes and many of them successfully placed in reputed institutions.

The fifth volume of Riyaz was published on the theme of 'Education beyond Convention'. 16 articles, including a few poems and illustrations explored pedagogy, co and non-scholastic education, oral learning and blended learning, embodied pedagogy, feminist and Ambedkarite pedagogies.



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The 2nd annual Rachana Fellowship was conducted successfully with 85 student teachers from teacher education programmes across India. The groups enjoyed five packed days that introduced them to a range of innovative pedagogies in their subject areas, as well as exploring education for sustainable futures. One of the many highlights was the session on education at the Kamala Nimbkar Bal Bhavan School at Phaltan and the books made by the children of the school, conducted by Dr. Manjari Nimkar and Ms. Rajavanshi, both alumni of the MA Education (Elementary) programme of TISS.



Research, Conference and Publications



An International Symposium on **Teacher Professional Development in the Global South** was organised from August 31st to September 1st, 2023, with support received from the Scheme for Promotion of Academic and Research Collaboration (SPARC). Experts from the BRICs, South Asia, Sub-Saharan Africa, as well as colleagues from the UK and the United States, attended the event. The symposium focused on teacher development for equity and inclusion, as well as developing comparative perspectives.



bit.ly/GEMR_BP

Dr. Freida Wolfenden launched the background paper authored by CETE faculty for the UNESCO GEM 2023 report on technology enabled content for school education in South Asia.



Invited delegates from Brazil speaking on History of teacher education practices in Brazil

On February 13, 2024, Prof Krishna Kumar, Director (Rtd.) NCERT, launched the book **“Learning without Burden: Where Are We A Quarter Century After The Yash Pal Committee Report”**. The book, edited by Prof. Mythili Ramchand, Dr. Ritesh Khunyakari, and Dr. Arindam Bose, provides perspectives from academics and practitioners on the seminal policy document Learning without Burden, reflecting on its core ideas and related practices.

The Centre’s **Policy and Practice Paper Series** was also launched this year, with earlier white papers and policy papers being included and a series of five new policy practice papers being finalised this year as a part of the series. These papers draw on the field practice and research of the Centre to inform policies institutions and practice. This years paper mostly deal with issues of ICT and teacher education.

The Centre put into place rigorous systems and protocols for data and research management and documentation and for project management. Guidelines for working with children, relevant for our field staff and students were developed. Manuals for all teaching programmes and management of Short term programmes were developed and guide the work key activities of the Centre.

A day long Conference on **“The discipline of education in India: Trajectories and Perspectives”** was organised on 11th December 2023 in Delhi in collaboration with India International Centre and Orient Blackswann. The conference brought together leading education scholars in India deliberating on the development of the discipline and its prospects in the changing Indian education ecosystem. The book ‘Education Teaching and Learning’, a festschrift to honour Professor Krishna Kumar, was launched by Prof. Nargis Panchapakesan, retired Dean, Central Institute of Education.

Bhutan’s District Education Officers attended a five-day residential session on **Academic Leadership** from April 16 to 20, 2024. The week-long session was attended by 30 dedicated Bhutanese participants who provided unique insights into educational leadership research and innovation



bit.ly/cete-ppp



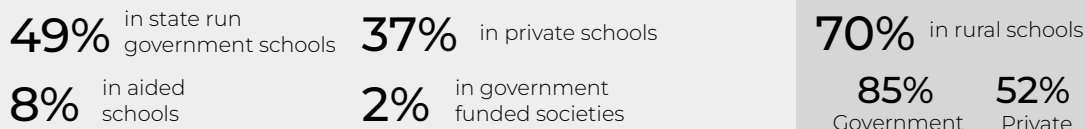
The Right Teacher for Every Child

State of Teachers, Teaching and Teacher Education Report for India 2023



9.5 million

Indian teaching workforce (classes 1 to 12)



- ▲ Working conditions are **improving**
 - ▼ North Eastern States and Rural areas have **poorer working conditions** for teachers
 - ▼ Contractual teachers **pay is less than 50%** of government teacher pay
 - ▼ **Contractual** workforce is **very feminised**
- ▲ Only 10% of government teacher workforce is contractual
- ▲ Working conditions in **private schools are better than those of government schools**
 - ▼ **Employment terms** are much **worse**, with salaries of 30-50% of government wages, no vacation pay, and 50% working without written contracts. Workforce is highly feminised
- ▲ Overall **50%** of the workforce are **women**
 - ▼ Marked **interstate differences**: Some have less than 40% women teachers and in some teachers
 - ▼ **80%** women teachers
- ▲ **90%** have some form of **professional qualification**. **83%** have **graduation**
 - ▼ Very **few women PE** teachers.
 - ▼ Only **46% teaching** primary schools have **DEEd** (or equivalent)
- ▲ **70%** teaching subjects in which they have **UG qualification**
- ▲ (from one state TET): **Quality** of students from **DIETS, IASEs and CTEs is better than** quality of students from Self Financed Colleges
- ▲ DIETs, CTEs and IASEs are **more efficient** than self financed colleges
 - ▼ **40% teaching** mathematics have **no UG mathematics** qualification
 - ▼ Overall **quality of PSTE graduates** is a concern. Low scores in mathematics is a concern. DEEd institutions are far worse than BEd institutions
 - ▼ **Quality and supply** of social science teachers is a concern



bit.ly/SoTTTER-by-CETE

The **Madhya Pradesh Head Masters Leadership** Training Programme brought 124 district heads and Schools Head Masters and Principals to the TISS campus in the workshops held from September 11-15, 2023 and January 8-12, 2024. The workshop highlighted topics such as pedagogic leadership, evidence-based school improvement, management of human resources in schools, teacher mentoring and support and developing communities of practice.



The second report on the **State of Teachers, Teaching, and Teacher Education, 'The Right Teacher for Every Child,'** was released online on January 18, 2024, by Mr Sanjay Kumar, Secretary (SEL), Ministry of Education, Government of India. The event featured a panel discussion featuring Dr. Carlos Vargas, Teacher Task Force UNESCO, Dr. Amita Chudgar, Michigan State University, Dr. Nidhi Gulati, Delhi University, Ms. Priyanka Dubey and Mr. Tarun Gupta, School teachers from Pune and Punjab. The Report is based on eight background papers drawing on primary and secondary data and examines teacher availability in Indian schools.



bit.ly/SoTTTER-by-CETE

The proposal to extend deepen Mizoram state engagement in education technology was finalist of the 2023 **HCL awards**. Being on the list enabled the team to continue CLix Phase 3 for another year, and consolidate an eight year long engagement with the state.

2

Academic Programmes

Batch of MA in Education 2022-24

Smriti Chawla won the **Institute Gold Medal** for the Best Student in M.A. in Education.

Shreya Ghosh won the **Institute Silver Medal** for Second Best Student in M.A in Education.



Batch of BEd-MEd 2021-24

Anuvab Mohanty won the **Institute Gold Medal** for the Best student in BEd MEd program.

Krishnakanth won the **Institute Silver Medal** for the Second Best student in BEd MEd program.



Batch of MA in Education and Technology 2023-24

Prachi Chandra won the Best student award in MA Education and Technology.



“ It was a thrilling experience to teach such enthusiastic, diverse and passionate young minds. The virtual sessions felt like a sandbox for convenient learning filled with exploration and discovery. Our AMA (Ask me anything) sessions at the end of each class helped foster personal connections and brought the whole self of each student to the learning environment.

Mr Krish Sreedevi,
Head, Product Management,
Tata ClassEdge, Harvard School of
Education, Alumnus

The MA (Ed) and BEdMEd curricula were reviewed and revised to align them with NEP2020 and have been approved by the TISS Academic Council.

The revised 80 credit programme brings greater emphasis on academic depth and development of practical and professional competencies.

The three-year Integrated B.Ed-M.Ed (Innovative), recognised by NCTE admitted its 3rd batch of students pedagogy and practice.

In 2023-24, 20 students were admitted to fourth batch of MA Education, 24 students were admitted to third BEdMEd and 4 students entered the MEd programme using the lateral entry provision.



We got an in-depth understanding of school structure, curriculum, textbooks, history of education, inclusivity and marginalisation in education, what pedagogic content knowledge is, use of technology in education and pedagogic specialisation. A part of the course also focused on training us to be a teacher during the school internship and field attachment that gave an overall view of an organisation.

B.Ed-MEd Student, Batch 2020-23.

We partner with some of the best schools in Mumbai where our students intern for their teaching. The involvement and mentoring support students receive contribute to their development as teachers.

MA in Education and Technology

NEP's provisions have enabled us to offer a new one-year MA programme in this growing areas of education. The programme aims to build critical knowledge, equitable, ethical, and sustainable perspectives, and innovative practices in educational technology. The faculty of the programme include national and international academics and leading practitioners facilitating extensive engagement with the industry, pioneering research and professional development.

