



[www.kite.kerala.gov.in](http://www.kite.kerala.gov.in)



E<sup>3</sup> ENGLISH eLanguage Lab

## E<sup>3</sup> English Language Lab (ELL)

*A FOSS based, Easy to Adopt, Free to Use & Deploy Anywhere Digital Multimedia Language Lab Software*

**Category 5** : Replication of Top Technological Solutions and Scaling up

**[www.ecube.kite.kerala.gov.in](http://www.ecube.kite.kerala.gov.in)**

**E<sup>3</sup> English Language Lab digital content on FOSS based platform ensures equitable, inclusive and quality education for 3 million students from Class 1 to 7 in over 11,000 schools in Kerala**

## **Components of E<sup>3</sup> English**

### **E-Library**

A repository of children's literature books in the Samagra web portal for promoting the reading, writing and communication skills of students

### **E-Broadcast**

Weekly broadcast of learner centered, activity based and interactive English programmes screened on KITE -VICTERS Channel

### **E-Language Lab**

Digital platform for students to access computer based interactive multimedia software content

## Objectives

- To provide an enjoyable digital platform to enhance and enrich the English proficiency of students from classes I to VIII.
- To provide students with opportunities to enhance their listening, speaking, reading, writing, pronunciation, language elements and vocabulary through storytelling based pedagogy.
- To provide each learner to work on ELL at their on pace individuality or in a group with the support of teachers.
- To facilitate the learning and development of students through assessment, feedback and mentoring continuously.

## Need and Genesis

Department of General Education has applications for Science, Maths, Social Science etc.

But, no existing FOSS based Language Lab software

## Constraints of Proprietary Language Lab Software

1. Against Policy.
2. High Cost (Rs.320 Cr-1000 Cr)
3. Restricted access.
4. Privacy issues
5. Not in tune with Curriculum and LOs

## Prior attempts

Developed Online Language Lab software and piloted in 14 DIETs in 2018-19.

- Functions only in stable internet.
- Server space required.
- Mguru Software - only online mode

E<sup>3</sup> English Language Lab was launched in 11.03.2022.



THE HINDU

HOME NEWS OPINION BUSINESS SPORT ENTERTAINMENT CROSSWORD SCIENCE

STATES ANDHRA PRADESH KARNATAKA KERALA TAMIL NADU TELANGANA OTHER STATES

NEWS STATES KERALA

KERALA

### E3 English to improve students' language skills

STAFF REPORTER

THIRUVANANTHAPURAM, FEBRUARY 18, 2020 23:23 IST  
UPDATED: FEBRUARY 19, 2020 08:59 IST

SHARE ARTICLE

f t g w e p PRINT A | A | A



**Enjoy, Enhance, Enrich English**  
For students from Classes 1 to 8

**Launch**  
This academic year

**Three components**

- Samagra e-library
- e-language lab
- e-broadcast

It aims at making use of facilities of Hi-Tech School and Hi-Tech Lab projects

The government has issued orders giving its nod for E3 (E-Cube) English, a project to improve English skills of students from Classes 1 to 8.

E3 (Enjoy, Enhance, and Enrich) English will not only help students' command

## Highlights of ELL

- Program developed through participatory process.
- No need for separate hardware or centralized server systems and internet or exclusive networking.
- No personalized data sharing, thus ensuring privacy.
- User friendly, easily trainable, replicable & can be adopted free of cost in other States too.
- The typical activities in the Moodle platform are adopted for the Language lab (Recording, Play Videos etc.).
- Uses Moodle platform under GNU GPL.



## Salient features of ELL



- FOSS based, free to use, easy to adopt and deploy anywhere software.
- The stories and activities in the software are linked to the curriculum and teaching learning materials in terms of themes and learning outcomes.
- ELL contains storytelling based, game like and competency based activities in 4 levels.
- The software contains digital multimedia content for promoting listening, speaking, reading, writing, vocabulary and language elements related activities for students at different levels.
- The ELL course content and activities enable students to put into practice the skills and knowledge they acquired in the classroom.
- Options for teachers for assessment, feedback and to track the progress of the students.
- Software can be installed in computers deployed in schools and no extra hardware cost.
- ELL works without internet and it can be used in all schools.
- No personalised data sharing and ensures privacy and security.

