

# From Fields to Futures: 25 Years of Digital Empowerment

*A photo exhibition*

For over two decades, IT for Change has been at the forefront of digital transformation through impactful field projects. Our work spans three broad areas: community informatics that places digital infrastructure in women's hands, adolescent girls' empowerment that builds agency in both online and offline spaces, and equitable EdTech integration within public education systems.

From women-led information centers serving as trusted digital hubs in remote villages and adolescent girls using Instagram to challenge patriarchal norms in Kannada, to teachers facilitating safe spaces for digital learning in government schools—we invite you on this visual journey documenting what happens when technology is placed in the hands of those historically excluded from it.

## EdTech for Equitable Education

While the mainstream EdTech vision often involves the displacement of the teacher, our initiatives deliberately place teachers at the center. Since 2009, our education projects have been working to integrate EdTech to strengthen teacher capacity and promote truly inclusive classrooms. Our active advocacy for and adoption of Free and Open-Source Software (FOSS) and Open Educational Resources (OER) fosters greater teacher agency, bolsters institutional autonomy, and builds crucial systemic capacity.

Our field work focuses on promoting STEM and supporting foundational language learning through the integration of audio-story pedagogy in government and aided schools. Coupled with our capacity building programs within teacher education and education administration institutions, these efforts allow us to develop scalable and sustainable models for strengthening public education across Karnataka and other states.

While driving vital field innovations, we simultaneously advance critical perspectives on EdTech. Through our projects, research, advocacy, and networking, we promote participatory and inclusive models of education via the appropriate integration of technology. Ultimately, we aim to contribute to building a truly inclusive and equitable education system.



2025

## Listen to Learn

A captivating audio story engages 6th-grade students in Bengaluru, inviting them to explore a new language without the pressure of reading, speaking, or writing proficiency. By incorporating voice modulation and sound effects, the story allows students to engage with language through emotion and curiosity. This approach provides a meaningful, immersive introduction to phonemic connections, new vocabulary, sentence structures, and grammatical concepts.



## Audio Stories in the Making

Under the Language Education through Audio-Stories Program – Karnataka (K-LEAP), government school teachers across the state explore innovative, audio-based approaches to language learning. This three-workshop series builds teachers' capacities to create, record, edit, and produce vibrant, contextual, and student-centered audio stories. Using audio stories in classrooms helps create an engaging, anxiety-free environment that builds active listening, phonemic awareness, and overall focus, while providing meaningful exposure to language.



## Audio resource creation in tribal languages for early childhood education

Scenes from the Jharkhand Language Enrichment and Application Program (J-LEAP) workshops in Ranchi and Khunti. In Jharkhand, where many children speak tribal languages, the absence of contextual learning materials can limit early language development. This collaboration strengthened the capacities of local Resource Persons from the Collectives for Integrated Livelihood Initiatives (CINI) to design engaging, mother-tongue-based resources for Anganwadi centers.



## Audio resource creation in tribal languages for early childhood education

Through a series of online and in-person workshops, IT for Change supported participants in selecting, scripting, recording, and editing stories in Mundari. The sessions blended digital skill-building with storytelling pedagogy, fostering locally grounded, technology-enabled approaches to early learning and strengthening community ownership of open educational resources.



## Inside the Language Lab

Students immerse themselves in stories through IT for Change’s Language Lab—an interactive digital resource created using free and open-source tools such as Xerte, Audacity, and Kdenlive. Available in multiple languages (Kannada, English, Hindi, Urdu, Tamil, and Telugu), the Language Lab offers stories in text, audio, and video formats, along with interactive activities like matching, drag-and-drop, and open-ended reflection. Students first listen to stories in their home language before progressing to new languages, building familiarity, confidence, and comprehension at their own pace.



## Stories for Language Learning

Teachers attend a demonstration on integrating stories into language lessons to make learning more meaningful and engaging. For many students, exposure to a new language is limited to just 30–40 minutes of class time, which slows learning and affects confidence. Story-based learning captures students' attention, and when paired with accessible digital resources, provides extended exposure that enhances comprehension, vocabulary, and fluency.



