



CONNECTED LEARNING INITIATIVE

An initiative seeded by

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Newsletter

Founding Partners



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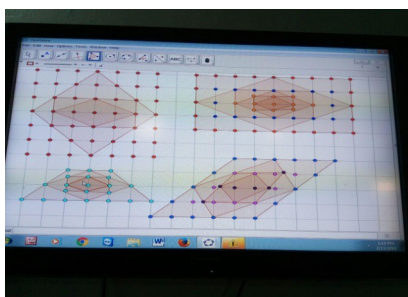
We are delighted to announce that CLIX has been selected for the 2017 edition of the UNESCO King Hamad Bin Isa Al-Khalifa Prize for the Use of ICTs in Education!

Voices from the field



Current reach in Chhattisgarh

Schools: 47
Teachers: 139
Students: 4,680



Amarijoti Sinha, Mathematics teacher of Govt. Higher Secondary School, Bagatarai has been consistently trying to link the concepts of mathematics through different activities such as Geogebra, dot grid activity etc. She also performs every activity which is shared to her through different mediums. She shared some of her insights and classroom experience on a linear equation problem that she received on Telegram. Since students had not worked with problems in 3 variables, she made the effort to convert the problem into a form where the students could construct their own solutions. These are some excerpts of her experience...

कक्षा नवमी की किताब में एक चैप्टर है "एक चर का रेखिक समीकरण" इसलिए इस सवाल को बच्चों के सामने रखने में एक दिक्कत यह थी कि बच्चे एक ही चर वाले रेखिक समीकरण से परिचित हैं और वे उन्हें ही हल करना जानते हैं, और आपने यह सवाल जो गणित ग्रुप में दिया है तीन चरों वाले रेखिक समीकरणों को बनाता है, जिस की सहायता से इसे हल किया जा सकता है तो मैंने बच्चों के लिए इसी प्रकार का एक सवाल बनाया और उसे ब्लैकबोर्ड में लिख दिया.

मेरा प्रश्न था आप एक स्टेशनरी की दुकान पर कुछ पेंसिल, पेन और कॉपी खरीदने के लिए जाते हैं तो दुकान दार ने आपको एक पेंसिल, एक पेन और एक कॉपी की कुल कीमत 18, एक पेंसिल, दो पेन और दो कॉपी की कुल कीमत 34 तथा दो पेंसिल और चार पेन और एक कॉपी की कुल कीमत और 38 बताया तो बताइए कि एक पेंसिल, एक पेन और एक कॉपी की कीमत क्या होगी?

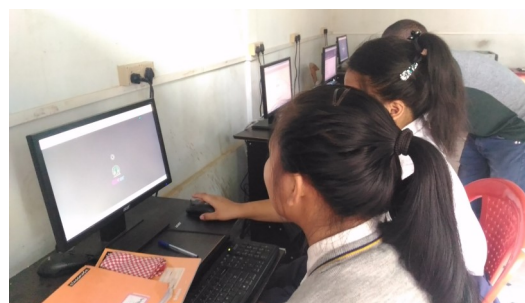
अब मैंने आपने जो सवाल दिया था.. वो diagram ब्लैकबोर्ड में बना दी.. मैंने बच्चों को आपके सवाल के साथ यह कहते छोड़ दिया कि आप Monday को इसे हल करके लाएं... लेकिन करीब दस मिनट के बाद ही एक बच्चा अपनी कॉपी लेकर Staff room में आया. Answer देखकर मुझे खुशी हुई क्योंकि उसके answer और मेरे answer बिल्कुल same थे फिर कुछ और बच्चों ने अपना solution दिखाया.



Government of Mizoram

Current reach in Mizoram

Schools: 30
Teachers: 154
Students: 4400



It has been two years since CLIX was introduced in our school. We teachers were thrilled that our school was among the chosen few where this exciting new programme was to be initiated and to be a part of this CHANGE in the education system of the State.