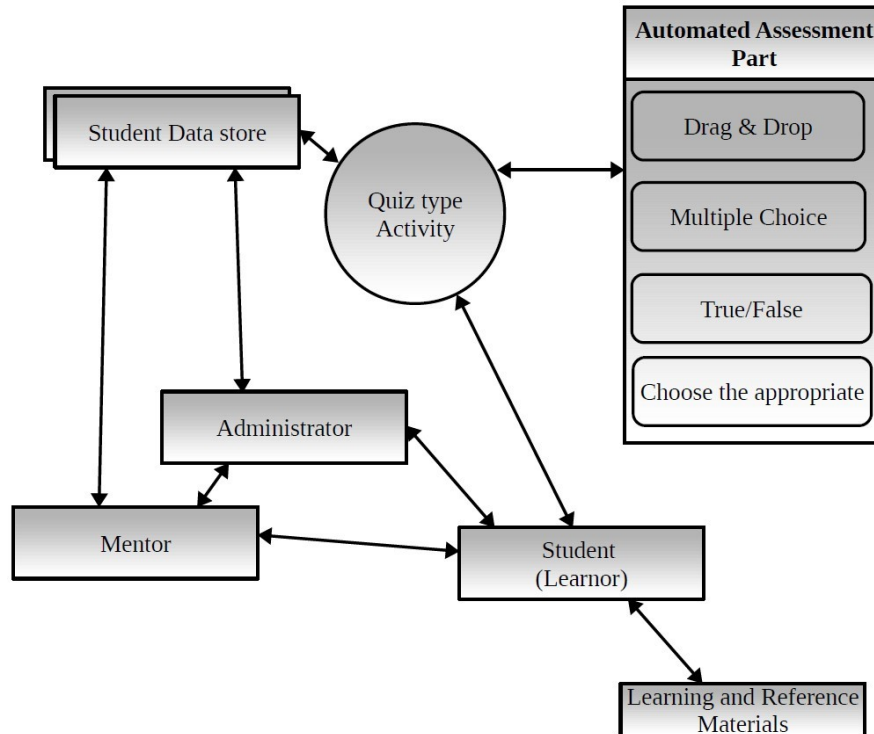
## Description of Technology

- Software utilises Moodle, a FOSS platform.
- Moodle customised to a stand-alone application and works without internet.
- ELL utilises intranet web solution with a 3-tier architecture.
- Moodle LMS has been changed into digital multimedia language lab.
- ELL platform has 3 login options : Student Login, Teacher Login and HM Login
- The platform has options for listening, speaking, reading, writing and options for audio and video recording.



## How ELL works ?

Student activity – Automated Activity Part



### Course Content and Activities

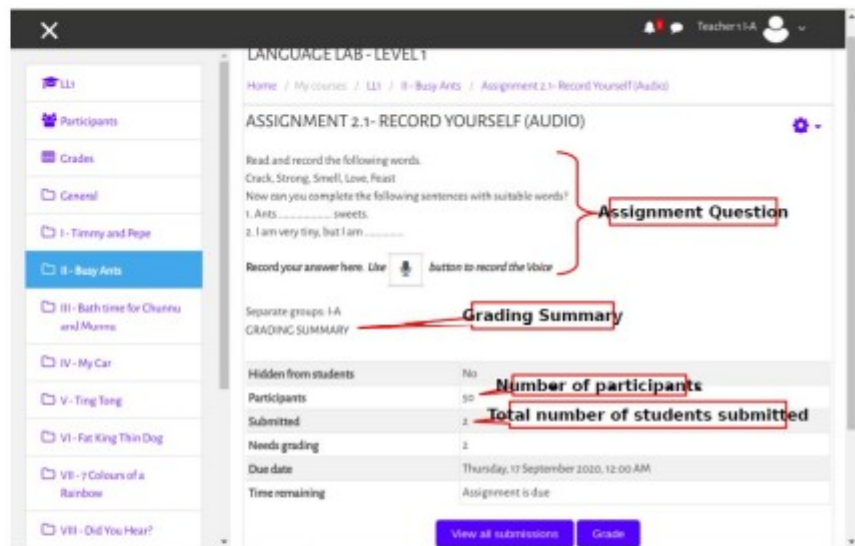
- 10 stories in each level
- ELL contains listening, drag and drop, true false, MCQ, Assignments, Speaking, Writing, Art work, Audio recording, Video recording etc.

