

# Impact of CALL on High School ESL learners: Reflections from India

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Poster No. #28

## Introduction

This paper presents preliminary findings from a small research study designed to assess the impact of Computer Assisted Language Learning (CALL) on second language learners of English in Indian high schools. The Connected Learning Initiative (CLIX) is a large scale intervention designed to improve learning in Maths, Science and English using education technology in the most underserved communities. CLIX modules were developed in 2-3 phases using an iterative design process, resulting in the final creation of two levels of communicative English modules, English Beginner and English Elementary. The focus of these modules is on listening and speaking, two skills which are not adequately addressed in the regular school curriculum.

## Objectives

A primary objective of this research is to study the changes in English language skills and language learning processes when teachers use CLIX modules in their own special contexts and in their own special styles. Certain sub-skills for listening and speaking were identified and assessed primarily through the pre- and post-tests. The learning outcomes that we are trying to measure after students complete two units, English Beginner Unit 1 and English Elementary Unit 1 are:

In listening skills, students will be able to:

- Identify the topic of a short conversation related to routine things/familiar matters
- Recall specific details in short spoken conversations
- Follow instructions when the speech is slow and clear
- Infer meanings of words from their contexts of use
- Infer links and connections between events

In speaking skills, students will be able to:

- Respond to and use social greetings appropriately
- Respond confidently in simple sentences on questions related to self, home, family, routines, school, surrounding, likes and dislikes
- Express personal opinions on everyday topics
- Describe a picture in short and simple sentences

