CLIx Newsletter | April 2017

View this email in your browser

The Connected Learning Initiative (CLIx) is a collaborative initiative of the **TATA INSTITUTE OF SOCIAL SCIENCES, TATA TRUSTS and MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT).** It is a bold and innovative effort that aims to improve the quality of education accessed by secondary school students and teacher professional development.

(clix.tiss.edu)

Voices from the Field:

The Field Support Persons talk about the State Field Workshop which took place at Hyderabad from 20.03.17 - 23.03.17.

"It was a chance to ask questions and clarify doubts. It was also a chance to talk and discuss ground level problems. It was also a chance to understand the deep thinking behind a study of schools and study of teachers. We also got to learn about mind maps. Free mind is a good tool to express ideas and prepare own thoughts. It is also easy for others to understand"

-Raju Sambari, Field Support Person, Warangal, Telangana

"I actually got more refined information about Postgraduate Certification Program, its usefulness towards Teachers Professional Development, and also about COP, reflective teaching, how to facilitate teachers for Digital Literacy Course. Now, I am more confident working in Spreadsheet, Inkscape and Free Plan to transact teachers in training. In nutshell, this training had boosted my confidence.

- Khushal Suthar, Field Support Person, Jaipur, Rajasthan

I liked the State Field Workshop because I learnt a lot of new things. It gave me an opportunity to meet teams from other states, and we shared ideas, challenges, and solutions which will help me in the future. Overall, the Workshop was well- organised. Keeping in mind the upcoming Rollout, attending the Workshop gave me confidence to tackle challenges and a clearer perception of TPD, its goals and strategy to implement it.

Lalrindika, Field Support Person, Aizawl, Mizoram

I attended a four day field team workshop followed by a two day school visit at Hyderabad, Telangana. In this workshop we gained a better understanding about the process of two years teachers certification course, planning of cluster level training and science module offering for upcoming academic year. The purpose of the school visit was to understand the lab infrastructure and local ecosystem of the school and so on.

-Hari Mishra, Field Support Person, Dhamtari, Chhattisgarh

State updates for this month

Chhattisgarh

- Meeting with Mission Director, RMSA for planning and strategy (17.03.17)

Rajasthan

- Steering Committee Meeting at Jaipur, Rajasthan
(27.03.17)