Our first challenge was at the one week long introductory training, but it was more to do with the school timetable. A small school like ours is very understaffed and it's very hard to dedicate a whole week to the training. Through understanding and good communication among the teachers we managed. We also had a problem at the module roll out where teacher trainers were to conduct a CLIX class in school. Most of the teachers in school were not very fluent in technology and thus, to go through the digital modules was a challenge. Some felt trainings were too few and they kept forgetting how to work on the modules. They needed help and so it took two - three teachers to take one class. The third challenge was materialistic - there are 9 computers for around 30 students. Initially the students shared computer time, but we found some students were afraid to even touch the computer and let their friends do all the work. So we let all the students do their own work which was very time consuming. Network problems hinder the classes too, due to both internet connection being slow sometimes, and irregular power supply.

But as we go on, we keep discovering ways to tackle problems. The modules are simple, yet very interesting and seeing them enjoying their lesson was really gratifying for the teachers. It would really help if the modules were more syllabi-oriented. We feel students would be more serious if they knew they are to be evaluated/graded on their performance. On the whole, CLIX programme has been very revealing and enlightening. The platform through which teachers from all over the country interconnect and share problems is very helpful. I truly hope that the programme will continue and evolve in a way that each and every student of the whole country may benefit from it.

Voices from the field

contd.



Government of Rajasthan

Current reach in Rajasthan

Schools: 101

Teachers: 248

Students: 13277

It is very interesting and a nice experience to be with CLIX as both students and teachers get an opportunity to become familiar with technological development in the field of education. It makes them feel comfortable with computer and its software as well as basic hardware. Firstly, as I deal with I2C module, students feel very confused and perplexed. Slowly they were able to type in Hindi (Indic typing). Then they get to know about mouse navigation, its buttons and finally they were able to start computer and login to CLIX modules on their own. Later, students also learnt about spreadsheets, how to use formula and many functions in the software. Then we proceed to Math modules in which they are introduced to Geometric and Proportional reasoning. Here, students get formula with different types of quadrilaterals which they haven't seen in books. They came to know about shapes - that they are actually based on their properties not on look. In Police Quad game, after starting mistakes, got to know the meaning of 'only', 'at least', 'not more than'.

Overall, students and teachers are always ready for a CLIX classroom as they find it interesting and different from conventional teaching. In my view, computer exposure of students should be increased, because thereafter they become more comfortable with maths modules and can complete other chapters in CLIX. Other problems, we resolve on our own or with the help of CLIX team.



Current reach in Telangana

Schools: 300

Teachers: 1,589

Students: 10,080

I am working as a maths teacher in ZPHS Maharajpet school. Children are learning this module with lot of interest as it is activity based. This module is awakening enthusiasm within a student to learn as it's a new mode of learning. If this is continued this will be a good mode of learning to learn the difficult topics. We have tried it before twice but we will work on it better from now by regularly bringing them to lab. We are able to use CLIX module to teach mathematics which is one of the difficult subjects for students. Students are especially enjoying the 'police quad game'. Students are able to read the clues and they are enjoying playing the police quad game. Jamuni story is also a enjoyable way of learning for students. Through this CLIX module they are not only learning subject, its a new way of learning mathematics in government schools in Telangana. All our students are from rural background so all of them are using computers for first time and they are extremely enjoying CLIX modules. CLIX is not only useful for students but also for teachers as it's a innovative pedagogical approach in the educational paradigm.

Tech Assist - 1

This section is intended to provide a series of "Do-it-Yourself" solutions for common technical problems faced in the field. We begin with a glossary of frequently used terms.

Computer

A device that executes a program or multiple program to get the output.

Example - We give input example (23+77), computer process / computes and gives us output as (100)

Hardware

Physical parts - Parts that we can feel with a physical touch

Example - Monitor, Keyboard, Mouse, RAM, Motherboard, CMOS, etc.

Software

Program / Applications - Set of instructions which performs a specific task.

Example - Ubuntu, CentOS, Windows, Mac, Openoffice, MS Office, Inkscape, etc.

Networks

Connecting multiple computers for communicating or sharing information and resources.

Input devices

Devices that help us in giving input to the computer.

Example - Keyboard, Scanner, Webcam, Microphone, etc.

Output devices

Devices that help computer in giving output.

Example - Monitor, Printer, Projector, Speakers, etc.