## Hypothesis:

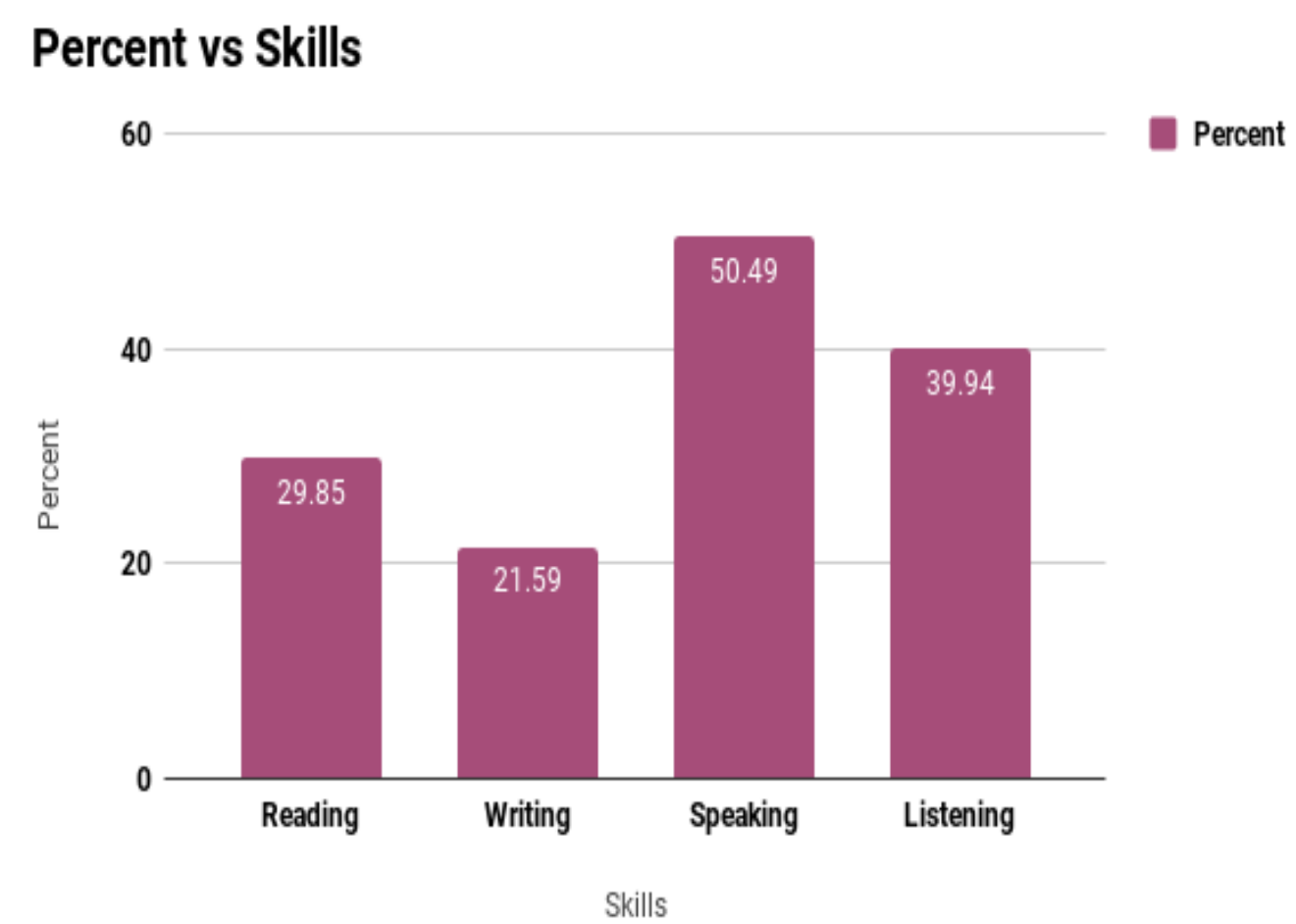
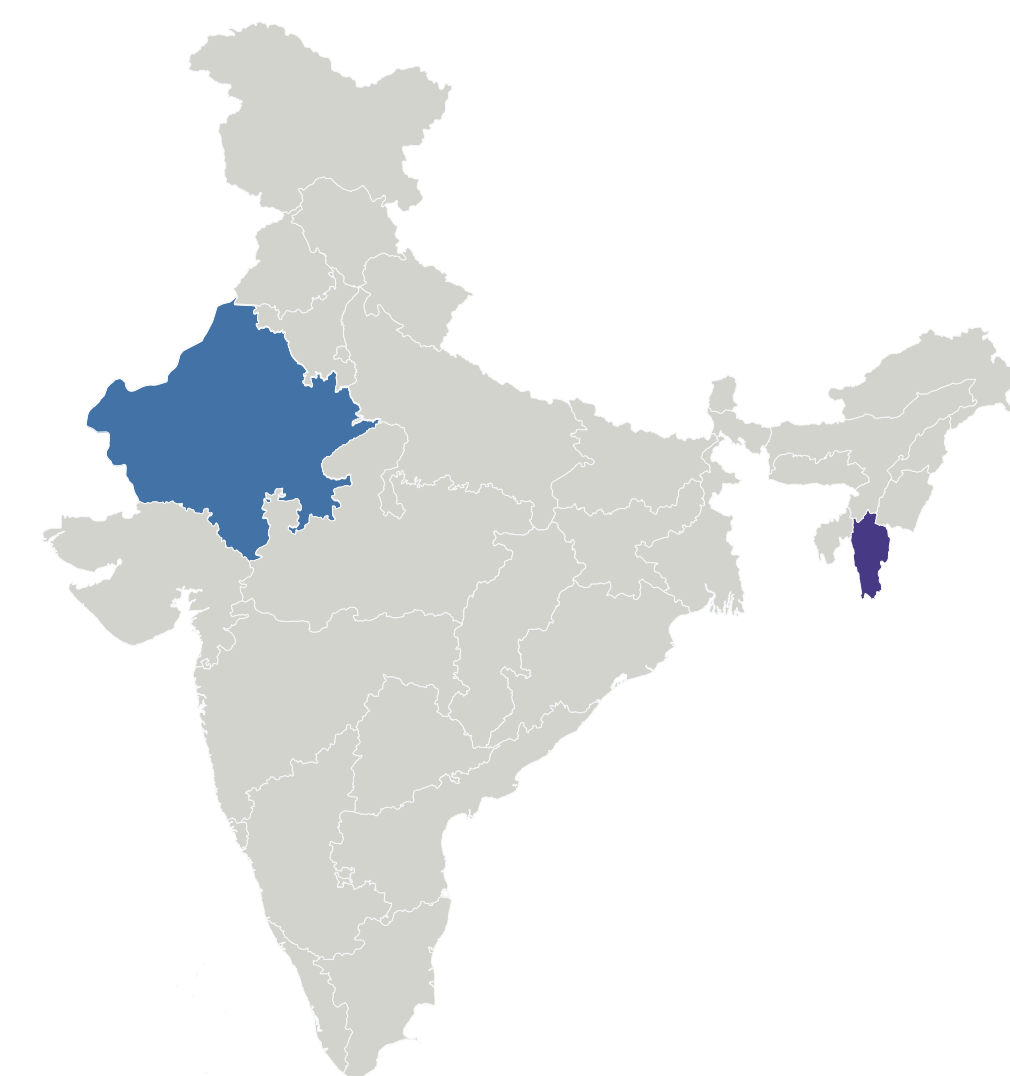
This study works with the positive hypothesis that the listening and speaking skills of secondary school English as Second Language (ESL) learners will improve when they work in pairs using CALL material/program that gives them authentic opportunities to listen intensively to, and speak in, English.

