CLIx for Students

CONNECTED LEARNING INITIATIVE

An initiative seeded by TATA TRUSTS

TISS

Massachusetts Institute of Technology

*Winner of the 2017 UNESCO - King Hamad Bin Isa Al-Khalifa prize for **Use of ICTs in Education***

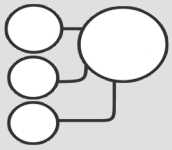
CLIx modules are suitable for use in middle and secondary school classes (ie VIII, IX and X) of all State and Central syllabi/programmes. All CLIx resources are Open Education Resources, released under Creative Commons Licenses. Each module is designed with digital activities, peer collaboration, hands on activity and assessment. Handbook/workbook/questions for reflection and teacher handbooks are provided. Each module includes wrap around notes for the teacher.

Invitation to CLIx: An Interactive Approach to Digital Learning

Introduction and Indic typing through connected learning experiences of sharing, commenting and discussion.
(2 weeks: 8 periods)

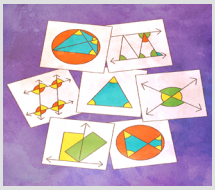
Analyzing with Spreadsheets to create and explore various constructions made possible by dynamic mathematics tools
(2 weeks: 8 periods)

Drawing with Inkscape for skills of designing and drawing on a digital canvas, through learning to operate a vector drawing program.
(2 weeks: 8 periods)

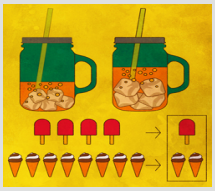


Organising with Mindmaps to understand and visualise the information and to understand the relationship between ideas.
(2 weeks: 8 periods)

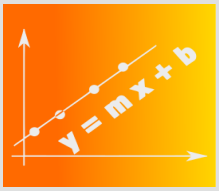
Mathematics



Geometric Reasoning. Resources including activities and games to develop geometric reasoning and analysis. Students work with geometric shapes, their properties and use informal deduction to gradually build their reasoning and understanding of the need for formal deductive proofs. Police Quad involving aliens and police, with 4 levels of difficulty, is an exciting digital game based approach to geometric reasoning. (3 weeks: 12 periods in 8th grade: 12 periods in 9th grade)



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.
(3 weeks: 12 periods)



Linear Equations focuses on conceptual understanding of linear equations. It uses activities involving collecting data, and modelling situations using this data. The focus is on developing an understanding of the physical meaning of slope of a line in different situations. (3 weeks: 12 periods)

Communicative English

English Beginner. For beginner students with limited English vocabulary and grammar skills. Initial focus is to build listening and vocabulary skills, and then develop speaking skills. Themes: Colours, the world around us, actions, the calendar, the weather, feelings, leisure.
(11 weeks: 22 periods)

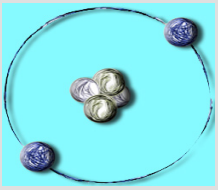
English Elementary. For elementary students who are ready to use English in real-life situations. Audio stories illustrate how each language function could be carried out during a conversation: social greetings, announcements, giving directions, expressing points of view, disagreements and making predictions.
(11 weeks: 22 periods)

Science

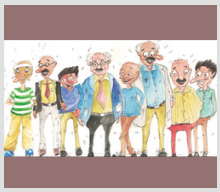
Motion uses investigative and discovery based approach to describe and analyze motion. The video player analysis tool is used to analyse high speed motion of a ball on an inclined plane.
(5 weeks: 20 periods)

Sound, a phenomenon integrated into our lives, investigated scienticaly through hands-on experience and controlled experimentation.
(4 weeks: 16 periods)

Astronomy. Observing common place astronomical phenomena such as apparent motion of the sun and the stars, recognising patterns over time and explaining them on the basis of the heliocentric model.
(3 weeks: 12 periods)



Atomic Structure blends experiments and digital activities to enable learners to grasp and contextualise modern chemistry in everyday life. This module focuses on the atom and its structure, critical to the understanding of chemical representation, equations and reactions.
(4 weeks: 16 periods)



Health and Disease is studied in its social and scientific contexts through observations, collecting data through surveys, making hypotheses based on their observations through independent short project works.
(4 weeks: 16 periods)

Ecosystem illustrates the connectedness between living organisms and the non-living elements of their ecosystem using a blended design of hands-on experimentation and digital activities.
(2.5 weeks: 10 periods)

Values and life skills

A story based approach to introducing students to key personal, social and professional values

Government Partners Government of Chhattisgarh, Government of Mizoram, Government of Rajasthan and Government of Telangana

Development & Implementation partners Centre for Education Research & Practice, Jaipur; Department of Education, Mizoram University, Aizawl; Eklavya, Bhopal; Homi Bhabha Centre for Science Educaton, TIFR, Mumbai; National Institute of Advanced Studies, Bengaluru; State Council of Educational Research and Training, Hyderabad, Telangana; Tata Class Edge, Mumbai; Inter - University Centre for Astronomy and Astrophysics, Pune.

Centre for Education, Innovation and Action Research,
Tata Institute of Social Sciences, V.N. Purav Marg,
Deonar, Mumbai - 400088. India.
Ph: +91 022 25525002/3/4,
clix.tiss.edu

© TISS, 2018
TISS/CEI&A/R/CLIx/BR(S)/Eng/28Mar'18/01