## Partnering with RIESI to Build Teacher Capacity

Teachers engage with interactive digital open educational resources created by IT for Change during a Certificate Course in English Language Training (CELT) at the Regional Institute of English South India (RIESI), Bengaluru. The 30-day course invites government school teachers from across South India to strengthen their English language teaching skills. The IT for Change team conducts sessions on approaches to language learning—such as second language acquisition—and facilitates hands-on workshops on creating digital resources for classroom use.



2024

## Stories for Better Learning

Gulnaz Begum, a teacher from Government Urdu Higher Primary School, Muslim Colony, Bengaluru, integrates storytelling into her language classroom. After attending IT for Change's workshop on using audio stories as a pedagogical tool, she began incorporating audio stories into her lessons—often bringing her own tablet to make the experience immersive for her diverse students. Her bilingual, story-based approach captures students' attention and imagination. She is also an active member of our online Community of Practice, where teachers share ideas, challenges, and classroom experiences.





## Speaking the Language of Shapes

Students from Government Higher Primary School, Ejjipura, perform the ‘Polygon Family’ – a play that brings geometry to life through storytelling. Designed with an interdisciplinary approach, the activity served a dual purpose: helping students visualize geometric concepts such as sides, angles, and differences between polygons, while also practicing descriptive vocabulary, dialogue, and narration skills. Hands-on engagement and visual aids supported deeper conceptual understanding, making the learning of geometry both fun and meaningful.



## Teaching Mathematics with Geogebra

Government High School Mathematics teachers in Rajasthan explore Geogebra as part of the Subject Teacher Forum program. After the training, these teachers led district-level workshops to help their colleagues integrate Geogebra into Mathematics teaching. The initiative enhanced teachers' digital confidence and classroom innovation, making abstract concepts more visual and interactive.



## Make Way for Digital Classrooms

Teachers in Assam learn to use GeoGebra, a free and open-source software that supports mathematics learning. This one-of-a-kind workshop series was part of a nationwide teacher capacity-building program conducted by IT for Change in collaboration with UNICEF (2015-16). Similar workshops were also organized in Rajasthan, Andhra Pradesh, and Telangana, equipping teachers across states to integrate digital tools into classroom instruction.



