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An initiative seeded by



The true teachers are those who help us think for ourselves. - Sarvepalli Radhakrishnan

Voices from the field



Current status of Mizoram Schools: 30 Teachers: 154 Students: 4,400

As a newly recruited Field Resource Co-ordinator for the field of Mizoram, it immediately came to my mind from the past few months experiences that students from most of the schools are really interested and enjoying the CLIx classes. Learning the relevant subjects while simultaneously interacting with the computer gave the children not only the basic concept of the same, but also helped in improving their knowledge of digital literacy.

Teachers who are engaged in the CLIx modules are truly inspired by the creativity and meaningful approach of the CLIx platform. Many positives feedback were observed from the teachers and Head Masters as the CLIx module permits the children to have fun while learning. I'm sure that this unique approach of studying will definitely help the students not only in their school days but in their career as well. It really is a great privilege to be a part of this remarkable IT revolution.

> VL Ramdinsanga, Field Resource Coordinator Mizoram CLIx Team



Current status of Chhattisgarh Schools: 47 Teachers: 139 Students: 4,680

हमारे स्कूल में विगत तीन हफ्तों से लर्निंग आउटकम स्टडी चल रही है जिसमे बच्चो को ज्योमेट्री सीखने सीखने की प्रक्रिया चल रही है. बच्चे कमांड से डायग्राम बना रहे थे तो उनके बडी(Buddy) ये कहकर उनसे बहस करते हैं कि तुमने तो फॉरवर्डपर क्लिक किया ही नहीं क्लिक करोगे तभी तो दिखेगा कि वर्ग बन रहा है या नहीं. तो कुछ बच्चे यहां पर परेशान हो जाते हैं और कुछ बच्चे पूरे कॉन्फिर्डेस के साथ कहते हैं. डायग्राम तो बन रहा है, पर वो टर्टल के नीचे छुपा है और देखना टर्टल हटाने पर पता चल जायेगा कि वर्ग बन रहा है कि नहीं. कमांड कम्पलीट करने के बाद टर्टल हटाने पर बच्चे देखते हैं - एक बहुत छोटा सा वर्ग!वे हंसते हैं, खुश होते हैं और हैरान भी!

ये पूछने पर कि बन रही आकृति दिखाई क्यों नही देती पिछली 3 आकृति बनाते वक्त तो ऐसा नहीं हुआतो बच्चों का ये कहना है कि यहां पर टर्टल सिर्फ 5 कदम या स्टेप ही आगे बढ़ता है और बन रही आकृति टर्टल से भी छोटी होती है जबकि पिछले कमांड्स में टर्टल 90, 100, 200 फॉरवर्ड किया गया था, जो कि टर्टलसे भी बहुत बड़ा है इसलिए आकृति बनती हुई दिखाई देती है.

टर्टल लोगो में ये चारों कमांड्स इस्तेमाल करने के बाद बच्चों में ये समझ तो विकसित होने लगती है कि दिये गये कमांड से वर्ग बनेगा या नहीं और यदि वर्ग नहीं बनता है तो कमांड्स में क्या बदलाव करना चाहिए. अब मुझे लगता है कि बच्चे कम से कम वर्ग और आयात के कमांड्स के साथ "कोण" और "भुजा" के कांसेप्ट को समझ पा रहे हैं.

> Amarjyoti Sinha Govt. Higher Secondary School, Bagatarai, Dhamtari

Voices from the field

contd.



Current status of Telangana Schools: 300 Teachers: 1,853 Students: 10,080

My name is M. Sai Deekshitha studying in the 9th class at Government Girls High School Lashkar bazar, Warangal . During the CLIx student workshop conducted in our school by Raju Sir, through computers we can learnt subjects, which are difficult to understand in class. Before this workshop, I did not know anything about computers. By attending this workshop I learnt parts of computer and how they work. Sir taught us how to operate computers for CLIx modules. We have learnt how to explore the module and learn from topics. These CLIx modules are useful for us for learning after school also. We want to learn from these modules and teach these to other friends in class. We are enjoying working and playing games on CLIx modules. These games are fun and learning. I liked "Police Squad" game which has a lot of clues, first it was difficult to find clues. Now, I know it's easy and fun.

