CLIx
Connected Learning Initiative

A **bold** and **innovative** partnership

between

Tata Groups (Tata Trust, Tata Institute of Social Sciences Center for Education Innovation and Action Research) and Massachusetts Institute of Technology

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Goal of Collaboration

- To improve the professional & academic prospects of high school students in underserved communities in India
  - Scope (3 years): 150,000 students, 1,000 schools, 2700 teachers

By incorporating thoughtful pedagogical design & contemporary technology

That will help provide sustainable quality learning experiences at scale in English, Mathematics, and Science (Physics, Chemistry, Biology)

Key Outcomes

- To raise social capital and expand educational opportunities for India's youth substantially and positively
- To provide continuous professional development for teachers via content knowledge pedagogy, teaching skills, and digital literacy

Arrive at a model that can have global relevance

Motivation

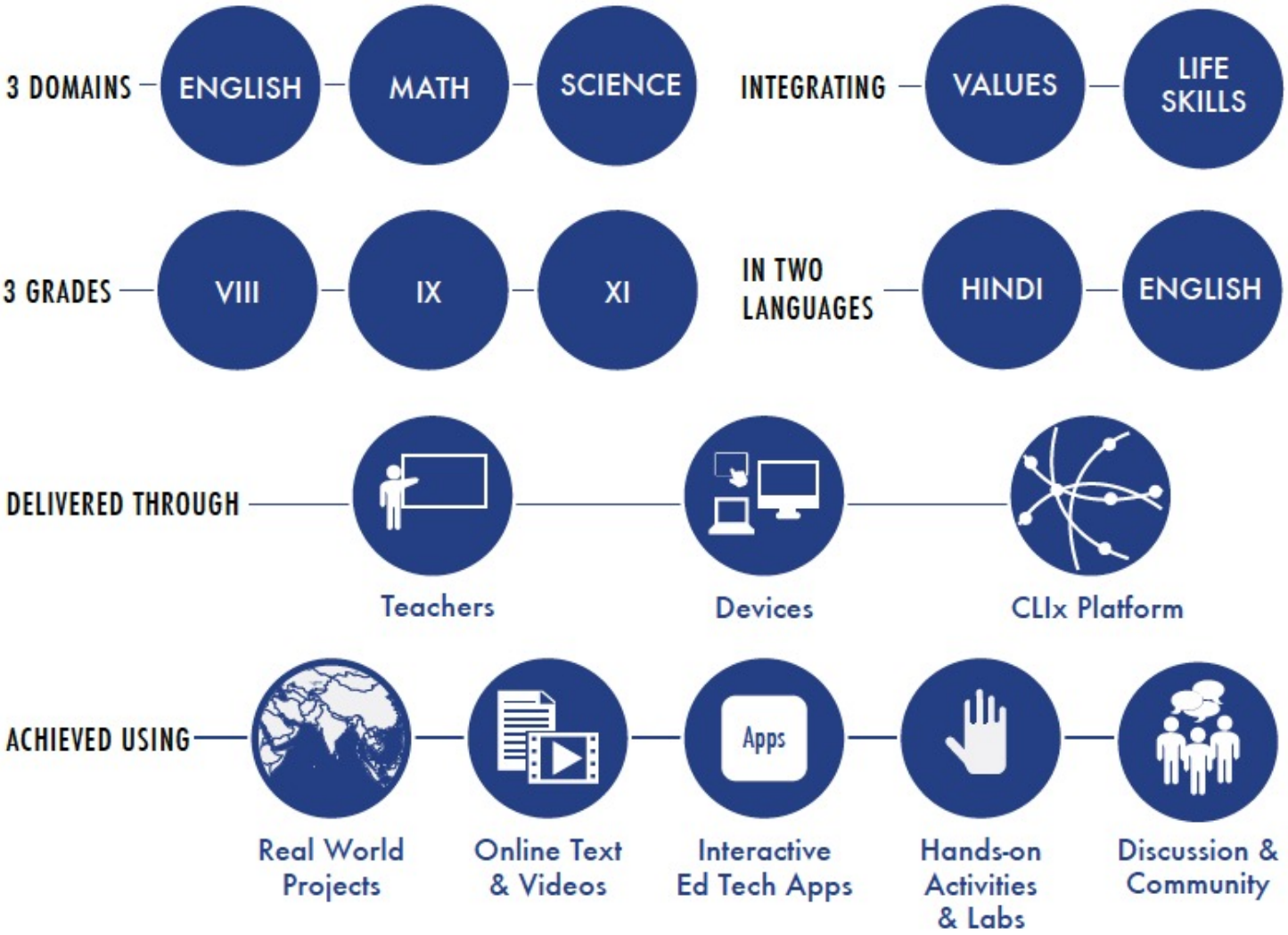
A number of studies of elementary schooling have established poor learning levels across states and school systems