2025

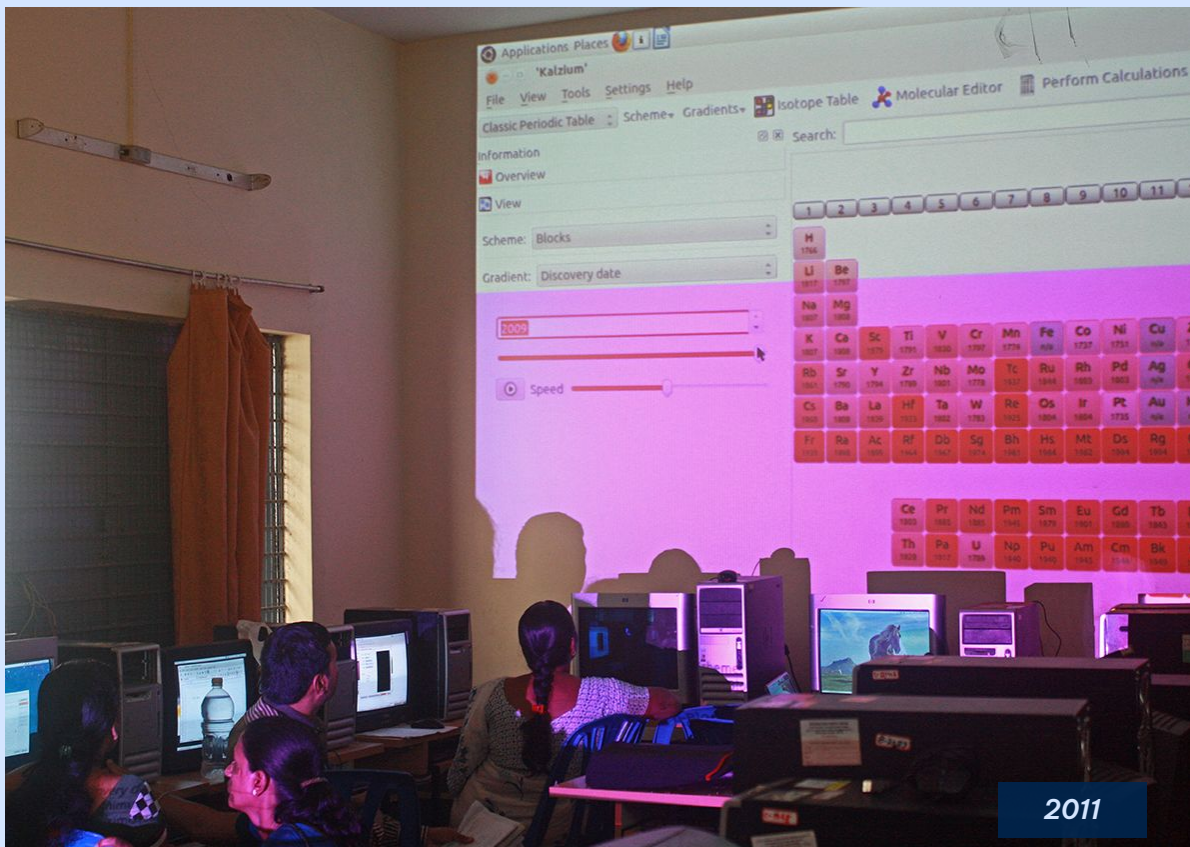
## All About Circuits

A lesson on electrical circuits comes alive through blended learning. The teacher introduces the concept, then guides students through PhET Interactive Simulations, allowing them to test and modify circuit components virtually. Once students grasp the logic, they recreate the circuits using real materials. This combination of explanation, digital exploration, and hands-on experimentation nurtures deeper understanding, helping students develop observation, reasoning, and scientific inquiry skills.



## Simulations to Simplify Science

A science teacher from a government school in Telangana explores Physics Education Technology (PhET) Interactive Simulations, a free application that enhances science learning. The software was introduced during a workshop on using interactive digital resources to teach science. In the workshop, teachers also collaboratively developed open educational resources for the Telangana Repository of Open Educational Resources (TROER)—a platform created using MediaWiki, a free and open-source software. TROER hosts materials in Mathematics, Science, Social Science, Telugu, and English for grades 6–10.



## Visualizing the Periodic Table with Kalzium

Teachers explore the periodic table using Kalzium, a free and open-source digital tool for learning science. The tool deepens understanding of elements and their properties through visual representations. For students who may find concepts like atomic structure, boiling and melting points, or periodic trends abstract, Kalzium's visual design makes these ideas more accessible by illustrating patterns and relationships across the periodic table.