## Product/Solution Description

- Student login, Teachers login & Head-Teacher / Principal logins
- Student console has Digital Multimedia content for students in 4 levels.
- Students can access course content using Student login & Teachers can monitor and give feedback to student's performance through teacher login.
- **Can easily be installed in computers** deployed in schools & **ready for deployment.**

*(Formal launch of deployment in all schools on 11.03.2022)*

- Software can be both online and offline.
- Present version is Offline -FOSS based.



The screenshot shows the 'LANGUAGE LAB - LEVEL 1' interface. On the left is a sidebar with course levels I-VIII. The main area displays an assignment titled 'ASSIGNMENT 2.1 - RECORD YOURSELF (AUDIO)'. The assignment question asks the user to complete sentences with suitable words. Below the question is a 'Grading Summary' table with the following data:

GRADING SUMMARY	
Hidden from students	No
Participants	50
Submitted	2
Needs grading	2
Due date	Thursday, 17 September 2020, 12:00 AM
Time remaining	Assignment is due

Annotations in the image highlight the 'Assignment Question' and the 'Number of participants' (50) and 'Total number of students submitted' (2) from the table.

Teacher Login- Grade Summary

## Market Readiness, Scalability & Growth factor

- Can be scaled up to cater a larger student populace.
- Can be installed in Laptops / Desktops with Linux based KITE-GNU Operating System 20.04.
- Can further be used for the development of software in languages like Malayalam, Tamil, Kannada, Hindi etc.
- Can be replicated in other States and Countries across different school educational contexts.

Model can be upscaled to other States if

1. Follow FOSS (Free and Open Source Software)
2. Have Tech-enabled Policy in Education
3. Set-up Language Labs and Hi-Tech classrooms



**Amitabh Kant** @amitabhk87 · 3h

Kerala schools to save Rs 3,000 crore by using Linux OS.

Envisages largest ICT training for teachers, with training of over 1,50,000 primary teachers. From the next academic year, more than 2,00,000 computers in Kerala schools [financialexpress.com/industry/techn...](https://www.financialexpress.com/industry/tech/) via @FinancialXpress



**Kerala schools to save Rs 3,000 crore by using Linux OS**

Schools in Kerala are expected to save Rs 3,000 crore as they have chosen the Linux-OpenSource (OS) operating system for computers being made av... [financialexpress.com](https://www.financialexpress.com)

20

77

261



## Safety and Security

- Profiles and login details in ELL are protected.
- ELL follows all guidelines of IT Act 2000 to ensure privacy.
- Moodle aligns with Moodle's privacy notice <http://moodle.com/privacynotice>.
- Linux OS of KITE eliminates threats and vulnerabilities.