2023-24 saw seven students joining the programme with four of them completing and the other three continuing and working to accumulate their credits by 2024-25.



This is the perfect course that can transition technology enthusiasts into educators, which is a platform where innovation can be realised. This course addresses the necessary skill and competency gaps in education that mark landscape changes in the integration of technology in education. It has the potential to offer a perfect platform where a new kind of workforce emerges to facilitate the progress of the society.

Saurabh C, Batch 2023-24

Our Partner Schools

- Atomic Energy Education Society, BARC
- The Somaiya School, Vidya Vihar
- Modern English School, Chembur
- The Gateway School Of Mumbai, Govandi
- Next School, Mulund
- B.D. Somani International School, Cuffe Parade
- Fidai Academy, Andheri East
- B.M.C. School, Mahul
- B.M.C. School, Ghatla

Placements

The student-led placement committee successfully conducted the placements for the year.

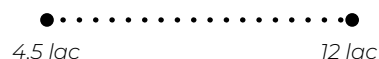
Overall, 33 students out of total 42 who participated in the placement process have been placed.

45 organisations participated in the placements including schools (residential and day-boarding), NGOs, CSR firms, EdTech Companies and startups, Education Consultancy firms, etc.

The CTC of the batch ranges from 4.5 lac per annum to 12 lac per annum.

33 out of 42 students were placed in the placement process.

45 organisations participated in the placements



Student Aid

Many CETE scholars were able to successfully pursue their education due to generous CSR support from Corporate partners. Close to **Rs 30 lakhs was disbursed to 30 students** whose application for aid was reviewed and sanctioned by the Student Aid Committee.

Thank you for your support



The Doctoral Programme

CETE currently has 25 Ph.D. scholars working on a diverse range of topics in teacher education, communities of practice and professional development, culture and pedagogy, technology in education, Foundational Numeracy, libraries and literacy practices, multimodal literacies, embodied pedagogy, innovative financing, understanding discourses of failure in school education, Socio Emotional Learning (SEL) and EdTech, and educational practices in child rehabilitation centres.

Four scholars published in international journals based on their research work, and several attended conferences in India and internationally. Vinay Lautre was selected as a Naughton STEM Education Programme Scholar and spent two months in DCU, Dublin, Ireland. Several scholars presented from their ongoing research at the Comparative Education Society of India, National Conference.



Ms Punam Medh is the first doctorate student of CETE to successfully be awarded the Phd. for her thesis titled: *Designing Stories of Scientific Discoveries to Facilitate Pre-service Teachers' Understanding of Nature of Science*



Ankit Dwivedi, completed his doctoral research on storytelling and teacher education through a public defence on 10th October 2023.



SIFAR

This year's SIFAR festival was titled **See-far: beyond the classroom**. The festival involved participation from all students of the campus. The events started off with an enthusiastic "Flash Mob" impromptu dance near the Dining Hall, signalling the energy of the events that followed. Of the many stalls and activities organised, some of the highlights include an art workshop and the street play.



Continuous Professional Development for Teachers and Educators

Short-Term Programmes and courses

The centre offered a variety of modular short-term courses as open runs and for selected cohorts. The participation was almost equally divided between open runs as well as customised cohorts.

A total of more than 2200 total participants attended (1200 over 15 open course runs and 950 over 11 cohorts for various states, Chhattisgarh, Madhya Pradesh, Brihanmumbai Municipal Corporation (BMC), Mumbai. Delhi as well as international participants from Bhutan.)

Two new courses were added to the TISSx platform on Pedagogy of Social Sciences, (English and Hindi), along with several new Open Educational Resources (OERs) for educators and teachers.

2200+

Participants



www.tissx.tiss.edu

3 most popular courses in 2023-24:



S-03a: Interactive Science Teaching (Experimentation)

The course begins with introducing the importance of experimentation and reasoning in science and then discusses how these crucial components of science can be appropriated in pedagogy of science.

Total participants : 387

I can now make my Science pedagogy more legitimate and interesting by including history of science and encourage children to do experiments and use variables to enhance their understanding of the concept.



Neeta Johny Joseph,
Shiv Nadar School



E-08: Mentoring for Teacher Professional Development

Build leadership skills to become an able resource for fellow teachers (peer mentoring) and contribute towards building and developing Communities of Practice (CoP).

Total participants : 306

The new knowledge that I gained in terms of frameworks for designing for a mentoring session and also insights into change at scale.



Nisha Sharma,
Educational Consultant



S-01a: Communicative English Language Teaching (Strategies)

Build an understanding of the socio-cultural context of language use and learning-teaching processes.

Total participants : 227

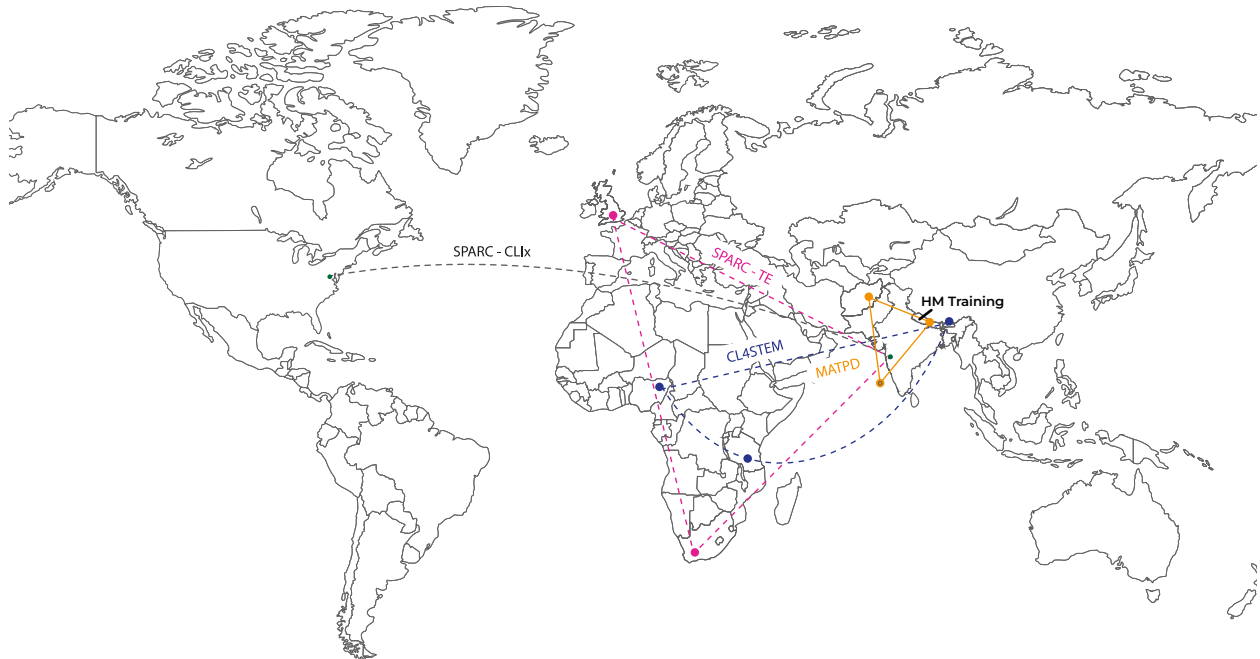
I love how the course made me think in new ways as opposed to the traditional methods used by teachers. The activities and assignments are perfectly balanced and I never felt bored while doing them.



Shahanaz M H,
St. Teresa's College

4

International, National and State Engagements



Connected Learning for STEM (CL4STEM)

Connected Learning for STEM (CL4STEM) through a pilot, scaled the CLix-TPD model to other countries in the global south building the capacities of science and mathematics teachers of middle and secondary schools to foster higher-order learning with inclusion and equity in their classrooms and researched its effectiveness and potential for scaling.

It is a South-South collaboration amongst Ibrahim Badamasi Babangida University, Lapai, Nigeria (IBBUL), Open University, Tanzania (OUT) and Samtse College of Education, Bhutan (SCE).

Key Project Outcomes

The impact of the pilot on teachers' knowledge, attitudes, and practice has been substantial and acknowledged by teachers and appreciated by education administrators in each partner country.

The learning from implementation and research from this phase was incorporated in revising the conceptual model for teacher knowledge, attitudes and practice, redesigning the online modules, and fine tuning the operating model.

Each of the partner universities is poised to work further on fine tuning this model of TPD for their country contexts for initial service education and for continuous professional development of teachers in their country.

Overall, the CL4STEM project has been largely successful in achieving its objectives with 13 CL4STEM resources being released as OER on the inhouse platform TISSx.



Explore the courses
www.tissx.tiss.edu/courses

Multimodal Approach to Teacher Professional Development (MATPD) (Nov 2021- April 2024)

This project focused on implementing the innovative approaches of Teacher Professional Development developed at CETE in under-resourced and developing contexts in Afghanistan, Nepal and Maldives where it was implemented and adapted to national contexts. Diverse modalities including ICT were used to support social learning and development of professional learning communities.