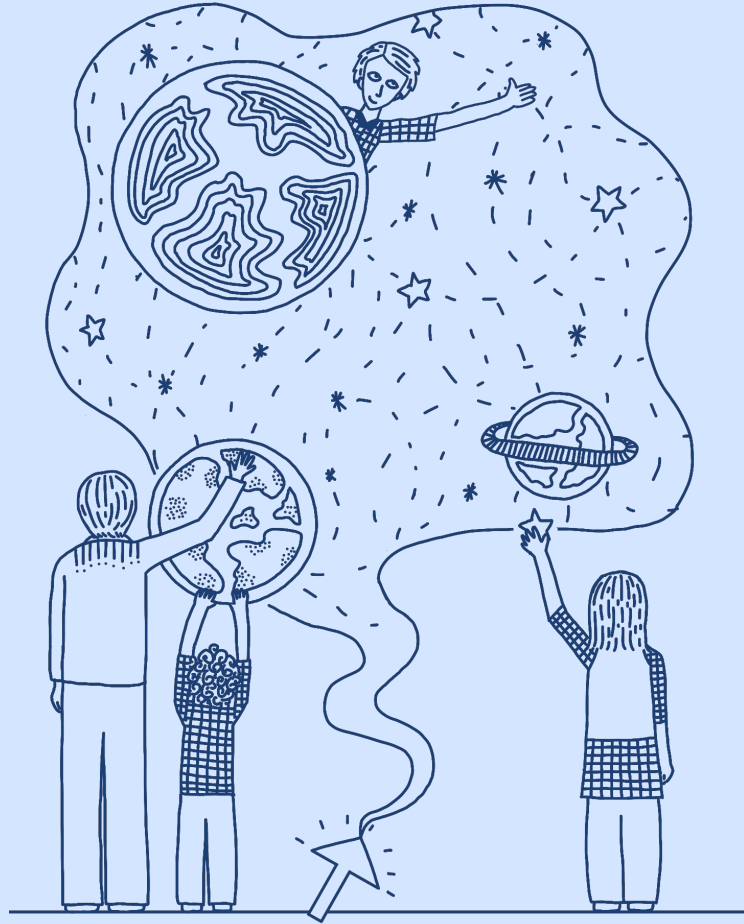
## Making Science Accessible

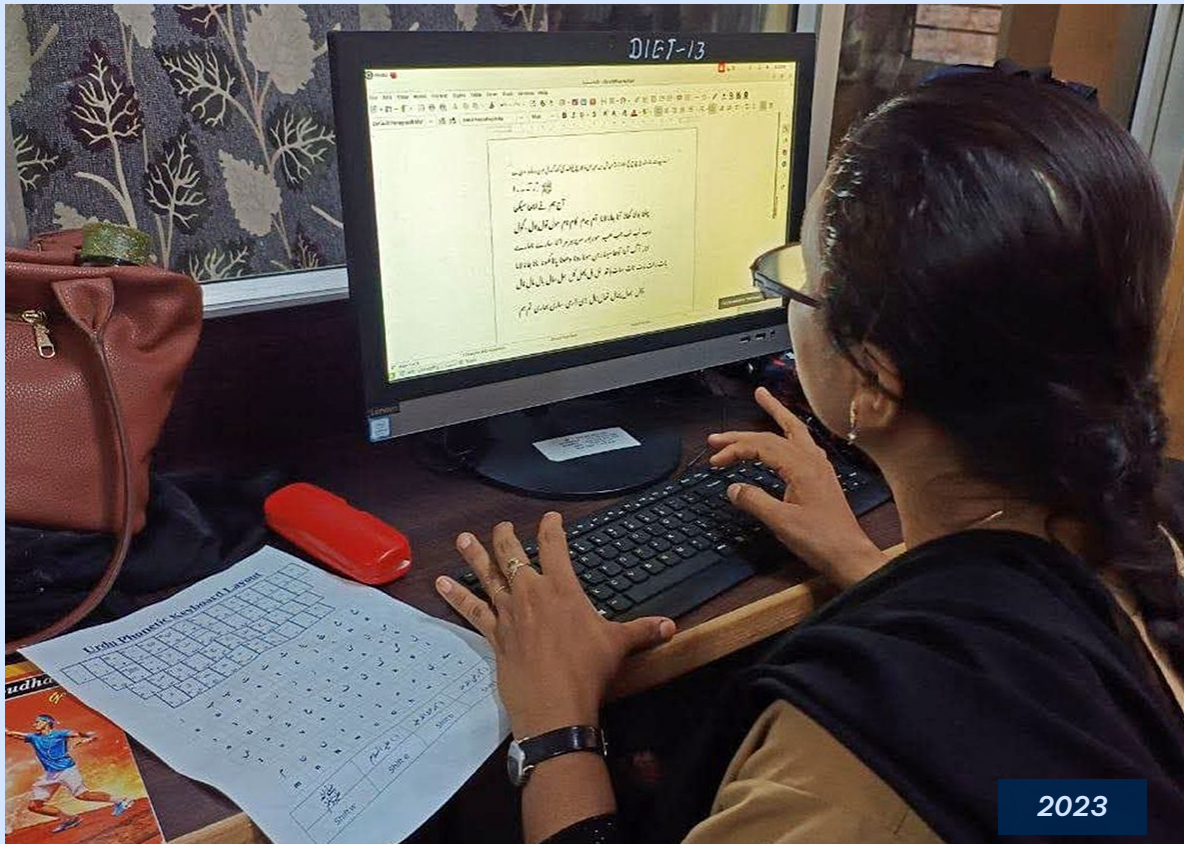
A student presents a model demonstrating 'How Electricity is Generated' at the Science Exhibition held at Hombegowda Boys High School, Bengaluru. Guided by IT for Change facilitators, students brainstormed ideas, designed models using low-cost materials, and presented them to peers, teachers, and parents. Such opportunities nurture curiosity, scientific temper, and conceptual understanding. In schools where laboratory infrastructure is limited and learning is often theoretical, these experiences allow students to experiment, question, and discover—making science tangible, engaging, and accessible.