- by the end of grade VIII, about 20% have developed critical abilities that enhance their life opportunities and employability
- a severe undersupply and shortage of Science, Mathematics, and English teachers
  - Teacher Education continues to remain conservative and resistant to modernization

- children constitute over one-third of India's population of approx. 1.2 billion people, which means India is home to 400 million children > every sixth child in the world lives in India
- Timing and climate are right to trigger changes

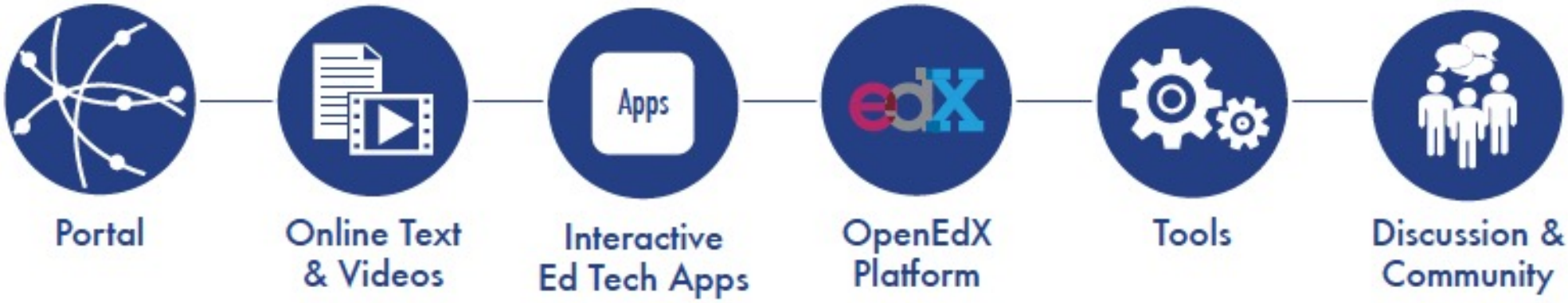
The National Assessment Survey by NCERT (National Council of Educational Research and Training)

CLIx LEARNING EXPERIENCES



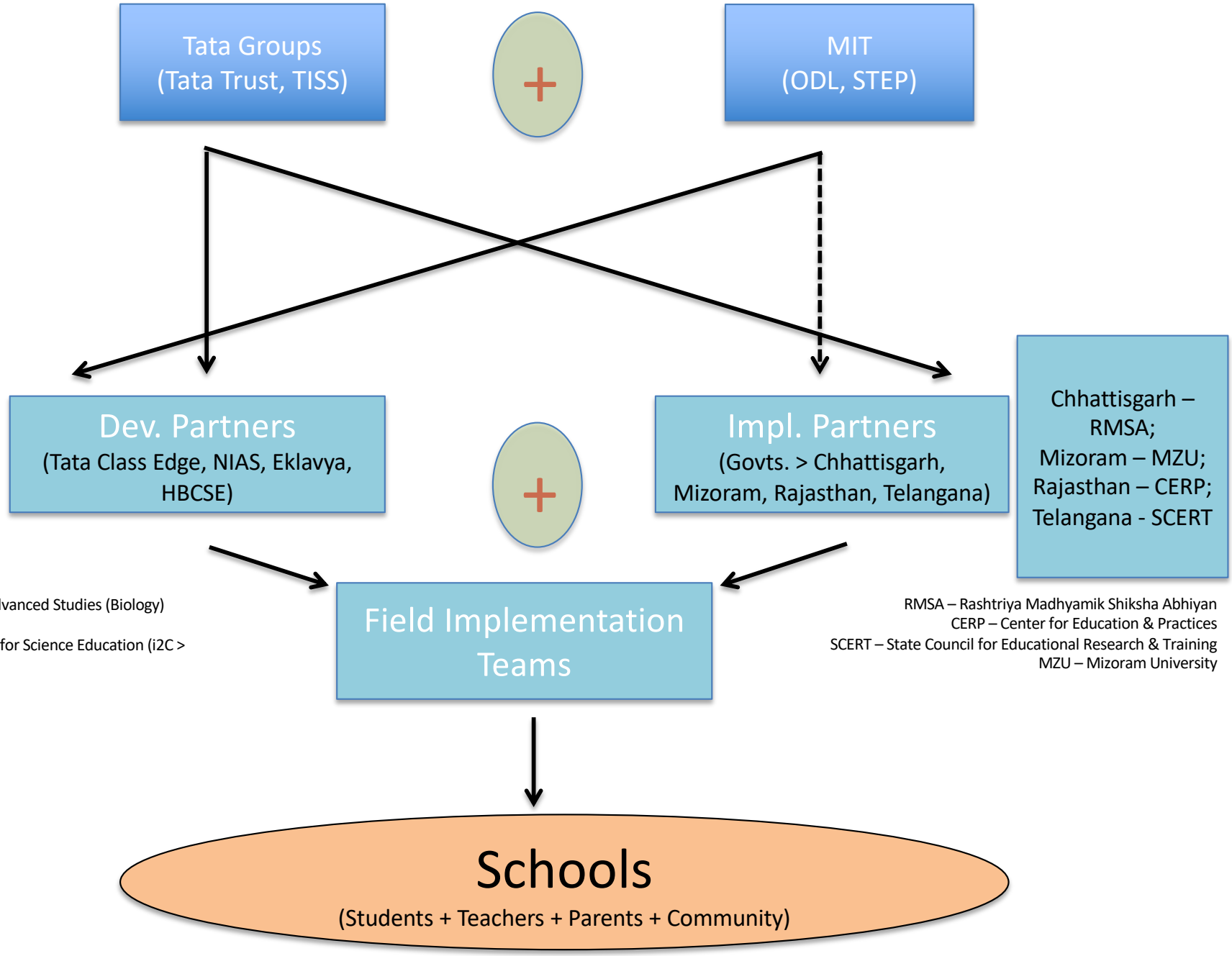
Focus > conceptual understanding and application of foundational concepts through active learning > emphasis will be on “Learning by Doing”