Key Project Outcomes

Fellows' action research reports have been summarised and presented in the form of action research compendium to inspire future generations of teachers and teacher educators.

Six case studies (2 from each country) elaborating on successes and challenges in the field were developed

4 policy documents with recommendations for scaling TPD initiatives in the three countries and South Asia.

Many associated fellows got opportunities to present their research in international forums and secure placement in leadership roles in national and international research projects.

The Government of Nepal has adopted the mentoring model in the standard operating procedures published by them for the scaling mentoring model in Nepal.

The project has facilitated presentations in national and international events and publications in the form of blogs, newspaper and magazine articles.

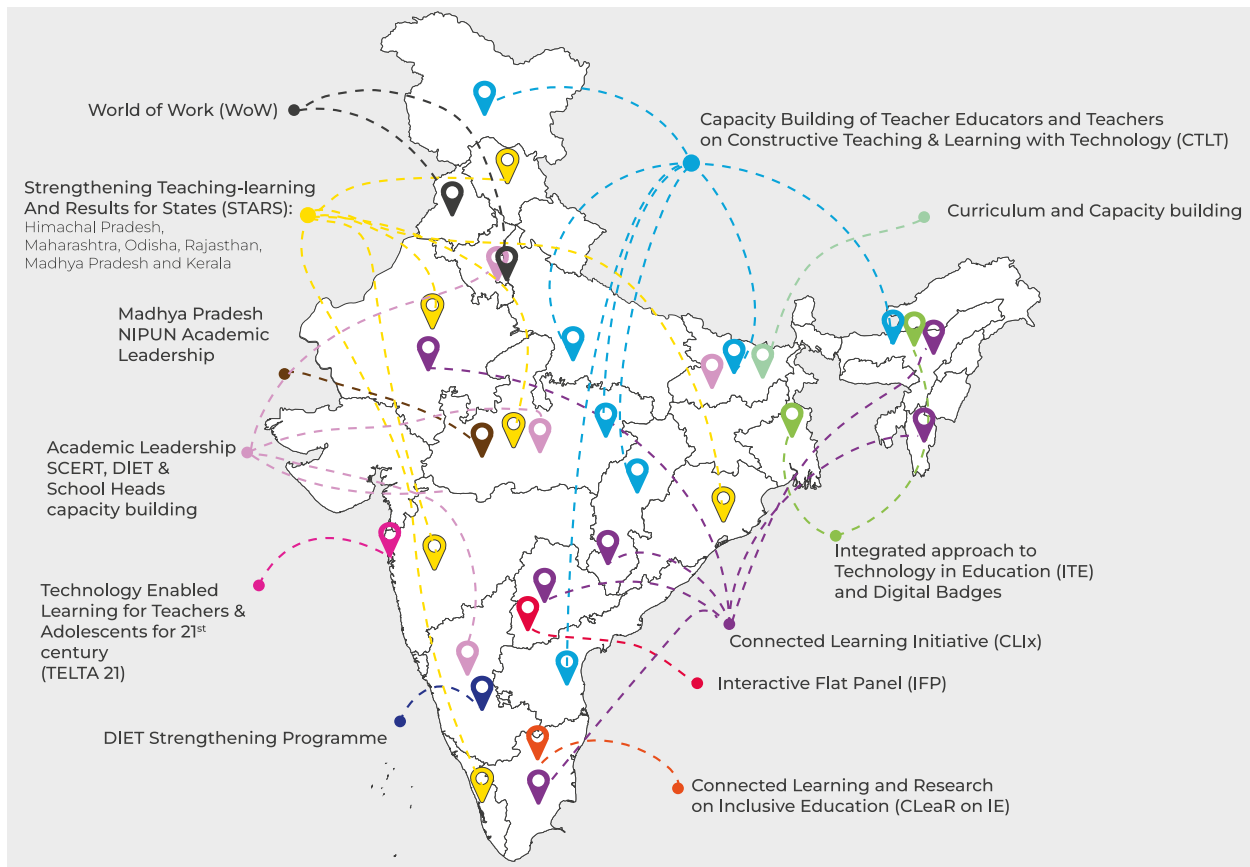
The curriculum adopted for the fellowship has been published.

Academic Leadership Program, Bhutan (16th – 20th April, 2024)

A 5-day Academic Training program organised by CETE for 30 District Education Officers (DEOs) from 20 districts in Bhutan. The program aimed to enhance leadership skills, foster a mindset conducive to leadership, and enable participants to create case studies based on their experiences. It covered various topics such as understanding schools as learning organisations, stakeholder engagement, evidence-informed decision-making, managing change and innovation, mentoring and coaching, and digital transformation in school management. The sessions included interactive activities, group discussions, and reflections to provide participants with a comprehensive understanding of educational leadership.

The success of this program has paved the path for more sessions for the other Bhutan Education Functionaries.

Support to Centre and States



Strengthening Teaching-learning And Results for States (STARS)

STARS is an outcomes based funding project being implemented by the Central Government with World Bank Aid in six states: Himachal Pradesh, Maharashtra, Odisha, Rajasthan, Madhya Pradesh and Kerala.

CETE, TISS supports the project as a part of the Central Program Management Unit (PMU) to the Ministry of Education providing technical support to improve the quality and governance of school education in selected states. The project team works closely with the government team to monitor and facilitate the project deliverables at the national and states levels with special focus on decentralisation and teacher professional development.

NCERT textbooks

Colleagues from the Science and mathematics Education Research Group were invited by the **NCERT** to contribute to textbook preparation based on the National Curriculum Framework 2023. Dr. Shamin Padalkar was a part of the Science textbook team and Dr. Ruchi Kumar was part of the Mathematics textbook writing team for grade 3 and 4.



Delhi- World of Work (WoW)

The World of Work Curriculum Development Project for the Delhi Board of School Education has entered into its third year. This new subject introduces secondary and senior secondary school students to the world of work.

In Grades 9 and 10 the curriculum was built around skills and perspectives unique to the social sciences and humanities, and offered students opportunities to use them in professional and work projects such as content writing, map making, journalism, legal studies, etc.

In grade 11 and 12 CETE is engaged with deepening knowledge of the world of work, by work, through work and for work-using a 'work bench pedagogy'. The team has developed curriculum framework, assessment framework and modules with teacher notes in the areas learning about work, journalism and legal studies.

In 2023-24, the curriculum was introduced in grade 11-students and specialised resource persons placed in the schools as teachers, are enjoying the challenging project based learning activities and outcomes. In November 2023, the teams met in a



Student going on transact walk and taking notes to write a story

design thinking work shop to conceptualise the ‘work benches’ which will be run in grades 12.

CETE’s engagement with the faculty of Delhi’s DIETs and SCERT continued. 91 faculty attended workshops followed by engagement with courses on practitioner research/action research offered by CETE.

Resources for Interactive Flat Panel (IFP) Use In Telangana Schools

The Telangana IFP OER Curation project, conducted from June 2023 to December 2023, focused on enhancing classroom interactions, inclusivity, and pedagogy by integrating curated Open Educational Resources (OER) for grades 8th, 9th, and 10th. Sponsored by the Government of Telangana, this TISS-SCERT collaboration developed 807 digital resources, with accompanying teacher wraparound materials, across Sciences, Mathematics, Social Sciences, English, Telugu, and Urdu. A comprehensive **curation framework (RAP Curation Rubric) with 15 indicators across relevance, affordance, and pedagogical practice was developed to assess the quality of the resources.** These resources have been implemented across 4000 secondary schools, to aid student learning outcomes and teacher professional development.



RAP Framework
bit.ly/cete-ppp

TELTA-21 Supported by



TELTA-21: Project Based Learning in Mumbai’s M Ward Schools

Technology Enabled Learning for Teachers and Adolescents in the 21st Century aims to leverage emerging technologies and pedagogies to transform teaching and learning, school culture and communities in the M-Ward of Mumbai city. Last year it reached 63 Mumbai Municipal schools, about 5000 students



and 200 teachers, enabling them to use project-based learning with technology for deeper, connected and authentic learning in subject classrooms and school camps. Last year TELTA-21 launched hybrid digital badges for students tracking and motivating their progress in PBL with emerging technologies. The team's efforts were recognized by Capgemini as the Best CSR Project in STEM education for the year 2023.

Mission Ankur: Strengthening Foundational Literacy and Numeracy in Madhya Pradesh

The Madhya Pradesh National Initiative for Proficiency in Reading with Understanding and Numeracy (MP NIPUN) project in collaboration with Rajya Shiksha Kendra (RSK) Centre of Excellence in Teacher Education (CETE), TISS and Central Square Foundation (CSF) focuses on improving foundational literacy and numeracy (FLN) under the National Mission ANKUR, across the state. TISS plays a key role by managing the recruitment and retention of 52 professionals (fellows) who anchor district-level Project Management Units (PMUs). TISS supports the state in talent acquisition, screening, and mentoring of these fellows, ensuring their effective contribution to improving FLN outcomes. Additionally, TISS provides capacity building and ongoing support to the fellows, aligning them with the project's goal of long-term, sustainable educational reform in Madhya Pradesh.