→ Log in facility

## Activities

Listening Activities  
Reading Activities

## Quiz type

Drag & Drop  
True/False  
Choose the appropriate

## Assignment Activities

Audio/Video recording  
Worksheet uploading

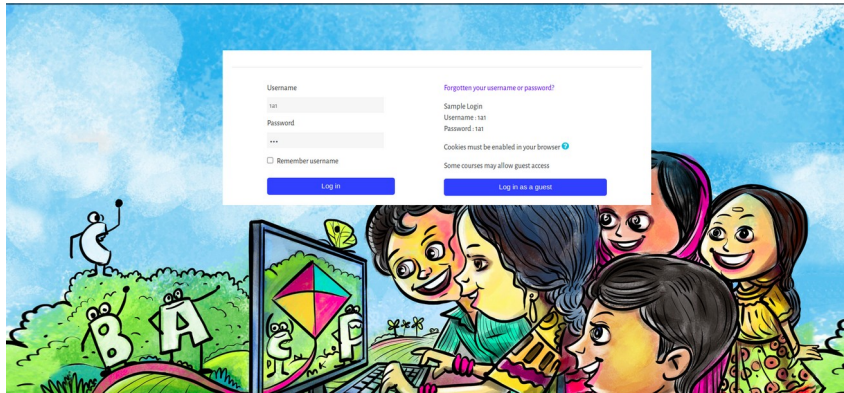
*Log-in screen – Students & Teachers have separate login credentials*

- ◆ Students can access the course content based on the level.
- ◆ Login window – enter using username and password.
- ◆ Digital content in 4 levels.

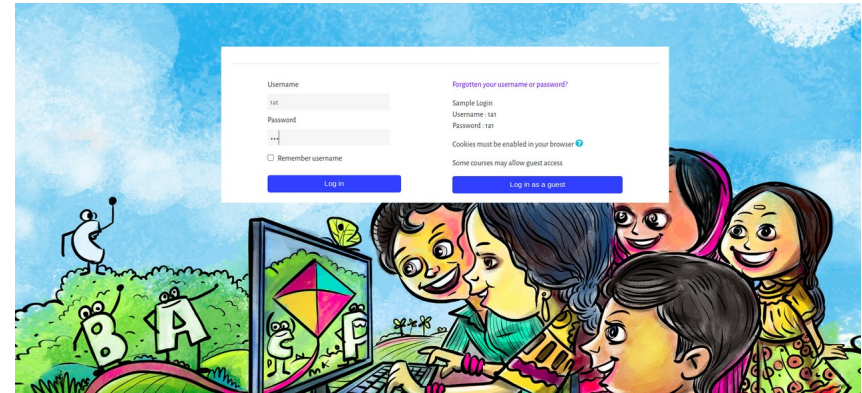


## Multiple logins- Student/Teacher/Head Teacher

- Student login, Teachers login & Head-Teacher logins
- Student console has Digital Multimedia content for students in 4 levels.
- Students can access course content using Student login & Teachers can monitor and give feedback to student's performance through teacher login.



Student Login



Teacher Login

# Software course content for Level-2

Abhishek SN

## LANGUAGE LAB - LEVEL 2

Home / My courses / LL2

### I. LITTLE PAINTERS

Your progress?

- Listening Activity 1.1 (Story)
- Play Story 1.1
- Read Story 1.1
- Listening Activity 1.2 (New Words)
- Assignment 1.1- Record Yourself
- Assignment 1.2- Upload Worksheet
- Drag and drop 1.1
- True or false 1.1
- Pick out the words which sound similar to the given word 1.1

### II. TOO BIG ! TOO SMALL !

- Listening Activity 2.1 (Story)
- Play Story 2.1
- Read Story 2.1
- Listening Activity 2.2 (New Words)
- Assignment 2.1- Record Yourself
- Assignment 2.2- Upload Worksheet
- Choose the correct answer 2.1
- Choose the correct answer 2.2

LL2

- Grades
- General
- I. Little Painters
- II. Too Big ! Too Small !
- III. When Will Amma Be Back ?
- IV. Rani's First Day at School
- V. My Home
- VI. The Red Raincoat
- VII. Who Ate All That Up?
- VIII. Bheema, the Sleepyhead
- IX. A Street, or a Zoo?
- X. What's Neema Eating Today?
- Home
- My courses

## Play Story - 1.1

### Read Story - 1.1

#### Play story video



#### Read Story - Little Painters



Previous

Play the Sound

Next

#### Listening Activity new words



# Hang


Play the Sound

Next



# Record Yourself

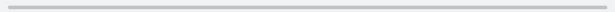

ASSIGNMENT 1.1- RECORD YOURSELF

Record the following words in your own voice. Use  button to record the Voice.