> M. Sai Deekshitha, Student Government Girls High School , Warangal



Current status of Rajasthan Schools: 101 Teachers: 248 Students: 13,277

क्लिक्स कार्यक्रम पिछले तीन वर्षों से हमारे विद्यालय में कक्षा 8 तथा 9 के साथ क्रियान्वयित किया जा रहा है। विषय आधारित इस कार्य क्रम में विद्यार्थी व्यक्तिगत अभ्यास के माध्यम से एवं अपने अनुभवों को एक दूसरे के साथ साझा कर के सीख रहे है। क्लिक्स क्रियान्वयन से पूर्व मेरे द्वारा विज्ञान विषय को तीन शिक्षण विधियों से अध्ययन करवाया जा रहा था जिनमें (1) कक्षा कक्ष में चित्र-चार्ट व व्याख्यान, (2) प्रयोगशाला में प्रायोगिक कार्य व स्वयं कर के सीखना तथा (3) मोबाइल में विडियो के माध्यम से समझाना शामिल है। क्लिक्स से मुझे एक और प्रभावी शिक्षण विधि का विचार प्राप्त हुआ, जिसके माध्यम से बच्चे आईसीटी लैब में विज्ञान शिक्षण बिन्दुओं को खेल, विडियो, सिमुलेशन जैसे विभिन्न तरीकों से रूचि लेकर सीख सकते है। विद्यार्थियों में विज्ञान के प्रति रूचि व अभिवृति विकसित करने में क्लिक्स का योगदान दिखाई देता है।

> वंदना रैगर, वरिष्ठ अध्यापक विज्ञान राजकीय आदर्श उच्च माध्यमिक विद्यालय, काचरोदा जयपुर

Blog of the month

Connected Learning at Scale: An International Symposium (08.08.18-09.08.18)

When the idea of an international symposium was first mooted, there was excitement and also niggling apprehension. Would we at CLIx be able to pull this off successfully?

While organising workshops and events with our partner states and at TISS was by now routine, an event of this magnitude had never been undertaken. The planning had to be perfect for the execution to succeed. The participants and invitees spanned countries. Workshops, interactive sessions, entertainment, venue, accommodation, travel, food, plan A, B, C — phew, the to-do list seemed to grow longer by the day.

In the last stretch of the run up to the symposium, with barely a week to go, days merged with nights, weekdays with weekends until D-Day arrived!

Everything had been planned to a T, and the teams worked with clockwork precision.

The Connected Learning at Scale: An International Symposium, was held at the TISS Mumbai campus on 8 and 9 August 2018.

The Symposium's major themes were:

- Designing learning experiences
- Scaling with quality
- Partnerships
- Research directions

There were five plenary sessions, one roundtable discussion, eight parallel sessions, and a variety of poster presentations and live demos over the course of two days. The participants were educational planners, policymakers, practitioners, educational researchers, foundations and agencies involved in advancing quality education for all, STEM education, as well as representatives of Indian state and central governments.

On the evening of 8 August, a special reception was held to recognise the contribution of all who had been instrumental in making the CLIx project a resounding success. These included teachers, state partners, development partners and implementation partners, all of whom were felicitated by Prof Shalini Bharat, Acting Director, TISS, and Tara Sabavala, Director, Tata Trusts.

The symposium generated interesting perspectives on the current status of high school education in India, the why and how of effective teacher professional development, and technology-enabled teaching and learning. Best practices and new ways to address the roadblocks in the path of achieving the desired outreach formed the crux of the conversations.



Here are some observations by CLIx leadership.

Prof. Padma Sarangapani, Professor and Chairperson, Centre for Education, Innovation and Action Research, TISS, and Project Director, CLIx, said, "Why CLIx? Because the voices from higher education are missing in the space of school education and other development problems in the global south."

Prof Vijay Kumar, Associate Dean and Senior Strategic Advisor for Digital Learning, Massachusetts Institute of Technology, said, "Scale is a vector. Scale is not taking one thing and doing it for all. We should be able to do many different things for different learners."