The MP government also engaged CETE to orient the HMs of the PM Shri schools. Two batches of 50 HMs have visited TISS and engaged in various aspects of school academic leadership.



A stellar lineup of dignitaries grace the inauguration of the #MPNPInductionProgram.



MP NIPUN Professional Program, a pioneering initiative of Madhya Pradesh Government, supported by Tata Institute of Social Sciences as an expert Knowledge partner, is revolutionising education at the foundation level. MPNP is a working model bringing together government systems, committed partners, academic expertise and enthusiastic young professionals to realise the NIPUN Bharat goals.

Shri Dhanaraju S.
IAS, Former Director,
Rajya Shiksha Kendra,
Government of Madhya Pradesh.



CHALK, Chattisgarh

Chhattisgarh Accelerated Learning for a Knowledge Economy (funded by World Bank) is new multi-year project the Centre was very happy to secure through a competitive bid process by the Chhattisgarh Government. CETE, TISS will anchor Teacher Professional Development for the state (CHALK-TPD). We are working in collaboration with SCERT and Samagra Shiksha to strengthen teacher professional institutions as well as teachers' capabilities. Acknowledging the present strengths of the state and its strive towards developing a Knowledge Economy, TISS has identified 5 Pillars to design, implement and sustain the positive impact of CHALK-TPD project :

- System Institution Strengthening (SCERT, CTE, IASE, DIETs);
- Capacity Development (Teacher Educators, School Complex Leaders, Teachers);
- Robust Monitoring and Evaluation System;
- Effective Communication (Internal and External); and
- Research-based Practices.

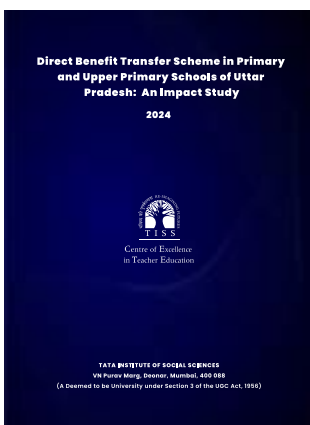
The project commenced in October 2023.

Uttar Pradesh DIETs and DBT study

A study of UP DIETs was taken up with UNICEF support, to provide the state with a situation analysis of DIETs and help identify key aspects that need to be addressed. The study identified aspects such as strengthening DIET faculty capacity, revising the existing programme and strengthening infrastructure as some areas requiring attention. The study is significant in light of the proposal of the Central government to upgrade DIETs in a phased manner into Centres of Excellence.

Direct Benefit Transfer Scheme was introduced by the UP government in all its government-run schools coming under the Department of Basic Education. Under this scheme, a total of 1200 rupees is sent directly into the account of the parent or guardian of students of class 1 to 8 (2022-2023) so that they may purchase school uniforms, shoes, sweaters, bags, and stationery goods such as pens, pencils, etc.

CETE TISS was assigned to survey and find out the impact of the DBT. The report noted the successes and challenges involved in the implementation of the DBT scheme and made recommendations for enhancing the reach of DBT to the most needy. The report findings were acknowledged and appreciated by the Basic Education Department, UP. Academic publications from the study are now being planned.



Engagement with Bihar SCERT: Curriculum and capacity building

The CETE faculty serve as members of the Academic Core Committee for the Bihar Curriculum Framework (BCF) 2024 and hold the position of Chairperson for the Focus Groups on Mathematics Education, School Culture and Processes, and Creating a Supportive Ecosystem, collaboratively developing the BCF 2024. In January 2024, professional development for DIET faculty was carried out to improve their technical-pedagogical expertise and competencies. This initiative aimed to develop practice-based professional development modules for district teachers, which will be implemented on the DIKSHA platform.



Connected Learning Initiative Phase 3 (CLIX-3) in Mizoram

Connected Learning Initiative (CLIX) continued its presence in Mizoram thanks to the **HCL Foundation Grant** awarded to CETE in 2023. The project, Connected Learning Initiative 3.0: Mizoram - Support Unit for Integration of Technology in Education (MZ-SUITE) leverages existing partnerships and past work in Mizoram. The project benefitted 604 students across 20 schools.

In addition, the engagement with Tamil Nadu SCERT has been ongoing since 2022 with respect to the integration of CLIX English Modules with customisation and selection to suit the Mozhigal language lab requisites and the Tamil Nadu context.

5

RACHANA

Teaching learning resources have potential to transform the classrooms from lecture based, passive teaching to student centric, active learning. Rachana Educational Resource Centre and Design Lab is established to collate a repository of educational resources. While some of the resources are procured, which students access for their teaching during school internship and community engagement, others are designed and are being designed by faculty and students of CETE.

The broader aim of Rachana is to cultivate design thinking among educators. Rachana also serves as a public facing unit of the centre and arranges community engagements and programmes for teacher students and educators. Here are some major activities of Rachana during the last academic year:

1. **Rachana Fellowship Winter School:** The 2nd Winter School was organised in November 2023 and saw increased interest with a major jump in applications for participation. Organised for the students enrolled in teacher education programmes across India with the following objectives in mind:
 - a. To introduce the latest innovations in education to student teachers
 - b. To expose student teachers to some of the key issues in cutting-edge educational research
 - c. To build a pan-India community of committed teachers and initiate a potential cross exchange of ideas and innovations through this community as well as expect the fellows to further cascade the learnings in their geographies.



The theme of the Winter school was **sustainability** which was addressed from multiple perspectives and context of different subject pedagogies. Education for sustainability, SDG policy and education, how to make education sustainable were some thoughts discussed. Students particularly appreciated the session in which teachers from an innovative school shared their activities and experience.

2. **Community Engagement:** MERIT is a study centre run by volunteers in BARC in Chita camp for students from low socioeconomic background. A one day workshop was organised for the volunteers, Following this, an engagement of CETE student teachers was planned with school students at MERIT. BEd Students planned the lessons with their pedagogy faculty mentors. This engagement gave exposure to educational resources and activities to the students and volunteers at the study centres. It also gave much needed experience of teaching to underprivileged children to our student teachers.



MERIT volunteers (BARC employees) working with TLMs during the workshop

3. The **Design Thinking in Education** for Learning with EdTech course was conducted in November 2023, kicked off by a workshop scheduled from 2 to 5 November for a total of 32 participants from across India. The course encouraged participants to identify and work with a teaching-learning issue emerging from their context to equip and train them in the creative process of designing technology-enabled solutions. On the third day of the workshop participants displayed their prototypes and engaged in immersive feedback sessions with faculty and students in the campus. The workshop concluded with reflective discussions around the feedback the participants received. The participants continued to work for the next 5 weeks remotely on their designs and complete all tasks online to earn a course certificate.



Legal Studies Workbench: Redesigning Legal Learning for the Next Generation of Thinkers

4. **Material development:** This year B.Ed-M.Ed students of different pedagogy groups developed inhouse teaching learning resources (TLR).

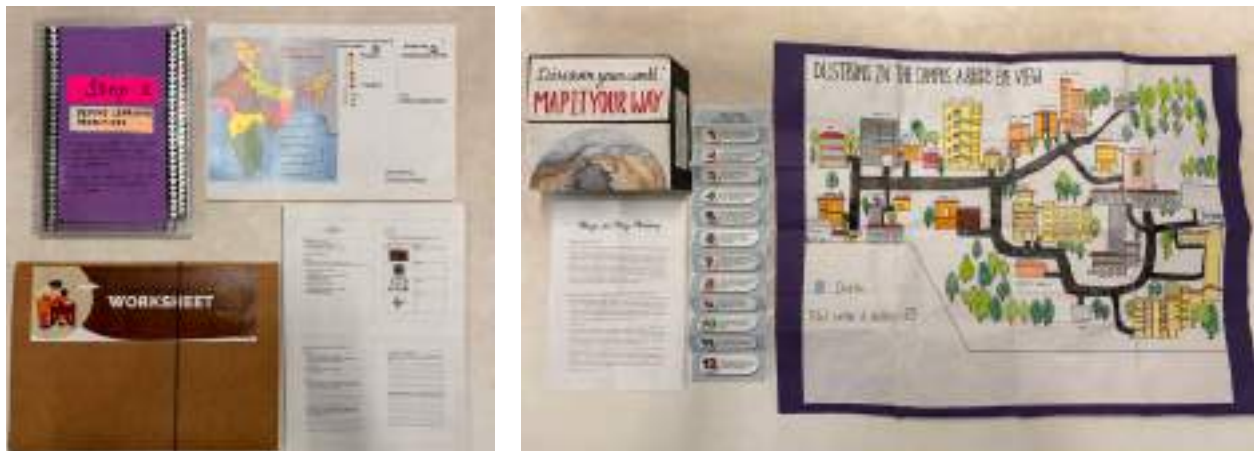
3 documentaries: Learning while creating a resources, and learning while using a created resource.