CLIx PLATFORM



Multiple elements for delivering learning experiences and professional development at scale and for providing support for the learning communities

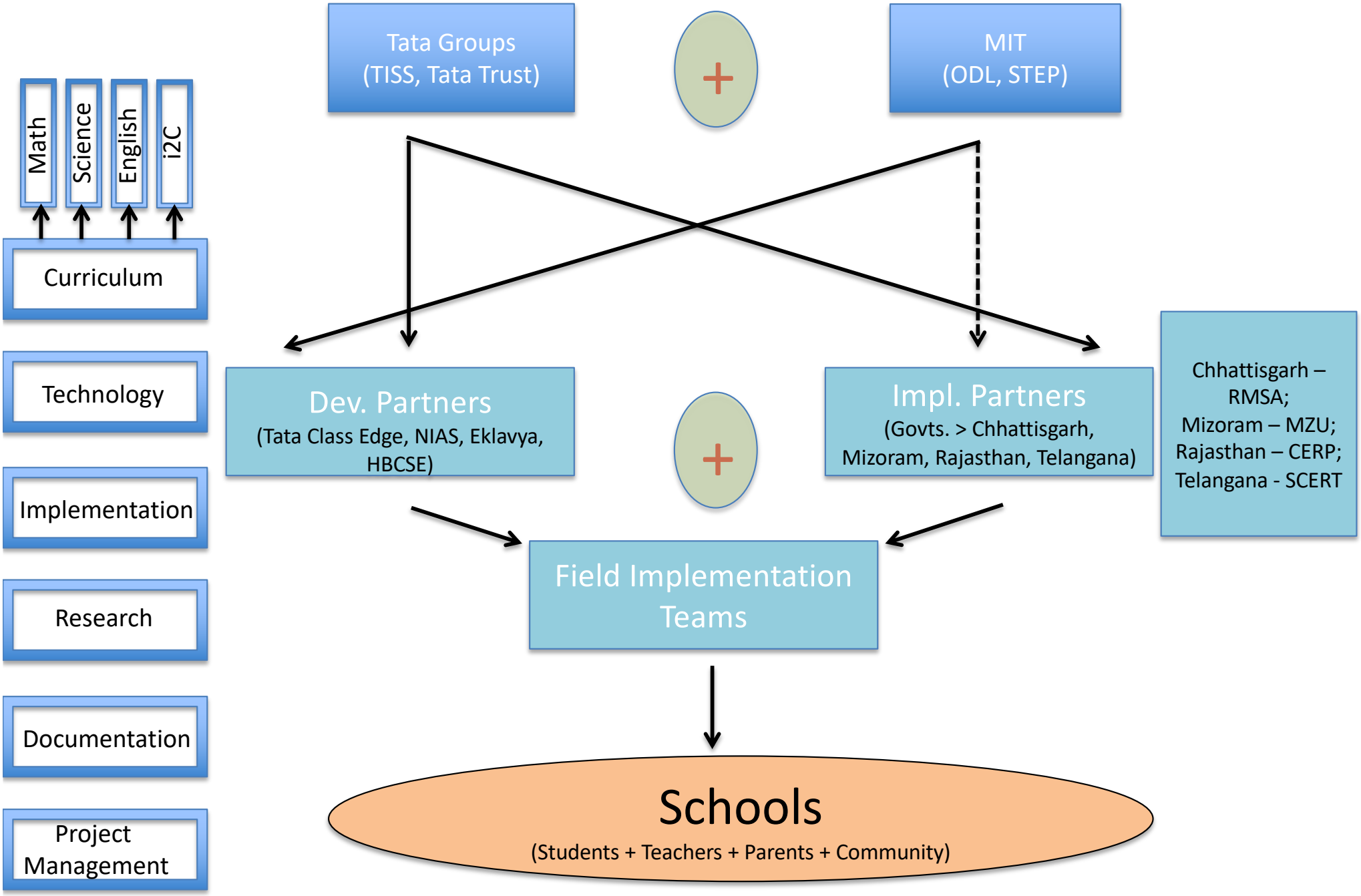
CLIx Ecosystem



NIAS – National Institute of Advanced Studies (Biology)
Eklavya – Chemistry, Physics
HBCSE – Homi Bhabha Centre for Science Education (i2C > Knowledge Lab)
Tata Class Edge - English

RMSA – Rashtriya Madhyamik Shiksha Abhiyan
CERP – Center for Education & Practices
SCERT – State Council for Educational Research & Training
MZU – Mizoram University

CLIx Ecosystem (cont.)



Group: Curriculum

- Collaborate with India teams to guide, design, and develop
  - curriculum
    - » existing classroom and teaching conditions, scope, content selection criteria and pedagogy
  - teacher professional development activities and materials
- Host design camps
  - professional development of India collaborators
- Offer online education technology courses (e.g. 11.132x *Design and Development of Education Technology* & 11.133x *Implementation and Evaluation of Education Technology*)

Group: Technology

Collaborate with India partners to design and develop tools to author, manage, and deliver learning experiences through a CLIx platform

- Infrastructure (computing devices, network, power) upon which learners will access the CLIx learning experience
- Research (data collection, access controls)

Group: Research

Evaluate the impact of the initiative on student learning and performance outcomes

- guide subsequent phases
- propose recommendations for future implementation

Group: Implementation

Implement learning experiences in partnership with state governments and other partners to reach 150,000 students, 1,000 schools, 2700 teachers (3 years)

- help create a local ecosystem (collaborating with community + experts)
  - school evaluation and studies
  - working with field support teams
- integrate technology and platform to build connectivity of communities
- coordinate with other groups

First Half, 2015

- Closure with partners (development and implementation)