1. Hang 2. Ladder 3. Roof 4. Splash 5. Swing

Online text

Record audio

▶ 0:00  

Record again

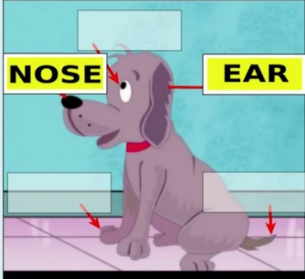
Attach recording

Save changes Cancel

## Drag & Drop activity Level-1

QUESTION 1  
Not yet answered  
Marked out of 1.00  
Flag question

Drag and drop Pepe's body parts in the correct place.



NOSE EAR

LEG EYE

TAIL

**Quiz Type -  
Choose the  
appropriate  
window.**

LANGUAGE LAB - LEVEL 2

[Home](#) / [My courses](#) / [LL2](#) / [I Little Painters](#) / [Pick out the words which sound similar to the given word 1.1](#)

**QUESTION 1**  
Not yet answered  
Marked out of 1.00  
Flag question

Put a tick mark to the words which sound similar to the given word.

1. gate.....

Select one or more:

- late
- fate
- mate
- cake
- rent

**QUESTION 2**  
Not yet answered  
Marked out of 1.00  
Flag question

Pick out the words which sound similar to the given word.

2. hang.....

Select one or more:

- rag
- sang
- leg
- bang
- rang

**Quiz Type :  
Drag & Drop**

LANGUAGE LAB - LEVEL 2

[Home](#) / [My courses](#) / [LL2](#) / [I Little Painters](#) / [Drag and drop 1.1](#)

**QUESTION 1**  
Not yet answered  
Marked out of 1.00  
Flag question

**DRAG AND DROP ACTIVITY**

A TEACHER	<input type="text" value="teaches"/>
A SINGER	<input type="text" value="sings"/>
A DANCER	<input type="text"/>
A SPEAKER	<input type="text"/>
A PAINTER	<input type="text"/>

## The score obtained for the Activity

LANGUAGE LAB - LEVEL 1

Home / My courses / LL1 / 1- Timmy and Pepe / Choose the appropriate 1.1

Started on	Thursday, 21 April 2022, 9:34 AM
State	Finished
Completed on	Thursday, 21 April 2022, 9:35 AM
Time taken	1 min 44 secs
Marks	<b>0.80/1.00</b>
Grade	8.00 out of 10.00 (80%)

QUIZ NAVIGATION

1  
Finish review

QUESTION 1  
Partially correct  
Mark 0.80 out of 1.00  
Flag question

Select the missing word

Timmy has  . She smells with it.

Timmy has  . She hears with them.

Timmy has  . She sees with them.

Timmy can dance on her  . She walks on her legs.

Timmy has a  . She tastes with it.

Based on this student can review  
& re-submit answer

Flag question

Timmy has  . She hears with them.

Timmy has  . She sees with them.

Timmy can dance on her  . She walks on her legs.

Timmy has a  . She tastes with it.

Your answer is partially correct.

You have correctly selected 4.

The correct answer is:  
Select the missing word

Timmy has [nose]. She smells with it.

Timmy has [ears]. She hears with them.

Timmy has [eyes]. She sees with them.

Timmy can dance on her [legs]. She walks on her legs.

Timmy has a [tongue]. She tastes with it.

## Assignment 2.2 upload worksheet

LL2

Grades

General

I. Little Painters

**II. Too Big! Too Small!**

III. When Will Amma Be Back?

IV. Rani's First Day at School

V. My Home

VI. The Red Raincoat

VII. Who Ate All That Up?

VIII. Bheema, the




### LANGUAGE LAB - LEVEL 2

[Home](#) / [My courses](#) / [LL2](#) / [II. Too Big! Too Small!](#) / [Assignment 2.2- Upload Worksheet](#)

## ASSIGNMENT 2.2- UPLOAD WORKSHEET

**Write a few words about your family. Take a photo and upload it with the help of your Teacher.**

SUBMISSION STATUS

Submission status	Submitted for grading		
Grading status	Not graded		
Last modified	Thursday, 21 April 2022, 9:09 AM		
File submissions	<table><tbody><tr><td> My Family.pdf</td><td>21 April 2022, 9:09 AM</td></tr></tbody></table>	 My Family.pdf	21 April 2022, 9:09 AM
 My Family.pdf	21 April 2022, 9:09 AM		
Submission comments	<a href="#">▶ Comments (0)</a>		

[Edit submission](#) [Remove submission](#)

You can still make changes to your submission.