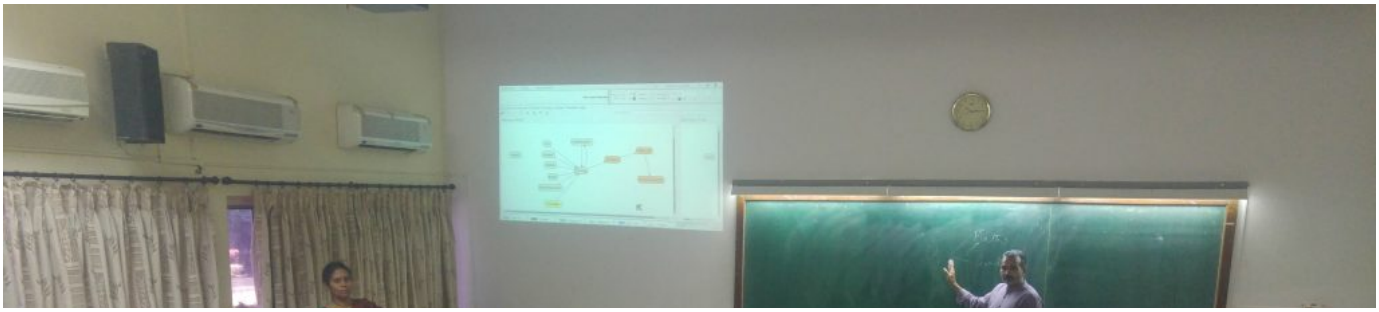
Mizoram

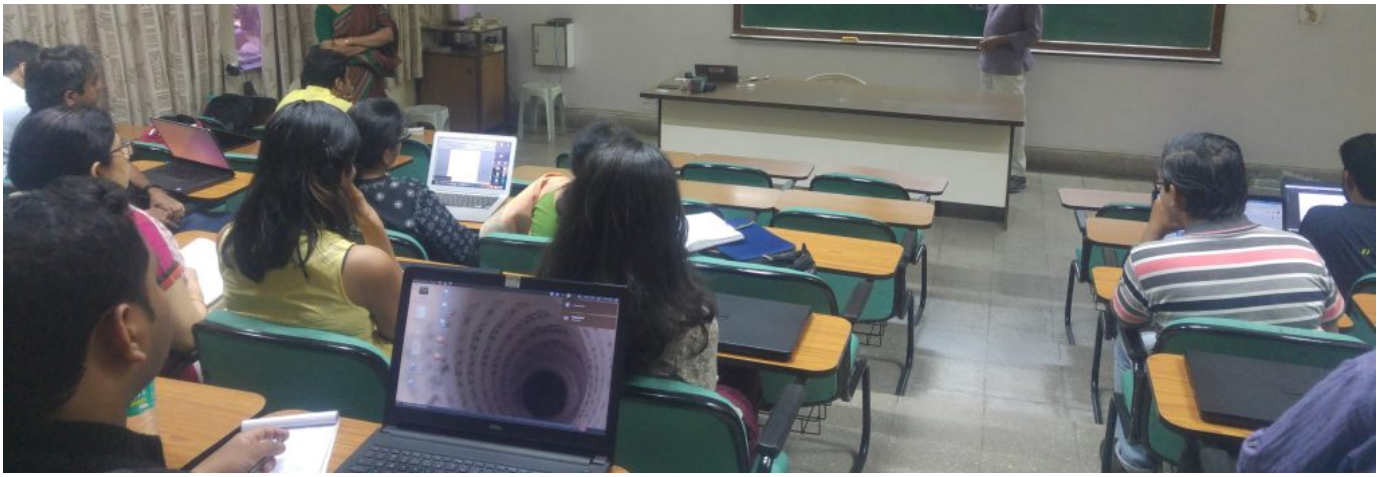
- Micro level data collection for Innovation Diffusion Process Documentation
- Consolidation of school-wise report on CLIx implementation

Telangana

- Training of 60 Teacher Educators in Hyderabad, Telangana
(30.03.18 - 05.04.17)

Blog of the month: "Integrating Content with the Digital Platform: Facilitating Interactive Learning"

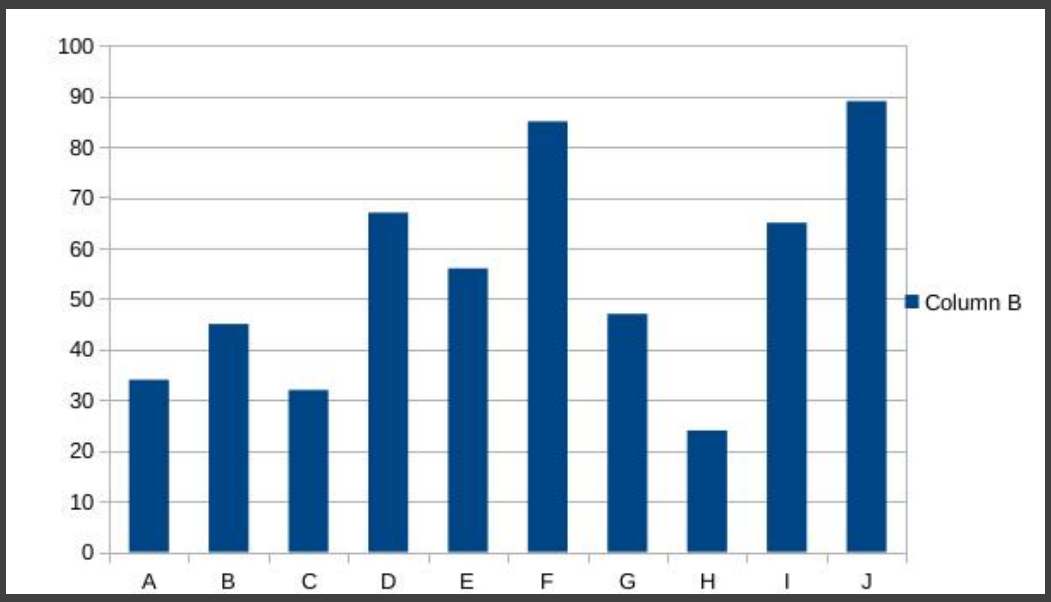




CLIx is developing a digital learning platform to present subject modules to students. The platform is being developed by the CLIX technology team at Gnowledge Lab, HBCSE, with assessment tools from MIT, USA. Read on.

Connecting Technology:

This section features the digital tools that CLIx has created and is using to reinvent pedagogy for students and teachers. This month we are featuring Geogebra, a tool used in our Invitation to CLIx (i2C) module, learners create and explore various constructions made possible by dynamic mathematics tools. They access different representations – algebraic, graphical, and tabular – and create visualizations and animations. These skills are useful for many topics in Science and Mathematics.



An image of a graph created by a student using Geogebra.
GeoGebra is dynamic mathematics software for all levels of education that brings together geometry, algebra, spreadsheets, graphing, statistics and calculus in one easy-to-use package.