- Launch of key activities in the following dimensions: Project Management, Curriculum, Technology, Implementation, Research, Documentation

Main Events, 2015

- Feb 18-19th (Bangalore, India) – **Introduction & Orientation to CLIx workshop**
  - Reviewing core CLIx objectives
  - Creating working groups
- Apr 11th (Mumbai, India) – **Implementation workshop**
  - Discussing implementation framework and strategies
- Apr 25-29th (Mumbai, India) – **Launch workshop**
  - Building shared CLIx understanding
  - Discussing scope of program
- Jul 20th (Mumbai, India) – **Review workshop**
  - Reviewing project status

Main Events, 2015 (cont.)

- Aug 3-14th (Cambridge, US) – **Design Camp workshop**

[Preceded by course 11.132x - *Design and Development of Education Technology*]

<u>Goals</u>

- To make the participants familiar with the EdTech design process in a hands-on way
- To start designing tools and modules that could be integrated into the final curriculum
- To facilitate team building across the larger team as well as within each domain group

Challenges

- **Connectivity** – if connectivity fluctuates, the scope of the offering will be impacted. This can further affect collaboration efforts between students across schools/states, amongst other key variables.
- **Availability of teachers to facilitate the course** – currently, not sure what to expect from the states in terms of teacher availability and time commitments. The teacher is a key motivator and fulcrum point. For example, his/her immediate feedback can impact how things move.
- **Structured within school timetable** – if courses are not coordinated within this, it can be a serious deterrent to course participation and completion. Assuming that students stay beyond school hours in most schools, there will be logistical complications in terms of human resources to man the labs, as an instance.
- **Assessments and feedback mechanism** - effective mechanisms to provide meaningful and if possible immediate feedback to students on tasks that they do is essential. No feedback can also be a deterrent to participation.

Thank you!