## Video Recording Activity


### Assignment – Video Recording

LANGUAGE LAB - LEVEL 2


[Home](#) / [My courses](#) / [LL2](#) / [VI. The Red Raincoat](#) / [Assignment 6.2 Video Recording](#) / [Edit submission](#)

#### ASSIGNMENT 6.2 VIDEO RECORDING

Can you write a four line action song about rain? Recite and record the action song with the help of your teacher.

Record the video here 

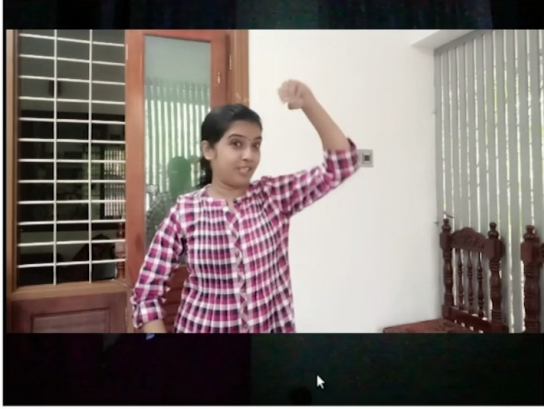
Online text



I

**Write a four line action song on Rain :**  
Recite and record the action song. (Level 2)

Record video



Stop recording (01:57)

## Teacher Log In

- Login credentials
- Teacher can go through Quiz type & Assignment activities submitted by students.
- Teacher can click on the activity concerned (Quiz or Assignment).

LANGUAGE LAB - LEVEL 2

Home / My courses / LL2 / I. Little Painters / Drag and Drop 1.1

DRAG AND DROP 1.1

Attempts 5 (4 from your groups)

SUMMARY OF YOUR PREVIOUS ATTEMPTS

Attempt	State	Review
Preview	In progress	

Continue the last preview

Copyright © 2020 - Developed by KITE. Powered by Moodle

First name  All

Download table data as

	First name / Surname	Email address	State	Started on	Completed	Time taken	Grade/10.00	Q_1 /10.00
<input type="checkbox"/>	No 4 III-A Review attempt	3astud4@gmail.com	Finished	20 April 2022 4:41 PM	20 April 2022 4:42 PM	28 secs	10.00	✓10.00
<input type="checkbox"/>	No 6 III-A Review attempt	3astud6@gmail.com	Finished	20 April 2022 4:44 PM	20 April 2022 4:45 PM	44 secs	10.00	✓10.00
<input type="checkbox"/>	No 8 III-A Review attempt	3astud8@gmail.com	Finished	20 April 2022 4:47 PM	20 April 2022 4:48 PM	17 secs	5.00	✓5.00
<input type="checkbox"/>	No 10 III-A Review attempt	3astud10@gmail.com	Finished	20 April 2022 4:49 PM	20 April 2022 4:49 PM	17 secs	10.00	✓10.00
	Group average						8.75 (4)	8.75 (4)
	Overall average						8.75 (4)	8.75 (4)

Regrade selected attempts

NUMBER OF STUDENTS IN GROUP 'III-A' ACHIEVING GRADE RANGES

Participants

Can see the grades?