Map It Your Way is an adaptive DIY teaching learning resource (TLR) kit which allows teachers and students to create maps on subjects and themes of their choice. It comes in a box consisting of step-by-step instructions to create a map, sample maps and a brief note on Maps and Mapmaking as a Teaching Learning Resource.

Let's Make Our Own Worksheet enables teachers and students to create personalised worksheets tailored to specific contexts, grade levels, subjects, lessons and topics. This resource fosters two-way active learning both the creation and use of worksheets. The DIY TLR kit contains A-Z steps to create one's own worksheets and some sample worksheets.

The Art of Handouts offers a comprehensive guide for creating engaging and effective handouts that goes beyond the conventional classroom discussion. This DIY TLR kit provides everything you need to design handouts that enhance and enrich the teaching-learning process, promote student engagement, and support differentiation.

The first draft of '**Trees of TISS Campus**' is ready. A booklet of classroom games is also being finalied for release. Its a booklet by students compiling games that can played in classroom.



Teaching Learning Resources created by students as a part of their Social Science course

Research Groups

Critical Humanities and Social Sciences

The Critical Humanities, Arts and Social Sciences (CHASS) comprises faculty and research associates who teach, research, consult and guide students in areas related to language, literature, social sciences, psychology, literacies, philosophy, history and culture studies. As a group with a multidisciplinary profile that also cuts across different aspects of educational discourses that include teacher education, technology in education, sustainability and inclusion, the members contribute to the teaching programmes (long term and short term), different projects at the Centre, outreach activities, advocacy and individual research.

The Faculty group has presented their work at 7 international conferences in diverse areas like language and literature, peace and socio-emotional learning practices among educators, and published over 9 research reports on completed projects.

Key Activities

- Developing curriculum for the the 'World of Work' as Knowledge Partner with the Delhi Board of Secondary Education in Media Studies, Legal Studies, Data Analytics, Teaching Aptitude and GIS Technologies, along with a common module on 'About Work', for students of Grades 11 and 12 in Delhi government schools.
- CLIX English teacher training workshops across 5 districts in Assam covered 105 teachers across 86 schools. In partnership with the Centre for Microfinance and Livelihood.
- Interactive Flat Panel (IFP) project in Telangana funded by the SCERT, Telangana and Flexible Teaching Plans (FTPs). 79 OERs in English and 133 for Social Sciences were developed as a part of OERs for students of Grades 8-10 and their teachers for effective use of IFP.
- Workshop sessions were also conducted on Peace, Education and Pedagogy by faculty for a national audience of student teachers as part of the annual Rachana Winter School.

A three-day workshop on '**Philosophical Themes in Education: Experience, Epistemology, Ethics**' was held from February 13 to 15 2024, led by distinguished educators Prof Sundar Sarukkai, (former professor of philosophy & Founder-Director of the Manipal Centre for Philosophy and Humanities) and Prof Gopal Guru, (retired professor, Jawaharlal Nehru University). Prof Mythili Ramchand and Dr Richa Sharma designed and anchored the workshop, which included in-depth discussions about some of the most fundamental issues on educational philosophy i.e. Is there an Indian way of philosophising?; what implications does it have for philosophy of education?; does it offer a method or methods that enriches the pedagogical discourses?.

Team

Dr. Anusha Ramanathan

Online and Distance Education, Teacher Professional Development, Language Teaching, Policy and Practice, Technology-enabled Learning and Assessment. Regional Representative (India) to Asian Association of Language Assessment (AALA).

Dr. Gomathi Jatin

Adolescent psychology, teacher education, classroom practices, school education - pedagogic practices, educational management and leadership and ICT in education

Dr Nishevita Jayendran

Representation and Cultural Studies, World Literature and Peace Studies, Critical and Cultural Literacies, Humanities education and sustainability National convener of the Special Interest Group (SIG) in Literature at ELT@I

Dr Richa Sharma

Philosophy of Education, Educational Ethics, Epistemology, Social Science Education, Critical Pedagogy, Peace Education

Research Assistants and Teaching Associates:

Shreyasi Mitra, Parul Dubey, & Shaily Bhadauria

Doctoral Research Scholars:

Ekta Singla, Ikanshi Khanna, Parul Dubey, Sanghamithra V, Laxman Vagra & Swati

Team

Prof. Archana Mehendale

Education law and policy, Regulation, Innovative Financing, Inclusive Education
Co-Chair, Special Interest Group on Inclusive Education, Comparative and International Education Society (until March 2024).

Dr. Poonam Sharma

Childhood Studies, Ethnography, Learner identity, Schooling, Pre-service teacher education programmes, Non-state actors in education, School management, Low-fee Paying private schools, Private Supplementary Tutoring

Dr. Emon Nandi

Economics and Financing of Education, Education and Development, Education Policy, Higher Education
Executive Member, Comparative Education Society of India

Dr. Meera Chandran

Sociology and Political economy of education, Teacher's work, knowledge and identities, Urban schooling and livelihoods, Comparative education

Dr. Vikas Maniar

Education of Adivasi (Indigenous) communities, ICT in Education, Political Economy of Education, Education Policy and School Systems

Associated Faculty:

Saurav Mohanty & Dr. Harshvardhan Kumar

Sr Research Associate/Post

Doctoral Fellow:

Dr. Kamlesh Goyal

Sr Research Associate:

Nisha Ramachandran

Doctoral Research Scholars:

Geetha M, Richa Panday, Pragya Singh, & Fathma Zohra

Education Development and Policy

The Education, Development and Policy Research Group aims at active engagement with education policy at the national and international levels, through a multidisciplinary approach to the sector. The group focuses on pursuing research and teaching on education policy, contributing to policy discourse through publications and influencing education policy by engaging with various state and non-state stakeholders.

Key Activities

- EDP members are involved in the "Innovative Financing in Education to Leave No One Behind" (IFE-2-LNOB) project that focuses on assessing the contribution of innovative financing for education in catalysing more and better financing to reach the most disadvantaged and marginalised groups. This international 5-year study is being undertaken in partnership with Graduate Institute of International and Development Studies – NORRAG (IHEID- NORRAG) in Geneva, University of Cape Town-Graduate School of Business (UCT-GSB) in Cape Town, UBS Optimus Foundation, and Volta Capital.
- The Doctoral Workshop on Policy Approaches and Methodologies was conducted on 9th and 10th of May 2024. Four seminars anchored by policy experts on Feminist Methodologies (Prof. Rekha Pappu), Episode Studies (Prof. Archana Mehendale), Comparative Policy Analysis (Dr. Rahul Mukhopadhyay) and Critical Policy Review (Dr. Sriti Ganguly). 25 doctoral students from TISS Mumbai & Hyderabad campuses along with a few Research Associates of CETE participated in the two-day online workshop.
- Dr. Protiva Kundu of CBGA delivered this year's Annual Union Budget Talk on the 14th of March, titled, "Decoding the priorities for the education sector in the interim union budget 2024-25" The talk took a closer look at the budgetary provisions for youth development, education and entrepreneurship to achieve the goal of Viksit Bharat 2047.
- A total of nine seminars were organised as part of the 'Policy Research Forum' on a wide range of topics: Education policy interlinkages, Abidjan principles, Student financing of HE, LFE school ecosystem, Muslim minorities in policy, Teachers' work and School closures.
- Archana Mehendale presented a co-authored paper titled, 'The Business of Education: Accelerators and Incubators in India's Education Start-Up Landscape' (with Radhika Gorur and Joyeeta Dey) at the International Conference on Education Policy in India: Contexts, Texts, and Institutions. April 25-27, 2024, Mahindra University, India.
- Emon Nandi presented the following papers at various conferences: (1) "Internationalisation of Research in Higher Education: New Pathways from Social Science Institutions in India? at a seminar on "Internationalisation of Higher Education", held at NIEPA, New Delhi, India, 22-23 February, 2024. (2) "Revisiting the Public-Private Divide in Indian Universities: Implications on Diversity, Equity and Inclusion" at the Critical Edge Alliance Conference, 2023, Al Akhawayn University in Ifrane, Morocco (Virtual) on 6th July, 2023. (3) Strengthening effective partnerships to address SDG 4: The role of Impact Bonds in Education; at the KFPE workshop (virtual) on 21st May, 2024
- Dr. Emon Nandi received the Knowledge to Action (K2A) mobility subsidy to visit to NORRAG, Graduate Institute Geneva in April – May 2024 to strengthen the partnership between TISS and NORRAG, explore the possibilities of new collaborations with other research organisations in Geneva, and work together on deliverables of the IFE-2-LNOB project.
- Dr Meera Chandran presented a paper titled Problematising the notion of equity in innovative financing of education, at Comparative International Society of India conference, held at Tezpur, 1-3 Dec 2023.