Connecting Research

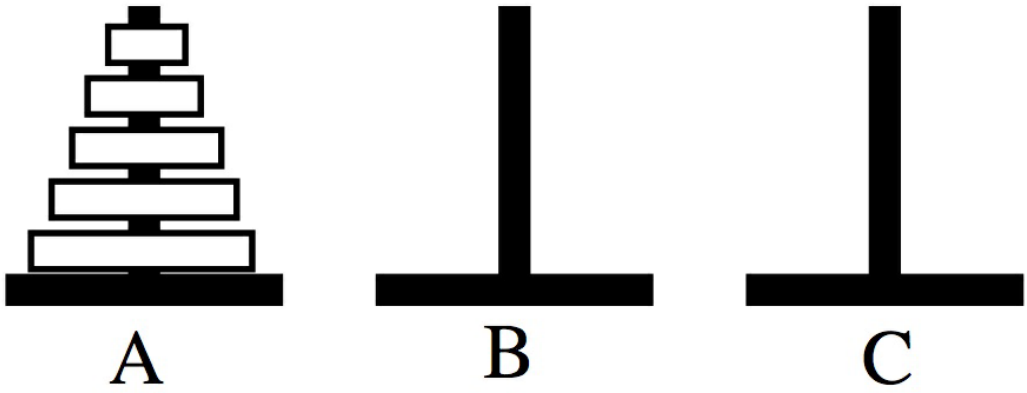
This section features recent studies in the field of education published by our CLIx faculty who work in tandem with the Centre for Education, Innovation & Action Research (CEI&AR). This month we read Amit Dhakulkar and Nagarjuna G's study on Epicyclical Astronomy: A case for GeoGebra.

Epicycles were historically used by the ancient Greeks to explain the retrograde motion of planets. This episode in history of science is used as a case to show how we can use computer simulations to visualize complex, abstract ideas and difficult to imagine constructions. We present here a method developed using the dynamic mathematics software GeoGebra, to teach the concept of epicycles. read on

Connecting Innovation

This section is for teachers, parents, mentors, and anybody who is looking for innovative ways of learning and teaching. We bring to you a variety of teaching/ learning tools, from different sources.

The Tower of Hanoi (also called the Tower of Brahma or Lucas' Tower, and sometimes pluralized) is a mathematical game or puzzle. It was invented by the French mathematician Édouard Lucas in 1883. There is a story about an Indian temple in Kashi Vishwanath which contains a large room with three time-worn posts in it, surrounded by 64 golden disks. Brahmin priests, acting out the command of an ancient prophecy, have been moving these disks, in accordance with the immutable rules of the Brahma, since that time. The puzzle is therefore also known as the Tower of Brahma puzzle. According to the legend, when the last move of the puzzle is completed, the world will end. It is not clear whether Lucas invented this legend or was inspired by it.



In the puzzle, we have a board with three rods. In one of the rods, we insert several discs arranged in order of magnitude with the largest at bottom. The task is to transfer all the discs from the first rod to one of the others in such a way that the final arrangement is the same as the original one. The rules are, only one discs can be moved at a time. No disc should be ever placed on the top of a disc smaller than itself. You can make use of one free rod while transferring.

Start with just two discs and count the minimum number of moves required to transfer the discs to one of the other rods using the third rod, then try it with three discs, 4 discs and so on. The aim is to find a rule which connects the number of moves with the number of discs.

Source: https://en.wikipedia.org/wiki/Tower_of_Hanoi
http://mathedu.hbcse.tifr.res.in/tower-of-hanoi/

Our recent posts

- Science Writing(11.02.17)

  When developing the science content, I had wondered whether students would understand what we were telling them in the modules. Was there a key to make sure each student learnt? read on
- Joy of Science – Science team participates in IUCAA workshop, Pune (31.01.17 – 04.02.17)

  TATA trust organised a 5-day workshop at the IUCAA science centre where we participated as Eklavya science team members. On the first two days, the IUCAA team demonstrated toys illustrating science concepts. read on

---

Opportunities

- Call for Field Action Research Fellows
- CLIx internships
- CLIx Faculty Fellowships 2016-2017

The Connected Learning Initiative (CLIx) is a partnership between the Tata Institute of Social Sciences (TISS), Massachusetts Institute of Technology (MIT) and Tata Trusts. It is a bold and innovative effort to improve the professional and academic prospects of high school students from underserved communities in India. CLIx incorporates thoughtful pedagogical design and leverages contemporary technology, including online capabilities, to provide quality educational content and experiences at scale in the areas of English, Science, Mathematics and Values. As a platform for innovation in education, CLIx also supports the professional development of in-service teachers, making substantial contributions to teacher education in Indian languages. The initiative aims to reach a total of approximately 1,100 schools and 147,000 students in Chhattisgarh, Mizoram, Rajasthan and Telangana during 2015-18, as well as conduct professional development for approximately 5,090 teachers.

CLI CONNECTED LEARNING INITIATIVE

Contact us :

+91 22 25525002/3/4 | clix.tiss.edu

Our mailing address is:

contact@clix.tiss.edu