# Teacher Log In – View all submission

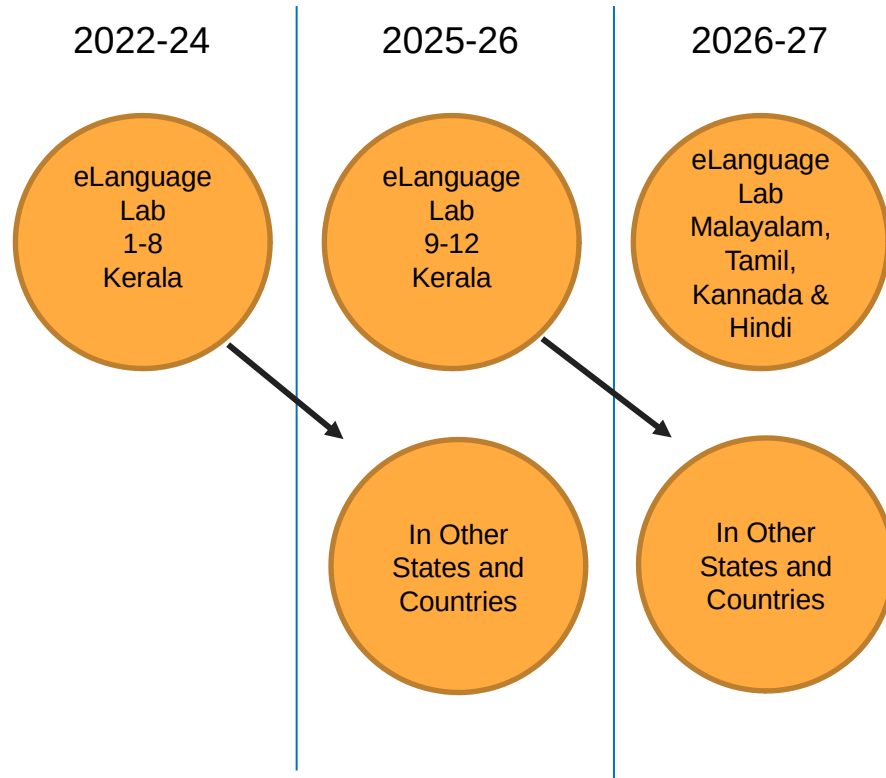
✕
Teacher 1 III-A
VICTERS

- LL2
- Participants
- Grades
- General
- I. Little Palaces
- II. Too Big! Too Small!
- III. When Will Amma Be Back?
- IV. Rani's First Day at School
- V. My Home
- VI. The Red Raincoat
- VII. Who Ate All That Up?

Select	User picture	First name / Surname	Email address	Status	Grade	Edit	Last modified (submission)	Online text
<input type="checkbox"/>		No 1 III-A	3astud1@gmail.com	No submission	<a href="#" style="background-color: #007bff; color: white; padding: 2px 5px;">Grade</a>	<a href="#">Edit</a> ▾	-	
<input type="checkbox"/>		No 2 III-A	3astud2@gmail.com	No submission	<a href="#" style="background-color: #007bff; color: white; padding: 2px 5px;">Grade</a>	<a href="#">Edit</a> ▾	-	
<input type="checkbox"/>		No 3 III-A	3astud3@gmail.com	No submission	<a href="#" style="background-color: #007bff; color: white; padding: 2px 5px;">Grade</a>	<a href="#">Edit</a> ▾	-	
<input type="checkbox"/>		No 4 III-A	3astud4@gmail.com	Submitted for grading Graded	<a href="#" style="background-color: #007bff; color: white; padding: 2px 5px;">Grade</a> 90.00 / 100.00	<a href="#">Edit</a> ▾	Wednesday, 20 April 2022, 4:41 PM	
<input type="checkbox"/>		No 5 III-A	3astud5@gmail.com	No submission	<a href="#" style="background-color: #007bff; color: white; padding: 2px 5px;">Grade</a>	<a href="#">Edit</a> ▾	-	

▶
🔊 LIVE
📺

## Vision and Roadmap



### Vision

- To enhance the English Language proficiency of all students from Classes 1 to 12 by using affordable and appropriate technology solutions.
- To empower teachers to support learners continuously to enhance students' English Language proficiency

### Roadmap

- Capacity Building of all teachers through the Master Trainer mechanism to enable them to use Language Lab, eLibrary and eBroadcast and to support students.
- Monitoring mechanisms at State / District and School level.
- Continuous Technical and handholding support by KITE.