## Experiential Learning in Action

6th and 7th-grade students from Government Higher Primary School, Byrasandra, explore scientific ideas through interactive exhibits at the Visvesvaraya Industrial and Technological Museum. Guided by IT for Change facilitators and Cognizant Outreach volunteers, students learn about electricity, motion, and energy by observing and experimenting with working models. By encouraging observation, questioning, and hands-on experimentation, learning becomes tangible, joyful, and deeply connected to everyday life.





## Typing for Transformative Learning

A teacher explores Urdu typing during a resource creation workshop for educators from Urdu-medium government schools. Many teachers, unfamiliar with digital Urdu keyboards, often rely on English transliteration. Through this workshop, they learned to type directly in Urdu script with the help of IBus, a free and open-source multilingual typing tool. Urdu keyboards were installed on their personal computers and at the local District Institute for Education and Training (DIET), enabling easier access and continued practice.



## Replacing Fear with Familiarity

DIET faculty from Dharwad take apart a CPU—hands-on—exploring the inner workings of a computer and challenging long-held hesitations around technology. Through this capacity-building program, educators, especially women, were encouraged to overcome their fear of technology and build curiosity, confidence, and self-reliance. The initiative also helped faculty members establish a network of mutual learning and professional support.



2023

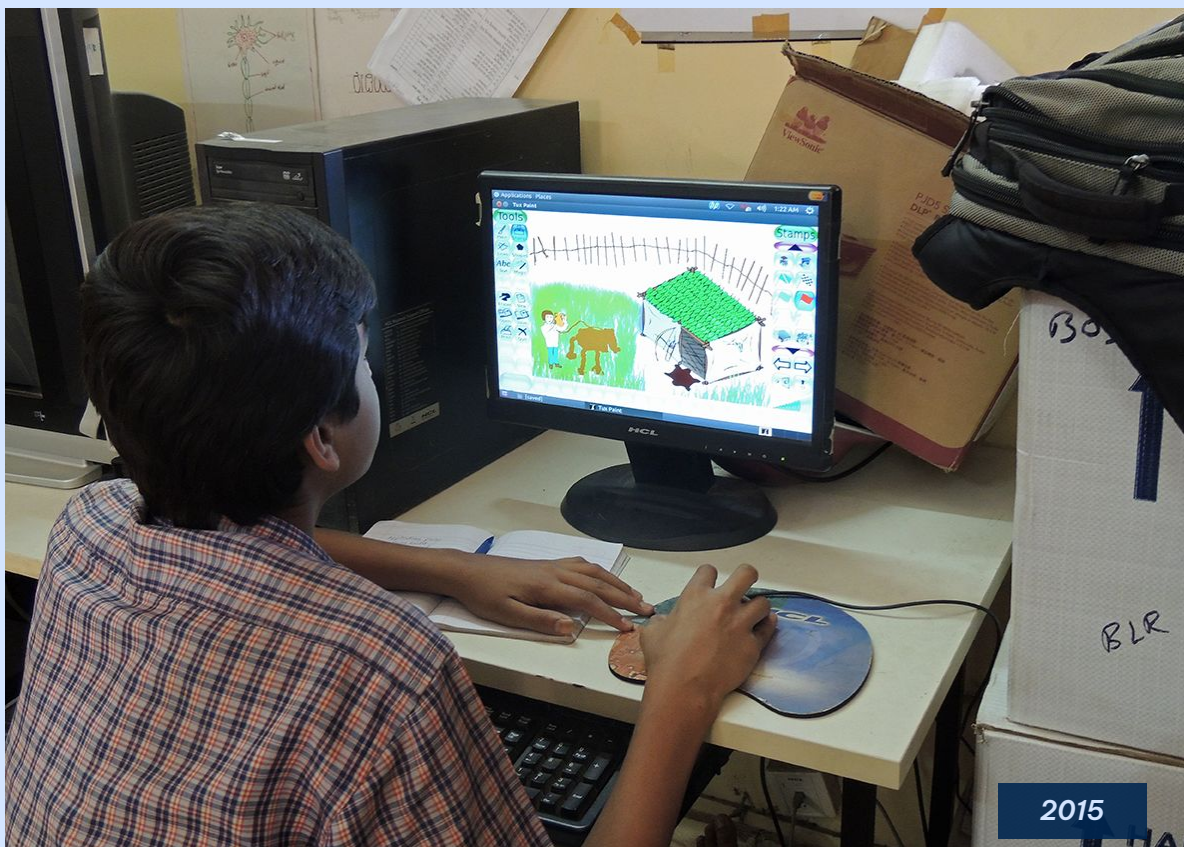
## Digital Classroom in Action

Nilpa, a teacher at Government Higher Primary School, Kothanur (Bengaluru), leads a tech-integrated mathematics lesson on fractions. After attending a capacity-building workshop on integrating digital technologies into classrooms, she independently set up the required infrastructure and facilitated her session using PhET Interactive Simulations.



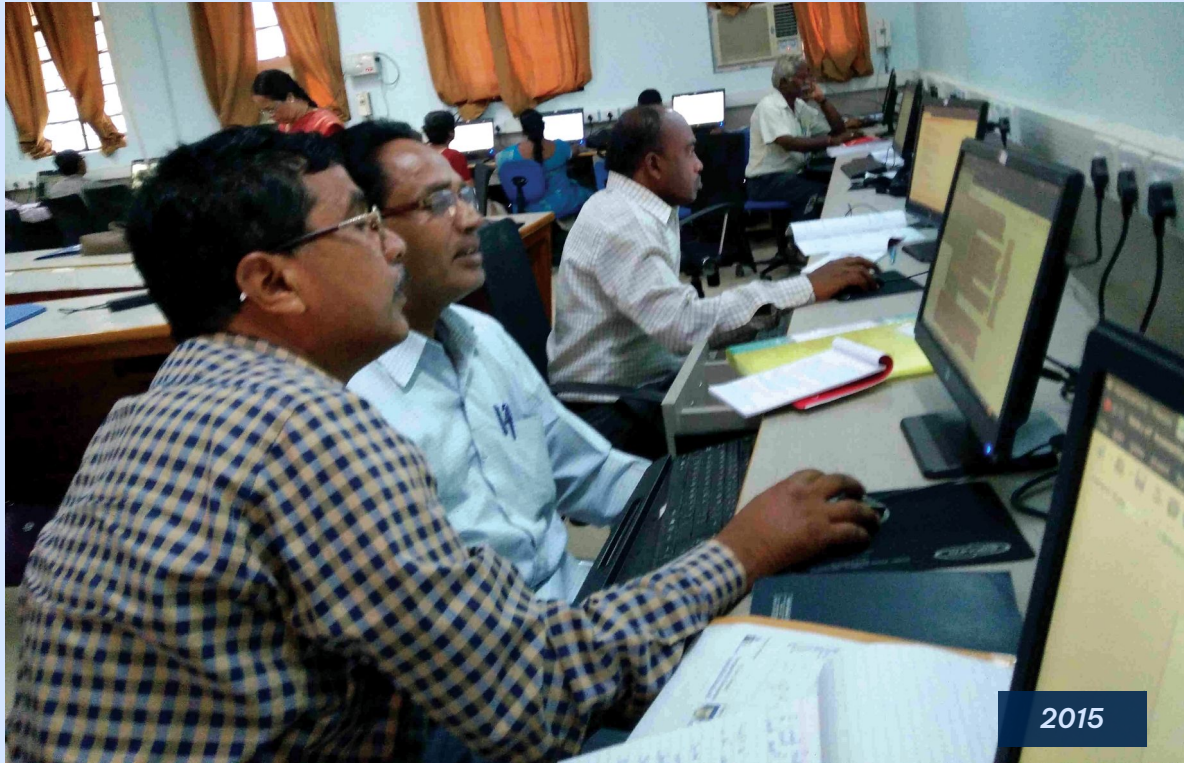
## Teaching Coding Through Open-Source Tools