Peripherals / Resources

Devices or parts connected to a computer. (All the input and output devices)

Internet

World wide networks - connecting a computer to all computers in the world to share / access information and resources, etc.

World Wide Web (www)

A communications model that enables the exchange of information over the internet.

Software Terminologies

Operating System (OS)

A special software which acts a container to run other applications. Hence it's one of its kind.

Example - Ubuntu, CentOS, Windows XP, Windows 7, Windows Multipoint Server, Mac, etc.

Application Software

A software which performs a specific task in a limited scope.

Example: Apache OpenOffice, MS Office, Inkscape, etc.

Web browser / browser

Software that helps in accessing the internet resources

Example - Mozilla Firefox, Google chrome, Safari

Tech Help Documents to be released shortly on our website. Stay tuned!

Blog of the month

Poster on Invitation to CLIX (I2C) at epiSTEME 7 Conference (05.01.18 – 08.01.18)

We attended the epiSTEME7 conference organised by the Homi Bhabha Centre for Science Education, Mumbai, to present a poster titled: Zone of Proximal Development in the Era of Connected Learning. This blog is about our experience at the epiSTEME 7 conference.



The conference had four major strands: 1. Historical, philosophical and sociocultural studies of STM; 2. Cognitive and affective studies of STME; 3. Curriculum and pedagogical studies in STME; and 4. Discipline-based education research with emphasis on undergraduate science education. The third strand had a sub-strand: the role of ICT in teaching-learning, and our paper was part of it. In our paper, we argued that Vygotsky's idea of zone of proximal development (ZPD) needs to be re-conceptualised considering the recent developments in technology, especially the arrival of connected computers.

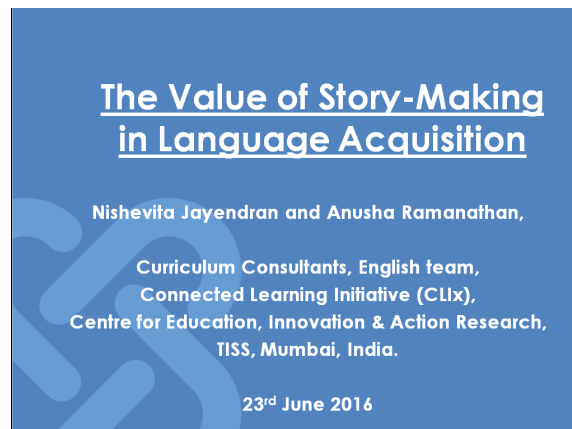
Vygotsky defined ZPD as the distance between the conceptual level at which the child is and the conceptual level the child can reach with some help from a teacher or an adult or more able peer. In that idea, a mentor is always at a higher conceptual level than the mentee. In our paper, we argued that learning can also happen through interaction between students at the same conceptual level where the interaction acts as a scaffold for further learning. We used observations made during the rollout of the Invitation to CLIX (I2C) module, particularly the use of Indic typing. Students created and shared their work through the CLIX platform. There was inter- and intra-group collaboration in the process. Temporary and permanent logs on CLIX platform created using the Comment, Notebook and Gallery features of the CLIX platform were helpful for students in learning. They used it to receive and give help to solve problems. We observed during the I2C module rollout that the role of mentor and mentee was dynamic. Different students played these roles at different times.

We got good feedback from many people at the epiSTEME 7 Conference. Parvin Sinclair, the former director of NECRT, suggested that we should conduct delayed post-test to see if the students still remembered what they had learnt.

Rafiqh Shaikh, Senior Research Associate, Science Team and Amit Dhakulkar, Assistant Professor, Invitation to CLIX Team, CLIX

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 & Action Research (CEI&AR).



This month we feature [Nishevita Jayendran](#) and [Anusha Ramanathan's](#) paper *The Value of Stories in English Language Learning* presented at Critical Edge Alliance Conference, Denmark which took place between 21-25th June, 2016

This paper argues for using story-creation to facilitate (English) Language Acquisition. Drawing on the Computer Assisted Language Learning (CALL) design for ELT, it is proposed that the structural attributes of stories such as plot, character and perspective that characterize their narrative representational nature make them an appropriate pedagogical tool to facilitate language learning.