## Research design

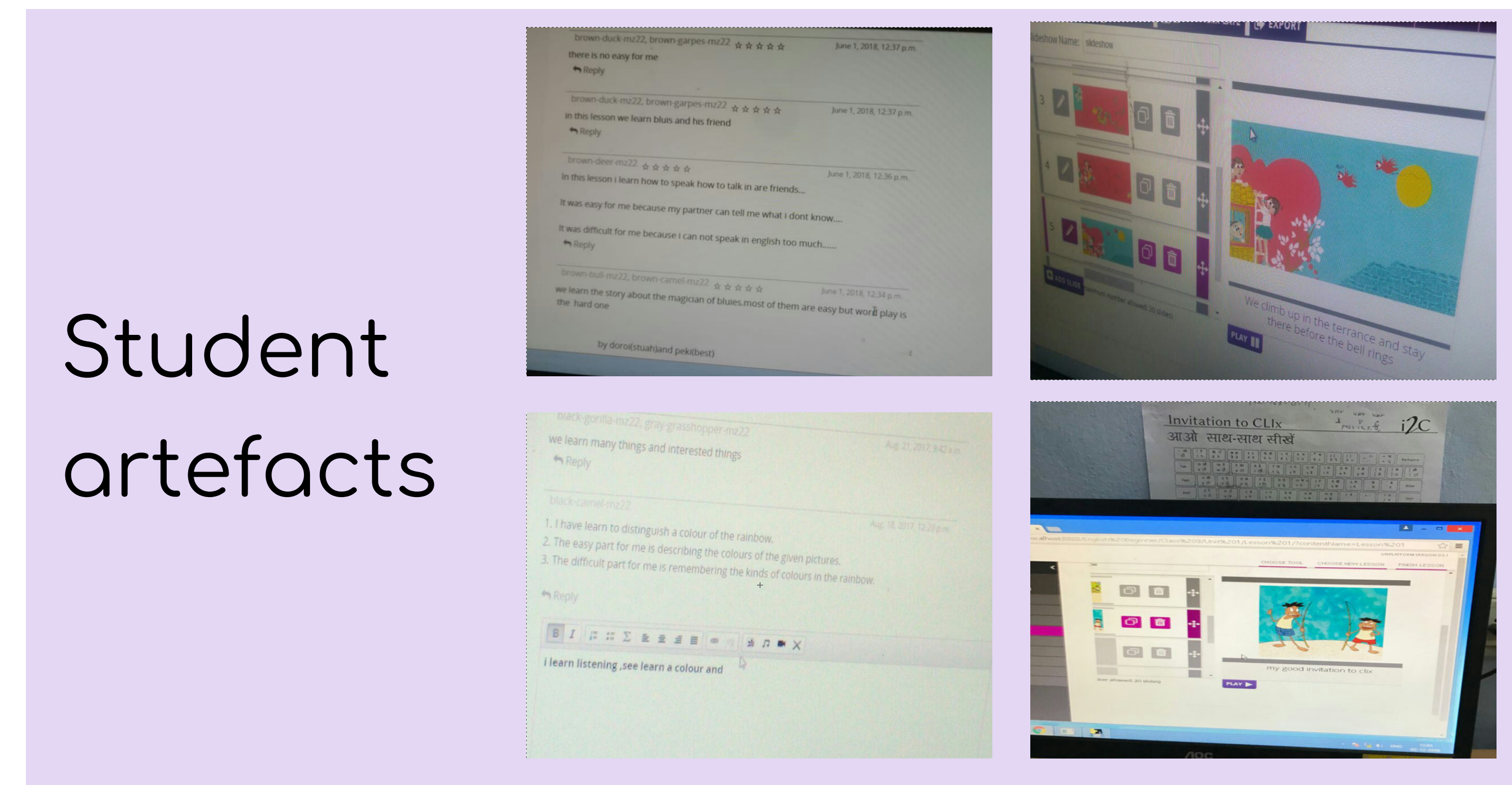
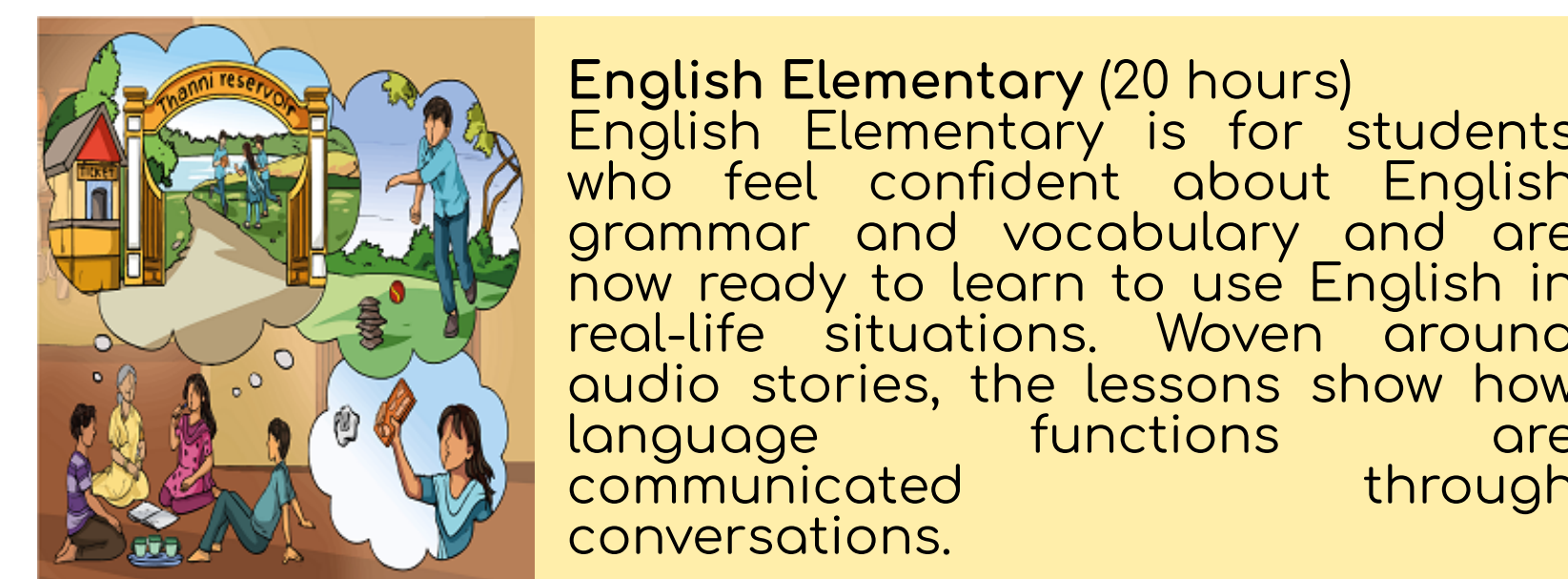
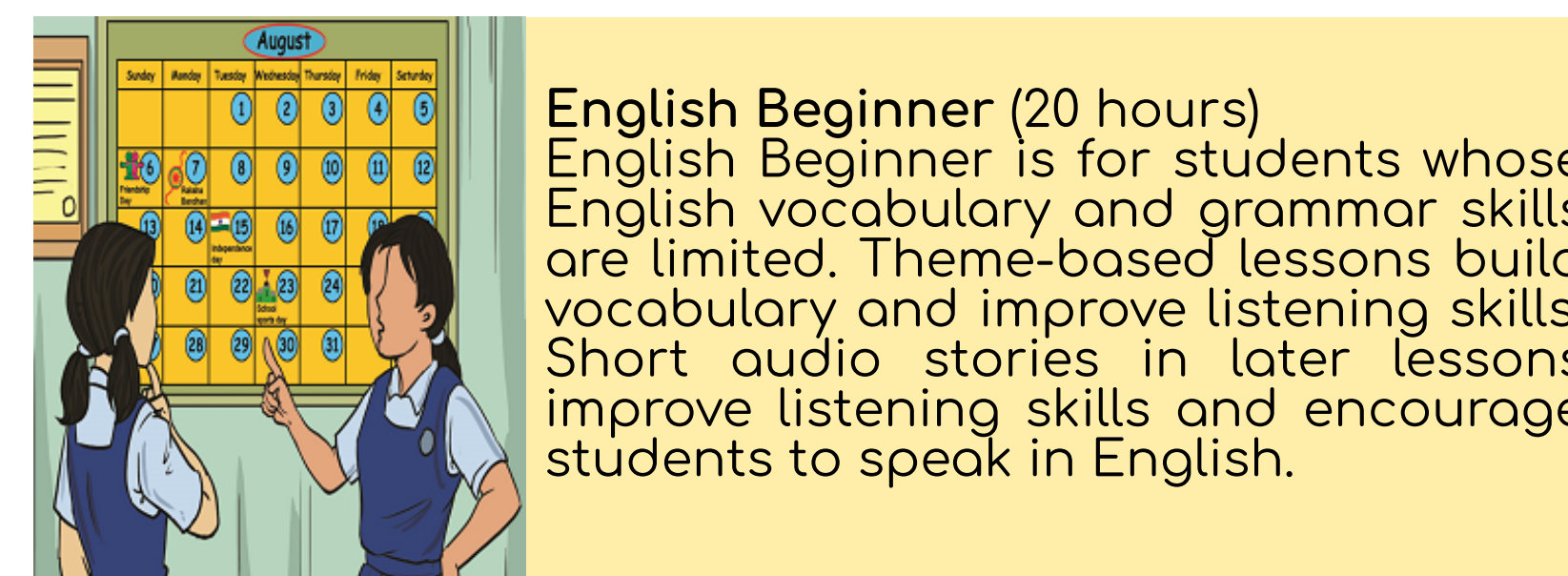
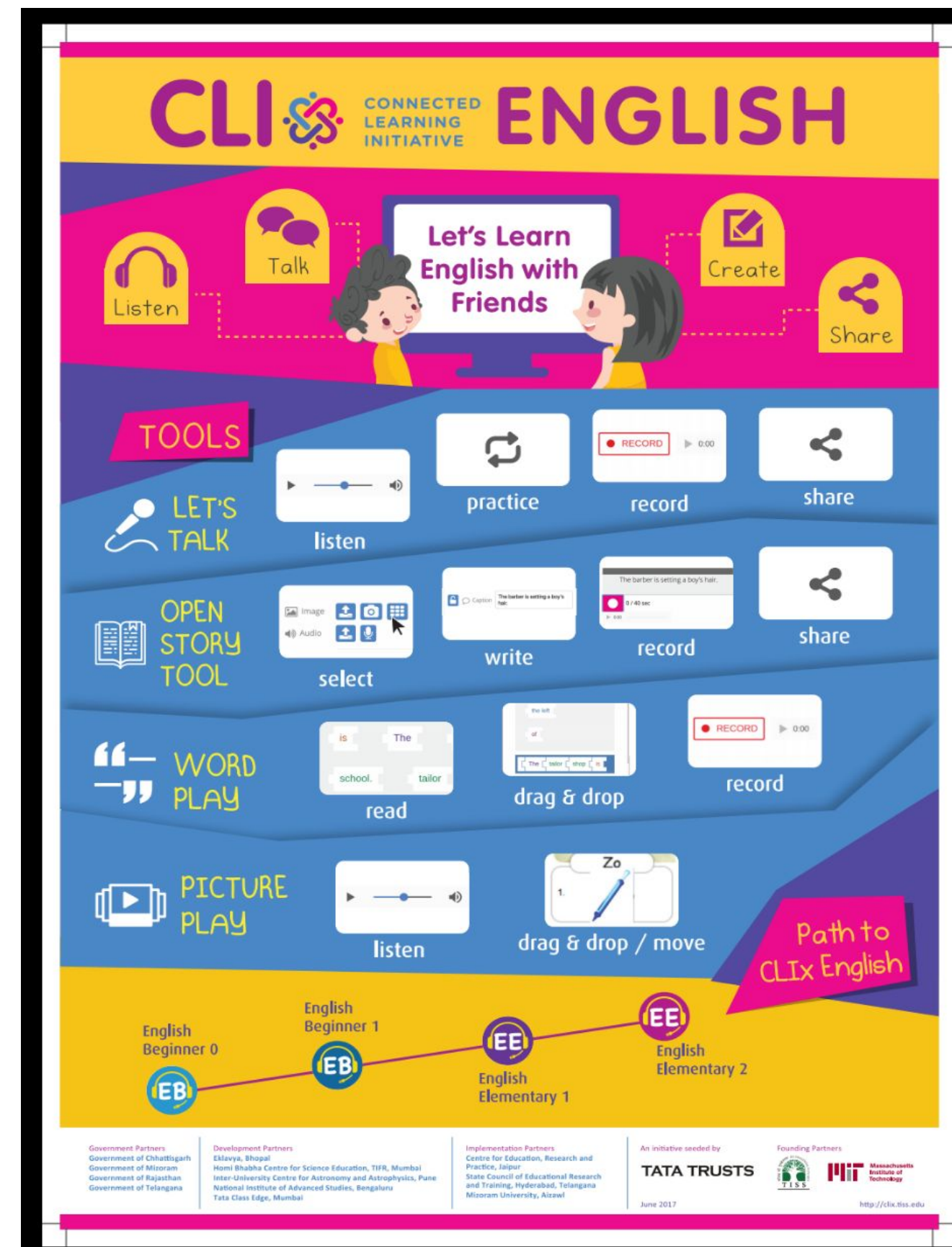
The study uses a mixed methods design combining quantitative methods with qualitative inputs. A pre and post test was administered to determine students' listening and speaking skills. A structured freewrite allowed researchers to observe and collect data of activities in the CLIX lab. These observations were coded and analysed to understand trends in classroom processes and student learning, to understand possible correlation to language learning outcomes.

