

The CL4STEM project builds the capacity of secondary school teachers in science and mathematics to foster higher-order thinking with inclusion and equity in classrooms. It piloted the Connected Learning Initiative innovation (CLIX, <https://clix.tiss.edu>) developed and scaled in India. The project is a collaboration among Ibrahim Badamasi Babangida University (IBBU) Nigeria, Samtse College of Education (SCE) Bhutan, Open University of Tanzania (OUT) and the Tata Institute of Social Sciences (TISS) India.

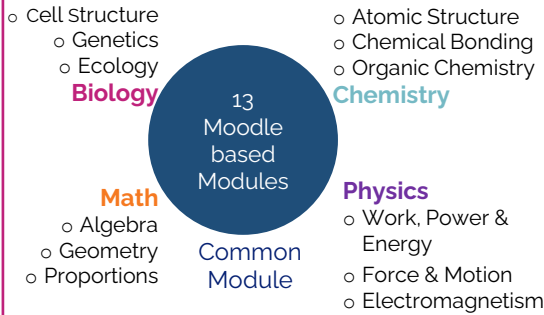
1. Principles

- Pedagogical Content Knowledge (PCK)
- Inclusive & equitable education
- Context specific & use of local resources
- Social learning

2. TEs capacity enhancement (20 TEs/country)

- PCK/TPACK based OERs
- Universal Design for Learning (UDL)
- Design thinking
- Managing CoPs

13 OER based modules designed by TEs were offered to teachers

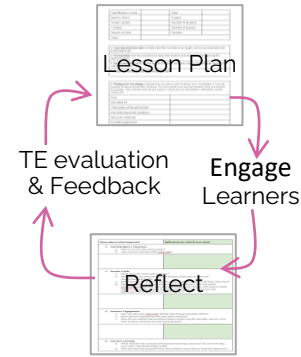


3. Intervention for teachers (77 teachers/country)

Mobile based Communities of Practice (CoPs)



Practice based implementation



4. Outputs

- TPD modules
- Evidence of adoption & diffusion

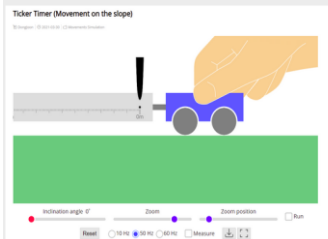
5. Outcomes

- Change in Knowledge, Attitude & Practice (Competency) for teachers and teacher educators
- Social learning in CoPs

6. Research

- Impact on teacher's knowledge, attitude and practices
- Innovation diffusion and teacher concerns/ usage
- Scaling readiness

Material/ Apparatus: Ticker timer animation. Click on this link to open the animation. (<https://javalab.org/en/ticker>)

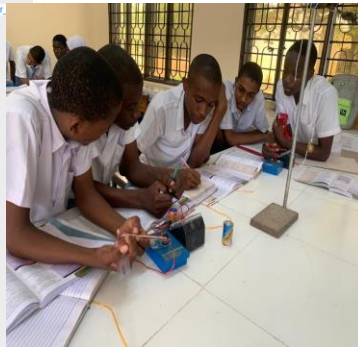


Method:

Step 1: Choose the frequency of ticker timer (say 10 Hz).

Step 2: To make the ticker timer move, choose an angle of inclination.

Step 3: Click run to start the animation.



This work is supported by the Global Partnership for Education Knowledge and Innovation Exchange (GPE-KIX), a joint endeavor with the International Development Research Centre (IDRC), Canada. The views expressed herein do not necessarily represent those of IDRC or its Board of Governors.

Centre of Excellence in Teacher Education