Education Technology (EdTech)

EdTech research at CETE has been deeply rooted in field practice with the flagship project on the Connected Learning Initiative (CLIX). Over the years the research in education technology has made significant contributions through pursuing empirical research studying critical and contemporary issues on equitable and sustainable perspectives and practices in teaching and learning with technology. The research extends to develop, validate and disseminate resources and pedagogies in education technology in school education.

On December 15, 2023, Professor Cynthia Breazeal, MIT's Dean for Digital Learning, delivered an open talk titled 'AI is for Everyone: Transforming K-12 Learning and Education in the Era of AI', captivating the audience with her ideas. This was part of the EdTech Talk seminar series, which was organised by the Centre's Education Technology Research Group.

The recently released UNESCO's GEM report on Technology in Education featured a background paper titled "State initiatives and innovations in technology enabled content for school education in South Asia: examining aspects of access, equity, inclusion and quality", authored by the Centre's faculty - Mr. Sadaqat Mulla, Dr. Bindu Thirumalai and Dr. Anusha Ramanathan.

Key Activities

- The EdTech members led by Dr Amina Charania completed a study on the efficacy and value of Google Solutions in pilot schools in India.
- The UNESCO-commissioned research on access, equity, inclusion and quality aspects of digital content in schools in South Asia led by Sadaqat Mulla, Dr Bindu Thirumalai and Dr Anusha Ramanathan
- EdTech members led by Dr. Amina Charania undertook a large research assignment for Central Square
- Foundation on learning engagement in the Digital Shala programme. This programme was initiated in 64 schools in the two districts of Madhya Pradesh.
- The UNESCO-commissioned research study led by Prof. Anil Mammen exploring notable trends.
- Developments in digital technology that have influenced and transformed higher education, especially teaching and learning, in South Asia over the last decade was initiated.
- Led by Dr, Anusha Ramanathan and Saurav Mohanty CLIX reached about 2600 teachers and 33000 secondary students, disseminating CLIX OERs in Science, Math and English in teaching and learning processes of secondary schools in rural districts of 5 states in India. Additionally, CLIX OER in English reached 100 schools across 05 districts of Assam and all 6000 government schools in TamilNadu through their language labs. For more information about CLIX, visit <https://clix.tiss.edu>.
- The TELTA-21 research led by Dr Amina Charania reported a significant positive change in students' competence to perform authentic projects using digital technologies. Blended digital badges were introduced to motivate and track the progress of students and teachers in this project.
- The Telangana Interactive Flat Panels (IFP) OER Curation project led by Prof Rekha Pappu, Dr. Bindu Thirumalai and Sadaqat Mulla was a
- Collaborative project between SCERT, Govt. of Telangana and TISS. It aimed to leverage the pedagogical affordances of IFP devices in the classrooms to enhance the quality of interactions, inclusivity and overall pedagogy in the schools. To achieve this, 804 digital resources were curated and organised as 303 concept wise templates to be integrated in classroom teaching in more than 4000 secondary schools across the Telangana state.

Team

Dr. Amina Charania

Constructivist approaches to teaching and learning with technology, Learners as producers of artefacts-digital agency, Teacher Professional Development, pedagogy and classroom processes, Member, Working Group 3.3, International Federation for Information Processing (IFIP)

Mr. Anil Mammen

Teaching and learning with technology, learning design with technology, learning sciences, design and development of teaching-learning materials, use of AI in education, philosophy of education and technology

Mr. Sadaqat Mulla

Learning and Teaching with Technology, EdTech enterprise solutions, Emerging Technologies for Education, Open Educational Resources (OER), Design-Based Research, Multilingual Resources, Free/Libre Open Source Software, Education and Development

Member, Working Group 3.1, International Federation for Information Processing (IFIP) Member, EdTech Society, India

Mr. Satej Shende

*Evolving need and scale of learning platforms
Member, EdTech Society, India*

Associated Faculty and Senior Members:

Dr Anusha Ramanathan, Dr Bindu Thirumalai, Mr Saurav Mohanty

Research and Teaching Associates:

Sohni Sen, Uchita Bakshani, Durba Sarkar and Raoson Singh

Doctoral Research Scholars:

Vinay Lautre, Sanchita Mandal, Alok Kumar & Reshma Balakrishnan

Inclusive Education

Team

Prof. Mythili Ramchand

Philosophy of education, Initial teacher preparation, Inclusive education from a social justice perspective and mediation of resources in the teaching-learning process.

Associated Faculty:

*Dr. Sonia Sawhney,
Prof. Archana Mehendale,
Dr. Ruchi Kumar,
Mr. Rafikh Shaikh,
Dr. Radhika Misquitta &
Mr. Sadaqat Mulla*

Doctoral Research Scholars:

Ameer Ali, Vinita Mariappa, Sunita Vishwas & Shabari Rao

The Inclusive Education Research Group (IERg) at CETE came together in 2019. One of the first projects the group took on was the Connected Learning and Research on Inclusive Education (CLear on IE) project, supported by the Cognizant Foundation. Phase I of the project began in 2022.

The CLear on IE project hosted a Symposium on “Inclusive Pedagogies & Practices” on February 23-24, 2024. The Tata Institute of Social Sciences, the National Institute for the Empowerment of Persons with Multiple Disabilities, and the Avinashilingam Institute for Home Science & Higher Education for Women worked together to organise the symposium, which was sponsored by the Cognizant Foundation and held in Coimbatore, Tamil Nadu. It was recognised by the Rehabilitation Council of India as part of the Continuing Rehabilitation Education (CRE) curriculum for special educators.

Dr. Umesh Sharma, Professor (staff of Education at Monash University, Australia), presented two papers titled, “Preparing to Teach in Inclusive Classrooms: Are We Ready to Teach All with Heart, Head and Hands?” and “Addressing Theory-Practice Divide in Inclusive Education - Potential of University-School Partnerships” in lively sessions with CETE students and staff on February 16, 2024.

Key Activities

- IERg members are involved in the Phase II of the CLear on IE project. This phase aims to strengthen practitioners' (student teachers, practising teachers and teacher educators) capabilities to practise inclusion by offering the three courses developed and piloted in Phase I.
- The IERg undertook a study on the status of vacancy of special education teachers by type of disabilities in Maharashtra. The project was commissioned by the Government of Maharashtra and aimed to identify the number of Children with disabilities in each district of Maharashtra and map the Special Education Teachers in each district based on their employment status, distinguishing between contractual and ad hoc teachers, while specifying their specialisations.
- The IERg anchors the South Asian Research Hub for Inclusive Education (SARHIE) which includes researchers from Bhutan, India, Nepal, Pakistan, and Sri Lanka. SARHIE organised a virtual seminar focusing on inclusive pedagogical practices across South Asia.
- Core group members of SARHIE from Bangladesh, India, Nepal, Pakistan, and Sri Lanka attended a meeting on 9th March 2023 during which key decisions were made focusing on advancing inclusive education in the region.
- IERg organised five academic talks, interactions, and discussions on a range of topics with experts from both international and national academia.
- The group also conducted two workshops led by Umesh Sharma and Johny Daniel for students in the B.Ed-M.Ed integrated and MA in Education programmes who selected the Advanced Specialisation course on Inclusive Education.

Science and Mathematics Education

Located in a Social Science focused University, the Science and Mathematics Education Research Group at CETE has a focus on researching and promoting interactive and inclusive learning and teacher education in Science and Mathematics, with a special focus on science and mathematics in society, on social justice and supporting learning in under-resourced contexts.