Radha Narve, a Mathematics teacher at Government High School, Begur, introduces her students to visual programming through Turtle Art—one of the open-source software tools promoted under the Teachers' Communities of Learning (TCOL) program. By teaching coding through creative visual exploration, the program strengthens logical and computational thinking among both teachers and students. IT for Change has conducted several workshops using Turtle Art and Scratch to encourage curiosity-driven, hands-on learning through coding.



## Student Designing Digital Picture Storybooks

A student from Government High School, Yedyur (Bengaluru), creates a digital picture storybook using TuxPaint, a free and open-source software. As part of IT for Change's digital literacy program, students build foundational digital skills—such as typing and using a mouse—while simultaneously strengthening their language learning. They develop their own stories, create storyboards, add illustrations and text, and finally present their digital storybooks to peers and teachers.



## Building Leadership Capacity in DIETs

Principals from District Institutes of Education and Training (DIETs) in Karnataka participate in a five-day workshop on the 'National Curricular Framework for Teacher Education' (NCFTE 2010) at the Regional Institute of Education (RIE), Mysuru. Conducted by IT for Change in collaboration with the Commonwealth Educational Media Centre for Asia (CEMCA), the workshop deepened participants' understanding of the NCFTE vision and the crucial role DIETs play in shaping teacher education.



## Champions of Digital Classrooms

Teachers from various subject areas participate in a workshop on integrating educational technology into classroom teaching. Through capacity building in technology, pedagogy, and content, they explore how digital tools can support their professional growth in increasingly tech-enabled classrooms. As part of the program, teachers are encouraged to invest in personal laptops to sustain their digital practice. In this 2013 workshop, most teachers brought their own laptops to learn. A post-program survey revealed that one in three teachers went on to purchase a personal digital device.



## Timetable for Tech-Integrated Lessons

At Government High School, Ejipura (Bengaluru), the faculty collaborates with the IT for Change team to plan the yearly timetable for high school students. Organized at the start of the academic year, the teachers schedule sessions for the project team to conduct tech-integrated classroom lessons in mathematics and language, ensuring that digital learning is woven into regular teaching schedules.



## Teacher Trainers Driving EdTech Integration

Teacher trainers from District Institutes of Education and Training (DIETs) across Karnataka participate in a workshop conducted by IT for Change on the Language Education through Audio-Stories Program – Karnataka (K-LEAP) at DSERT, Karnataka. The session focused on understanding students' language learning challenges and included a hands-on exploration of Kathe Khajane, a multilingual repository of digital stories. DIET faculty discussed strategies to introduce these resources to teachers in their districts, fostering awareness, collaboration, and support networks for meaningful classroom integration across the state.



2023

## Digital Resources for Future Classrooms

At Vijaya Teachers' College, Bengaluru, B.Ed. students learn to integrate open-source tools such as K-Geography and GeoGebra to create digital classroom resources. Through IT for Change's Pre-Service Teacher Education (PSTE) Program, student-teachers learn to use technology meaningfully in teaching and learning. The program nurtures the capacity to design innovative, inclusive classroom practices and encourages future educators to remain adaptable, reflective, and resourceful.





## Engaging Parents in Education

Parents from Government Urdu Higher Primary School, Tank Garden, Bengaluru, come together to reflect on how schools and communities can jointly nurture children's learning. As part of this community engagement initiative, parents received audio stories in Urdu, English, and Kannada, along with discussion prompts, through a WhatsApp group. By overcoming language barriers, parents were able to actively participate in and support their children's learning at home.