## Teacher Empowerment and Implementation

- Language lab software developed in 2022 was trialed in selected schools and the software was revised.
- Implemented in schools in 2022 June/July.
- 70,000 teachers given 2 day training in using and implementing e-Language Lab in schools.





## Students in E-Cube Lab



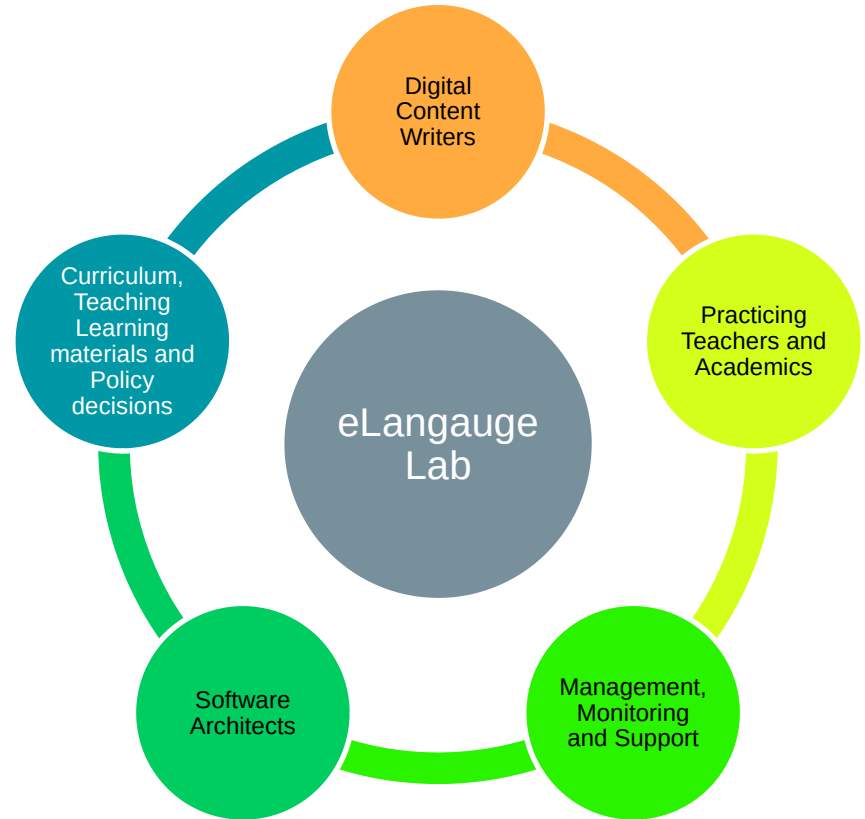
## Findings of the Impact Study by RIESI & ITfC

- Use of ELL in classrooms improved the English language proficiency of students.
- Teachers recognised the positive impact of ELL on students English Language proficiency based on LSRW skills in an integrated manner.
- ELL offers complete linguistic immersion and self paced learning possibilities for students providing them with focussed learning environment in faculty English language acquisition.
- The strength of ELL lies in the interesting storytelling based pedagogy, gaming mode activities, innovative implementation strategies developed by teachers and a strong system for providing support and feedback to teachers.
- With a fun-based learning structure, ELL has been unanimously praised as a unique and engaging learner-centric language learning digital platform for students in Government and Aided schools of Kerala.

---

## Team & Partnerships

- Presently KITE has
  - A team of expert content writers
  - Skilled practicing teachers
  - A team of experts in software development.
  - A group of officials for co-ordination and management.
- KITE receives..**
  - Academic support from SCERT
  - Financial assistance from Govt
  - Support from General Education Dept
  - Support by FOSS community.
- **Reference link**  
*(4 Minutes video, Software for download & User Guide)*



**Reference Link**

**<https://ecube.kite.kerala.gov.in/>**

**- THANK YOU -**