Tara Sabavala, Director Tata Trusts, said, "What CLIx did for us is that, in a small way, we have shown we can use technology to deepen student learning and make it joyful for them."

Amrita Patwardhan, Tata Trusts, said, "Topdown support is required for a bottom-up approach in education."

The journey has just begun. Not content to rest

on our accolades, we march forward with renewed enthusiasm.

- Sunita Badrinarayan, Communications Co-ordinator and Deepa Bhalerao, Sr. Program Manager, Centre for Education, Innovation and Action Research, TISS



CLIx team—Research

This section features recent studies in the field of education published by our CLIx team who work in tandem with the Centre for Education, Innovation and Action Research (CEIAR).

In this paper, we illustrate the findings from a design experiment conducted for an ICT enabled micro-course for large scale implementation to address high school mathematics teachers' teaching of geometry. In the paper, we have described the theoretical principles of the design of a micro course for teachers which includes implementing a student module developed for teaching geometrical reasoning at high school level. The 11-week course involves integration of ICT in teaching mathematics as well as using ICT to engage in professional development through the micro-course. The preliminary findings of running the course in three states have been reported indicating the challenges faced in implementing the ICT based course for teachers at scale along with the insights gained for refining the theoretical assumptions based on which the course was designed.

Read full paper

Explore CLIx

CLIx offerings for students: <u>https://demo-</u> clix.tiss.edu/

Post Graduate Certificate in Reflective Teaching with ICT: https://

www.tissx.tiss.edu/

Publications: <u>https://clix.tiss.edu/research/</u> publications/

Releases/Modules: <u>https://clix.tiss.edu/</u> research/releasesmodules/

Blogs: https://clix.tiss.edu/news/

CLIx in the Media: <u>https://clix.tiss.edu/press-</u>room/

Opportunities: <u>https://clix.tiss.edu/</u> <u>opportunities/</u>

Module: Mathematics (Proportional Reasoning)



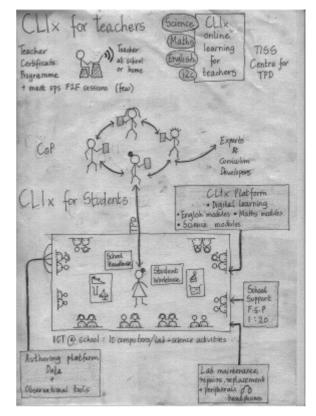
Proportional Reasoning aims to enable students to identify and understand multiplicative relationships in contexts involving comparisons, sharing, and scaling, leading to conceptual applications both within and across subject domains.

Forthcoming events

Teacher training- Open Educational Resources (OERs) for Teaching & Learning (Chhattisgarh) 8-10 September 14-16th September

Teachers (Math) workshop in Lunglei (Mizoram) 18-21 September

About CLIx



The CLIx Ecosystem

The Connected Learning Initiative (CLIx) is a technology enabled initiative at scale for high school students. The initiative was seeded by Tata Trusts, Mumbai and is led by Tata Institute of Social Sciences, Mumbai and Massachusetts Institute of Technology, Cambridge, MA USA. CLIx offers a scalable and sustainable model of open education, to meet the educational needs of students and teachers. The initiative has won UNESCO's prestigious 2017 King Hamad Bin Isa Al-Khalifa Prize, for the Use of Information and Communication Technology (ICT) in the field of Education.

CLIx incorporates thoughtful pedagogical design and leverages contemporary technology and online capabilities. Resources for students are in the areas of Mathematics, Sciences, Communicative English and Digital Literacy, designed to be interactive, foster collaboration and integrate values and 21st century skills. These are being offered to students of government secondary schools in Chhattisgarh, Mizoram, Rajasthan and Telangana in their regional languages and also released as Open Educational Resources (OERs).

Teacher Professional Development is available through professional communities of practice and the blended Post Graduate Certificate in Reflective Teaching with ICT. Through research and collaborations, CLIx seeks to nurture a vibrant ecosystem of partnerships and innovation to improve schooling for underserved communities..

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