## Sample:

The North-Eastern state of Mizoram and the North-Western state of Rajasthan were selected for this study. The participants were standard IX students of government schools where the CLIX intervention is being implemented. The total number of students who participated in the test from the two states was 70. According to analysis of secondary data (NAS) the two participating states are at opposite ends of the literacy spectrum with Rajasthan results being below the national average for reading comprehension and Mizoram performing at par with the national average. Data was collected from 3 schools in Mizoram and 2 schools in Rajasthan in the period between April 2017 and March 2018.

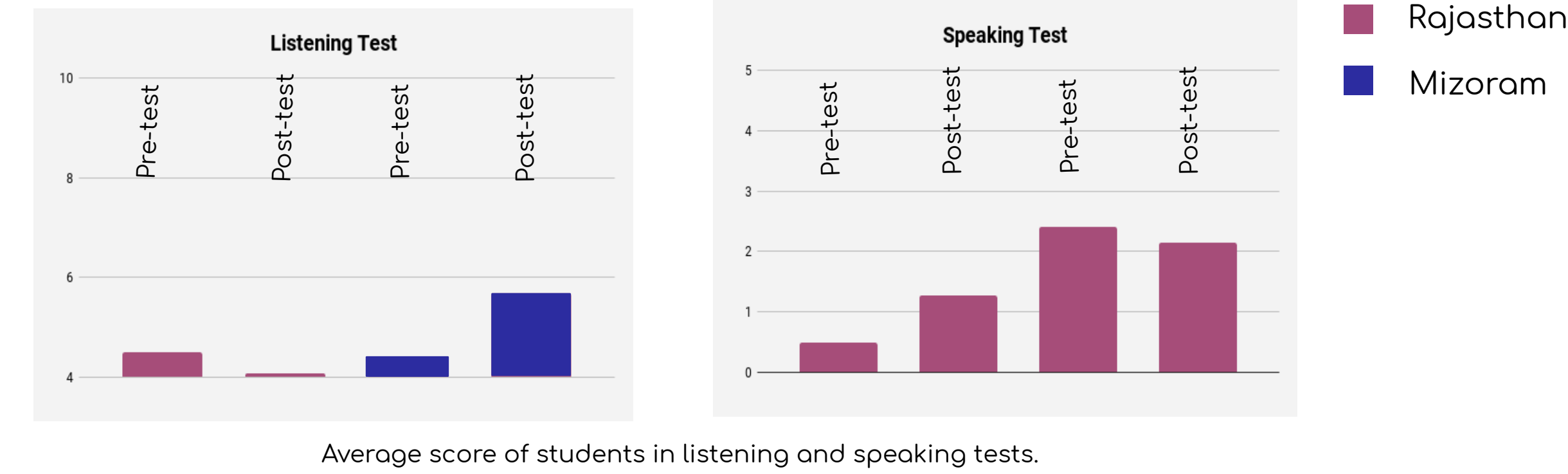


Peer-learning and collaboration in action.



Teachers create a safe learning space.

## Findings



The pre and post-tests of 70 students across the two states revealed marginal increment in student performance in listening and speaking skills.

## Listening skills:

In Rajasthan, the difference between the scores of the pre and post tests is not statistically significant ( $p = 0.23$  at 95%).

However, in Mizoram the difference is statistically significant ( $p < 0.0001$  at 95%). The average score shows an increase of 1.27 in the post-test.

## Speaking skills:

In Rajasthan, the difference in scores is considered to be statistically significant ( $p = 0.005$  at 95%). The average score in the post-test shows an improvement of 0.78 from the pre-test.

Whereas, in Mizoram the difference in scores is not statistically significant ( $p = 0.4836$  at 95%).

There were noticeable changes in the dynamics of classroom interaction, as students worked collaboratively. Given the sporadic and limited exposure to the modules by the students due to field constraints, which involved holidays, school exams and unfavourable weather conditions, among others, it is difficult to determine conclusively the effect of the modules on learning outcomes in the current cycle. It is noteworthy, however, that despite the inconsistent roll out, there has been a registered change in listening and speaking skills.

## Discussions

The difference in scores suggests that engaging with the CLIX English modules on a CALL platform can improve listening and speaking skills. Our inference is based on the fact that the CLIX modules were the only intervention in the school at the time of this study.

## Limitations

This study is work in progress, to be ratified with further study for verifiability. The schools have had a limited exposure to the modules, approximately 4 to 5 hours over a period of 5 months. Due to the busy schedule of schools, pre-test for speaking could not be conducted in one of the schools in Mizoram. Technical issues, both hardware and software, interrupted sustained rollouts in these schools.

## The way forward

A more sustained implementation of the modules is currently underway and regular field observations can further establish the findings more definitely.

## Acknowledgements

We would like to acknowledge the contributions of Reema Mani for being an integral part of the research design and in initiating the study, and Mayuri Kulkarni for her assistance with data collection. We are grateful to our English advisor, Dr. Malathy Krishnan, for her invaluable insights and critical comments that have helped shape the study. Karuna D'Souza, Manoj Bhandare and the CLIX media team helped in the illustrations and story ideations for the CLIX English module. The Mizoram and Rajasthan field teams have supported us in enabling the school visits and in implementation of the modules.