Key Activities

- Dr Ruchi Kumar and Dr Shamin Padalkar of the SME contributed to GRADE 3 text books in maths and science as part of the authoring teams at NCERT
- Dr Ruchi Kumar and Dr Arindam Bose have conducted a blended course for **Delhi Mathematics TGT teachers** working for the Directorate of Education, Govt of Delhi on the theme 'Developing mathematics reasoning among students'.
- Dr Arindam Bose has been engaged as a member of the Academic Core Committee of the **Bihar Curriculum Framework (BCF) 2024** and as the Chairperson of the Focus Groups on Mathematics Education, School Culture and Processes and Creating a Supportive Ecosystem of BCF 2024 with SCERT, Bihar.
- Faculty and Research Associates were involved in the **CHALK project**. As part of the project, the team helped to design and review flexible teaching plans (FTPs) for Chattisgarh. Five Foldscope workshops were conducted in Chhattisgarh from February 18 to 24, 2024, involving 329 teachers across 33 districts.
- The year long Faculty Development Programme for **Anglo Eastern Maritime Academy (AEMA)** was concluded in 2023-24 .
- Students designed activities to teach science and presented them to their peers during the internship seminar on 27 February 2024 as part of the National Science Day.
- Dr Arindam Bose and Dr Ruchi Kumar participated at the PME Regional Conference held in Khon Kaen University, Khon Kaen, Thailand in December 2023 as a member of the International Programme Committee (IPC) and also presented two papers.
- Dr Ruchi Kumar presented a paper in International Commission of Mathematics Education's ICMI Study conference on the topic of Geometry held at Reims, France from 23-29 April 2024.
- 2 International visitors were hosted, Profs Rita Borromeo Ferri and Andreas Meister from University of Kassel, Germany in December 2023. They conducted a workshop on Education for Sustainable Development (ESD) through Mathematical Modelling Activities and also delivered a T-SER seminar on the same topic. Prof Aneshkumar Maharaj from University of KwaZulu-Natal, South Africa visited CETE in January 2024 and held academic discussions with the MA in Education and BEdMed students.

Team

Dr Arindam Bose

Out-of-school mathematics and implications for school mathematics learning, Language diversity and mathematics learning, Sociology of Mathematics education, Ethnomathematics, Implications of cultural practices on mathematical cognition, Number Theory Visiting. Visiting Professor, Universidade Federal de São Paulo (UNIFESP), Brazil Member of the International Committee of the International Group for the Psychology of Mathematics Education (IGPME) - 2019- 2023 and Vice President, IGPME 2021-2023.

Dr Shamin Padalkar

Visuospatial Thinking, Representational Competence, Nature of Science, Preservice Teacher Education, Science Teacher Professional Development, Designing Blended Pedagogic Material. Member, Indian National Young Academy of Sciences

Dr Ruchi Kumar

Teacher Professional Development, Teacher education, Math Education, Science Education, Inclusive Education, Use of ICT for teaching-learning process, and developing Professional learning communities. Member of Mathematics Teacher Association (India) and International Group for the Psychology in Mathematics Education. Co-Chair of Thematic Study Group on "Mathematics Education in under resource contexts" for 13th International Congress on Mathematics Education to be held in Sydney 2024.

Dr Rafikh Shaikh

Biology and Science Education, Science Teaching and Learning Materials, Science Teacher Professional Development.

Associated Faculty:

Dr Bindu Thirumalai

Research Assistants:

Avanish Singh & Tejaswini Bhaskar

Doctoral Research Scholar:

Punam Medh & Pralhad Kathole

Teacher Education and Professional Learning

Team

Prof. Padma Sarangapani

Teacher Education, Culture and Pedagogy, Education Policy, Work and Education, Professional learning

Dr. Bindu Thirumalai

Teacher education and focus on scaling; Online TPD; Teacher Academic Support and Teacher Communities of Practice; Technology and Education and Open Educational Resources; Data Handling and Statistics in Mathematics Education

Associated Faculty and Senior Members:

*Prof. Mythili Ramchand,
Dr. Ruchi Kumar,
Dr Anusha Ramanathan,
Dr. Gomathi Jatin, Dr Richa Sharma,
Dr Meera Chandran,
Mr Saurav Mohanty*

Doctoral Research Scholars:

*Emaya Kannamma, Sunita Magre,
Geetha V., Santosh Gurung, &
Pragya Singh*

The Research Group on Teacher Education and Professional Learning of the Centre anchors the core work around teacher education, and policy, school leadership and school and teacher support resource institutions and systems. The work of the group members includes the study of policy and practice of teacher education, engagement with DIETs and SCERTs and school leadership, with a focus on systems transformation, and research on aspects of the sector, and policy advocacy.

Key Activities

- Faculty associated with this group are working across 4 projects (2 national and 2 international), reports and publications and organising several events like workshops, Symposium and seminars. The international projects - CL4STEM and MATPD are reported in the international engagement section.
- The Longitudinal Study of Teacher Education (LiSTEn) is research on the teacher education programme offered by the Centre of Excellence in Teacher Education (CETE). Participants in the research are 54 students of two cohorts from academic years 2022-23 and 2023-24. Baseline data collection for both these cohorts has been completed.
- The **State of Teachers Teaching and Teacher Education** report is a Biennial State of the Sector Report produced by CETE. It is the flagship report providing a bird's eye view of the status of the sector. This second report on the State of Teachers, Teaching and Teacher Education in India 2023 (SOTTTER 2023) focuses on issues concerning the teaching profession and teacher preparation in India. The research and author team included Padma M. Sarangapani, Mythili Ramchand, Jyoti Bawane, Kamlesh Goyal, Anitha Bellappa, Aishwarya Ratish and Arpitha Jayaram.
- With support from SPARC, Govt of India, CETE hosted an international symposium on the topic **"TPD in the Global South"** on 31 August - 1 September 2023. This symposium focused on the BRICS countries, the South Asian region and countries in Sub-Saharan Africa, including Nigeria and Tanzania. CETE, TISS, and Leadership For Equity collaborated to organise a consultative workshop on **Strengthening Teacher Education and Professional Development for Teacher Educators**.
- Professional development workshops and courses for Delhi SCERT teacher educators and Teachers working under Directorate of Education, Delhi were conducted as part of the ongoing collaboration with Delhi SCERT. The workshop for Practitioner Research for Delhi SCERT teacher educators was held from 18-22 December 2023.
- Dr Bindu Thirumalai facilitated a workshop from 4th January to 6th January 2024 for DIET faculty across Bihar to enable development of online courses for teachers on the DIKSHA platform. She facilitated a session on Role and Impact of CoPs for Teachers at CIMposium 2024, STiR Education's annual conference on March 20 in New Delhi.
- Dr Ruchi Kumar facilitated an online workshop for teachers and student teachers across Bhutan on the topic of **"Resources and Strategies for Teaching Geometric Reasoning"** on 4 April 2024. Several Open Educational Resources including CLiX resources were shared. Around 150 participants attended the workshop. Findings and experiences from CL4STEM and MATPD were shared at forum organised by KIX EAP



Partnerships and collaborations

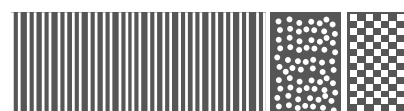
The last year can be qualified as a successful year for CETE in the area of forging new partnerships and venturing into new geographies of collaboration while continuing to strengthen existing collaborations.




Our partner Capgemini recognised the TELTA'21 project as the **“Best CSR project in STEM Education for 2023”** among projects funded by the CapGemini CSR. This encouragement reinforces the team’s commitment to forge ahead with greater motivation!

CETE’s primary focus on working on systemic reforms and engaging with government school systems was strengthened through new and diverse engagements across states. Madhya Pradesh, Punjab, Maharashtra, Haryana and UP are some states where CETE engaged in new projects over the last year. CETE successfully bid for the large-scale project, CHALK-TPD, funded by the World Bank for transforming Teacher Professional Development in the state of Chhattisgarh .

CSR partners (MIRAEE Asset Foundation & Sri Aurobindo Society) generously contributing towards Student aid this year.

How our partner segments stack up



-  Government Engagements
-  CSR And Other Engagements
-  International Engagements



Our collaboration with CETE, TISS Mumbai has been a transformative experience in redefining education for the 21st century. Through technology-driven learning activities, we have empowered young students from government schools to develop critical thinking, creativity, and adaptability. Together, we are nurturing a new generation of learners and educators equipped with the skills and insights essential for a rapidly changing future.

Anurag Pratap,
Vice President & Head Corporate Social Responsibility and Sustainability
Capgemini Foundationn



Cognizant Foundation India is proud to partner with Tata Institute of Social Sciences (TISS) since 2018. Our partnership has evolved over the years, starting with supporting scholarships for students pursuing post-graduate programmes at TISS. Cognizant Foundation India aims to promote a culture of Inclusion which resonated with the most recent project implemented by TISS.

Deepak Prabhu Matti,
Chief Executive Officer,
Cognizant Foundation



CETE reaffirms its focus on charting new pathways for collaborating with stakeholders in the sector and supporting positive outcomes impacting students, teachers and education functionaries.



We, at Sri Aurobindo Society (SAS) are pleased to support students pursuing their dreams through TISS and CETE's B.Ed. – M.Ed (Integrated), MA Education, MA Education (Elementary), and MA Education and Technology programmes. By providing essential assistance, we are nurturing hope, and are pleased to empower these dedicated individuals to build a brighter future for themselves and the community. We wish them every success on their journey ahead.