## Open Primary Schools Now!

Approximately 82% children across all classes have lost at least one mathematical ability since the last academic year.

To combat this, we, a group of public education and health workers, demand that the government:

- Open primary schools fully and immediately with necessary hygiene precautions.
- Allow all students to attend school, with parental consent and teacher vaccination on priority.

## Supporting Teachers and Students Through the Pandemic

As part of the National Coalition on the Education Emergency (NCEE), IT for Change advocated for the safe reopening of schools during the pandemic. Prolonged school closures had severely impacted learning, especially among marginalized communities. The team conducted webinars with educators to discuss these challenges and collaborated with state Education Departments to develop resources supporting teachers. IT for Change also organized open online classes to help teachers adapt to remote teaching and sustain student learning.



## सकुल खोला!

शिशुदेर खादा, पुष्टि एवंग स्वास्थ्यसेवा प्रयोजन

नाशनल कोयोलिशन फर एडुकेशन इमार्जेसि



## ತಕ್ಷಣವೇ ಶಾಲೆಗಳನ್ನು ತೆರೆಯಿರಿ!

ಮಕ್ಕಳಿಗೆ ಊಟ, ಪೋಷಣೆ ಮತ್ತು ಆರೋಗ್ಯ ಖಾಲನೆಯ ಅಗತ್ಯವಿದೆ

ಶಿಕ್ಷಣ ತುರ್ತುಪರಿಹಾರಿತಯ ಕುರಿತು ರಾಷ್ಟ್ರೀಯ ಒಕ್ಕೂಟ



## शाळा लगेच उघडा!

मुलांना अन्न, पोषण आणि आरोग्यसेवेची गरज आहे.

शैक्षणिक इमरजन्सीवरील राष्ट्रीय गठबंधन



## உடனடியாக பள்ளிகளைத் திறக்கவும்!

குழந்தைகளுக்கு உணவு, ஊட்டச்சத்து மற்றும் ஆரோக்கியம் தேவை!

கல்வி அவசரநிலை குறித்த தேசிய கூட்டணி

2020



## Language Teaching During the Pandemic

At the online panel discussion 'International Conference on English Language Teaching During Pandemic Times' – organized by the Regional Institute of English, South India, in collaboration with IT for Change – academicians and educators reflected on redesigning language teaching in the absence of physical classrooms. The discussion explored effective online pedagogies to address diverse learning needs and considered inclusive strategies to support students from marginalized socio-economic contexts during the COVID-19 lockdown.





## Recognizing Innovative Educators

Teacher Sucheta S.S. from Government High School, Thyamagondlu, Karnataka, receives the National ICT Award for her innovative teaching practices. Sucheta participated in IT for Change's Subject Teacher Forum (STF) and Teachers' Community of Learning (TCoL) programs, which support educators in exploring digital tools and pedagogical innovation. Her recognition celebrates the commitment of teachers who engage in these collaborative learning communities to enhance classroom teaching through technology.



## Kerala CM Releases Report Based on IT for Change's Study

Chief Minister of Kerala, Pinarayi Vijayan, releases 'Empowering Adolescents with Future-Ready Skills - The Inspiring Story of Little KITEs', a UNICEF report based on a study by IT for Change. The report examines the Little KITEs program in Kerala high schools, run by the Kerala Infrastructure and Technology for Education (KITE), focusing on how it develops adolescents' digital skills and perspectives on technology. IT for Change Director Gurusurthy Kasinathan is seen on the dais alongside the Kerala Education Minister, Education Secretary, CEO of KITE, and senior UNICEF officials.



## Contributing to Policy Dialogue on Education Reform

Gurumurthy Kasinathan, Director, IT for Change, participates in a task force meeting on curriculum framework convened by the Karnataka State Education Policy Commission (SEP), alongside education experts such as Prof. Anita Rampal and Prof. R. Govinda. The task force deliberated on key issues, including medium of instruction, gender discrimination, learning processes, assessment models, school structure, dropouts, retention, and inequalities affecting socially and economically disadvantaged groups.