To this end, the paper analyses the Open Story, a student-led, task-based tool developed by the Connected Learning Initiative (a collaboration between TISS, Mumbai, MIT, Boston, USA and Tata Trusts, India) that integrates in its structure written, visual and aural representation to support language learning in higher secondary students by allowing them to engage in creative activities such as story-making. By blending Reading, Writing, Listening and Speaking modules into its rubric, the Open Story draws on constructionist learning theories through a task-based approach that shifts students from being receivers to producers of text.

Based on the analysis of select stories created through this tool by senior secondary students of Mizoram, India, this paper affirms the power of Open Story in facilitating language acquisition and production. Subsequently, this paper considers the transformation mobilized by a CALL platform within the representationalist attribute of story, and its influence on language learning.

Keywords: Story, CALL, Open Story, Constructionist learning, TBLL.

[Read full paper here](#)

Explore CLIX

CLIX offerings for students: <https://staging-clix.tiss.edu/welcome>

Post Graduate Certificate in Reflective Teaching with ICT: <https://www.tissx.tiss.edu/>

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

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

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

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

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



Module: [Invitation to CLIX](#)

New media, in the form of connected digital devices, have the potential to allow learners interesting and innovative opportunities going beyond the classic blackboard paradigm and facilitating, instead, a process of learning-to-learn together. Under-served learners in India stand to benefit greatly from access to digitally-enabled learning, once they gain simple operational skills and familiarity with the new media. The skills thus acquired should last the learner a lifetime.

i2C is designed to be an easy and exemplary connected learning experience, facilitated through a specially designed course Platform – a social space where collaborative interactions happen. i2C aims to prepare learners for conceptual and investigative engagements in Science, Mathematics and English Communication as offered through CLIX. The i2C module consists of 4 units i.e. Introduction and Indic Typing, Analyzing with Spreadsheets, Drawing with Inkscape and Analysing with Mindmaps.

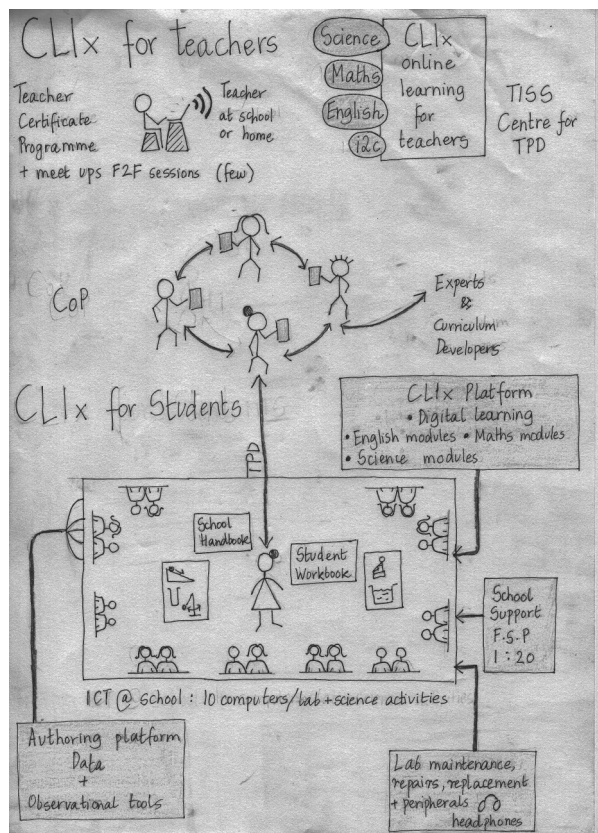
Forthcoming events:

19th-20th Mar'18 - **Technology Workshop**

21st-23rd Mar '18 - **Implementation Workshop**

3rd-5th June 2018 - **CLIX Symposium**

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 with Tata Institute of Social Sciences, Mumbai and Massachusetts Institute of Technology, Cambridge, U.S.A. as founding partners. It offers a scalable and sustainable model of open education and is a bold effort to bring innovation, and global best practices adapted to the Indian context, to meet the educational needs of students and teachers.

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 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 under-served communities.

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