Sambhrant Sharma,
Member Executive & Director, Education



Tata Industries Limited

TATA TRUSTS

Partnerships Lead

Uma Lal
Head Partnerships & Resource Mobilization
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Publications

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Popular Writings

Anil Mammen (Substack Blogs):

- *The Paradox of Achievement Tests*
- *Making a living while fighting the good fight*
- *Pedagogy is not a business problem*
- *What makes learning outside school valid?*
- *Anchoring Effect in Curriculum Design*

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CETE in the media

सूक्ष्मजीवों से स्कूली बच्चों को अवगत कराएंगे शिक्षक

एनएनएन न्यूज



एनएनएन न्यूज: एक कार्यक्रम में, शिक्षक बच्चों को सूक्ष्मजीवों के बारे में शिक्षित कर रहे हैं।

एनएनएन न्यूज: एक कार्यक्रम में, शिक्षक बच्चों को सूक्ष्मजीवों के बारे में शिक्षित कर रहे हैं।

एनएनएन न्यूज: एक कार्यक्रम में, शिक्षक बच्चों को सूक्ष्मजीवों के बारे में शिक्षित कर रहे हैं।

फोल्डस्कोप कार्यशाला से लाभाहित हुए विज्ञान शिक्षक

एनएनएन न्यूज



एनएनएन न्यूज: एक कार्यक्रम में, शिक्षक बच्चों को सूक्ष्मजीवों के बारे में शिक्षित कर रहे हैं।

एनएनएन न्यूज: एक कार्यक्रम में, शिक्षक बच्चों को सूक्ष्मजीवों के बारे में शिक्षित कर रहे हैं।

एनएनएन न्यूज: एक कार्यक्रम में, शिक्षक बच्चों को सूक्ष्मजीवों के बारे में शिक्षित कर रहे हैं।

TISS REPORT | INTERVIEW OF EDUCATION SECTOR

'Only 46% of teachers in state are qualified'

What's Inside

Major Finding

Only 46% of primary school teachers possess the appropriate Diploma in Education, Bachelor of Education, and Diploma in Elementary Education (D.El.Ed.) qualifications.

Educational crisis

- 54% of teachers in state do not have the required qualifications to teach
- 64-70% of teachers in government and private schools lack qualifications in their respective subjects
- 87% of teachers in rural schools lack the required qualifications
- 25-41% of state teachers do not have the required qualifications
- 50% of professional teachers were employed without written contracts
- 35% teachers studied in English and science
- 31% for English, 30% for regional language

The highest discrepancies were found in teacher working conditions, where 88-93% of teachers did not have contracts in subject at the undergraduate level.

TISS 2023, 2024: The Right Teacher for Every Child has put out a comprehensive analysis of the education sector in India, based on datasets such as IIESS, the Periodic Labour Force Survey 2018-22, and primary data collected from eight states, including Maharashtra. The report delves deep into aspects of teacher availability, deployment, and the overall state of the sector.

The report unveiled stark contrasts between states, with the North-

'54% primary teachers lack professional qualification'

Major Data Points

- 83% teachers are qualified
- 90% have some form of professional qualification
- 4% could not give any professional qualification
- 16% did not have any professional qualification
- 69% teachers without qualification in rural areas

More than half the teachers in primary schools across India do not have the required professional qualifications to teach. The study, conducted by the Tata Institute of Social Sciences (TISS), found that 54% of primary school teachers in the country lack the required professional qualifications to teach. The study also found that 83% of teachers are qualified, 90% have some form of professional qualification, 4% could not give any professional qualification, and 16% did not have any professional qualification.

The study also found that 69% of teachers without professional qualifications were in rural areas. The study also found that 83% of teachers are qualified, 90% have some form of professional qualification, 4% could not give any professional qualification, and 16% did not have any professional qualification.

Topic News Business

Members Across a third of schools in Maharashtra, it was observed in a study that, in choosing Maharashtra, 50 per cent of the schools in Maharashtra were found. Around 40 per cent of the schools in Maharashtra do not have UGC or any appropriate professional recognition. The situation is

'1/3rd maths school teachers in Maha didn't study it at UG level'

serious in Maharashtra, where 33 per cent of schools have a requirement for mathematics and science teachers, followed by English and social studies (25 per cent).

This information, based on government records and primary data gathered in a survey, was presented on Thursday at the 10th meeting of the Board of Technical Education in Thane. The board is headed by the state minister for Technical Education, Dr. Anil Deshpande.

After five government bodies in Maharashtra, the board is headed by the state minister for Technical Education, Dr. Anil Deshpande. The board is headed by the state minister for Technical Education, Dr. Anil Deshpande.

Members, Anil Deshpande, State Minister for Technical Education, Maharashtra, and others. It was released in an address given by the state minister for Technical Education, Dr. Anil Deshpande.

The report also stated that the board is headed by the state minister for Technical Education, Dr. Anil Deshpande. The board is headed by the state minister for Technical Education, Dr. Anil Deshpande.

Dr. Deshpande said that the board is headed by the state minister for Technical Education, Dr. Anil Deshpande. The board is headed by the state minister for Technical Education, Dr. Anil Deshpande.

...the board is headed by the state minister for Technical Education, Dr. Anil Deshpande. The board is headed by the state minister for Technical Education, Dr. Anil Deshpande.

1. Sample source

২০ স্কুলৰ ৩৫গৰাকী শিক্ষক-শিক্ষয়িত্ৰীৰ অংশগ্রহণ

বকোত কাৰিকৰী বিষয়ৰ

কৰ্মশালা চিএম এলৰ টাটা ট্ৰাষ্টৰ

বকোত, ২১ জানুৱাৰী ২০২৪

শিক্ষক-শিক্ষয়িত্ৰীৰ অংশগ্রহণৰ অধীনত বকোত কাৰিকৰী বিষয়ৰ কৰ্মশালা চিএম এলৰ টাটা ট্ৰাষ্টৰ আয়োজন কৰা হৈছে। ইয়াত ২০ স্কুলৰ ৩৫গৰাকী শিক্ষক-শিক্ষয়িত্ৰীয়ে অংশগ্রহণ কৰিছে।

কৰ্মশালাখনত কাৰিকৰী বিষয়ৰ বিষয়ে আলোচনা কৰা হৈছে। ইয়াত ২০ স্কুলৰ ৩৫গৰাকী শিক্ষক-শিক্ষয়িত্ৰীয়ে অংশগ্রহণ কৰিছে।

কৰ্মশালাখনত কাৰিকৰী বিষয়ৰ বিষয়ে আলোচনা কৰা হৈছে। ইয়াত ২০ স্কুলৰ ৩৫গৰাকী শিক্ষক-শিক্ষয়িত্ৰীয়ে অংশগ্রহণ কৰিছে।



10

Staff and Researchers: 2023-24

General Administration and HR

Vijay Jathore, Swati Kamble, Sudheer Reddy, Mahesh Ghule, Rohan Kamble, Kailash Panvalkar and Vijay Arsud

Accounts

Gayathri Moily, Tushar Vaity, Sheetal Mhatre & Shruti Patil

Academic Administration and Support

Pratima Zore, Vishal Kshirsagar, Nikhat Nasrin, Rajul Krishnan, Meena Mane, Puja Jadhav (Until January 2024)

Rachana ERC: Vinay Lautre, Avani Singh

Partnerships and Communications

Ramesh Khade, Janani, Bhairavi Panikar, Valerie Bocarro (until April 2024), Sourabh Bharadwaj (until September 2023), Naveena Prasad M (until June 2024)

Technology: Satej Shende, Durga Swetha Garapati and Ansari Zaibullah Ahmed

Research management: Aishwarya Ratish and Arpitha Jayaram

Projects

CLlx : Connected Learning Initiative
CLlx 3.0 MZ-SUITE: Mizoram Support Unit for Technology Integration in Education :

Faculty Lead(s): Anusha Ramanathan, Saurav Mohanty,

CLlx 2.0, CLlx Assam through TBSI and Tamil Nadu:

Anusha Ramanathan, Saurav Mohanty, Karthik S (Until October 2023)

MATPD: A Multi-Modal Approach To Teacher Professional Development In Low-Resource Settings

Faculty Lead(s): Ruchi Kumar

World of Work:

Faculty Lead(s): Padma M.

Sarangapani, Nishevita Jayendran, Richa Sharma

CL4STEM: Connected Learning for STEM

Faculty Lead(s): Padma M.

Sarangapani, Mythili Ramchand, Vikas Maniar

TELTA - 21 :Technology Enabled Learning For Teachers And Adolescents For 21st Century,

Faculty Lead(s): Amina Charania

NORRAG: Innovative Finance For Education To Leave No One Behind education Work Group For Sustainable Mountain Future: Faculty Lead(s): Archana Mehendale

STARs: Strengthening Teaching-Learning And Results For States :

Faculty Lead(s): Padma Sarangapani and Mythili Ramchand

LiSTEn: Longitudinal Study of Teacher Education, Faculty Lead(s): Meera Chandran & Shamin Padalkar

SoTTTER :State of Teachers, Teaching and Teacher Education 23

Faculty Lead(s): Padma M. Sarangapani & Mythili Ramchand

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