



Department of General Education
Government of Kerala



Innovative Technology-Based Learning in Pre-Primary Schools

Integration of Technology into Pre-Primary Classrooms

(Integration of Technology into Preschool Learning Environment)



V. Sivankutty

Minister for General
Education and Labour
Government of Kerala



Thiruvananthapuram
Date: 17/07/2025

Message

Kerala has always been a role model among all states in the field of education. Performance excellence and quality are the hallmarks of General education in Kerala.

The Kerala society's emphasis on education has contributed greatly to this achievement. The General Education Department and Samagra Shiksha Kerala, hand in hand, are implementing numerous quality interventions, paving the way for the empowerment of public education and thereby creating a new Kerala.

Kerala is among the states that have shown the best performance in the National Quality Index. This achievement has earned Kerala a place in the 'STARS' project. The goal of the 'STARS' project is to implement necessary reforms to enhance the quality and credibility of public education, design and implement innovative and flexible activities to improve educational quality, and ensure better outcomes.

This is a brief document about the major activities implemented by Samagra Shiksha Kerala under the STARS project in Kerala. I extend all my best wishes for the continuation and quality implementation of excellent activities.

With affection,

A handwritten signature in green ink, appearing to read 'Sivankutty'.

V. Sivankutty



Dr. K. Vasuki IAS
Secretary



General Education Department
Government Secretariat
Thiruvananthapuram
Phone Office : 0471-2517395

Date :

Message

Secretary, General Education

Samagra Shiksha represents an integrated and inclusive approach to school education, and this document reflects the innovative practices, collaborative initiatives, and community engagement that have enriched our educational landscape. I am delighted to note the commendable effort taken to present a document showcasing the academic activities carried out under Samagra Shiksha in Kerala under the STARS Project. This initiative is a significant step forward. Creating a comprehensive record of our academic endeavours is crucial for several reasons: it allows us to effectively showcase the depth and breadth of the programme, serves as an invaluable resource for future planning and implementation, and enables us to identify best practices and areas for further improvement. This document not only reflects the dedication and hard work of our educators, administrators, and stakeholders but also serves as a valuable record of the innovative and inclusive practices being implemented across the state.

The holistic development of learners is always the focus of the Samagra Shiksha, Kerala. This documentation highlights our collective strides towards that goal. From strengthening foundational learning to fostering equity and excellence in education, the initiatives captured in this document reflect the spirit of collaboration and commitment that defines Kerala's education system.

The hard work demonstrated in creating this document is truly appreciated. Such thorough documentation will undoubtedly contribute to the continued success and evolution of educational initiatives across the State, ultimately benefiting our students and the entire academic community.

I congratulate the entire team behind this initiative for their dedication and vision. May this report serve not only as a record of achievements but also as a source of inspiration for future educational endeavours.

Dr. K. Vasuki
Secretary Department of General Education
Government of Kerala



Introduction

STARS (Strengthening Teaching-learning and Results for States) is a sponsored project of the Central government implemented in Kerala through Samagra Shiksha since 2020. Numerous commendable activities have been implemented through the STARS project to improve the educational quality of Kerala. Early childhood education, foundational literacy, evaluation, improving classroom learning, streamlining educational service activities, interventions in vocational education, and physical infrastructure development are among the various programs implemented as part of the project. This booklet introduces some of the most commendable programs among them. We hope that the information in this book will be beneficial for future educational planning and implementation.

Dr. Supriya A.R.
State Project Director
Samagra Shiksha Kerala

Department of General Education
Samagra Shiksha Keralam

STARS Project Document 2025

Integration of Technology in to Preschool Learning Environment

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Innovative Technology-Based Learning in Pre-Primary Schools

Vision of the state

Objective of the Programme

Innovative Technology-Based Learning in Pre-Primary Schools



Integration of Technology into Pre-Primary Classrooms is a programme aimed at ensuring the use and benefit of innovative technology in pre-primary classrooms.

10 crore 54 lakh rupees have been allocated through the STARS project to purchase digital equipment for 2221 approved pre-primary schools.

Digital

Equipment and Classroom Facilities

Benefits:

-  Assists in language development, cognitive development, and socio-emotional development
-  Opportunity to watch videos related to classroom themes
-  Opportunity to practice singing and moving to rhythm
-  Able to provide sensory experiences to children with special needs through diverse sensory experiences
-  Helps increase children's participation in classroom activities
-  Helps learn about different cultures



Smart TV
(Samsung
Business TV - 43 inch)





Provides Opportunities for Audio-Visual Learning:

(Short educational videos demonstrating multiple sensory activities, animated stories and songs)

For Children

(under the supervision of a teacher only):

Language Development:

- Children's performances, songs, and dramas can be recorded and displayed on TV

Cognitive Development:

- Concepts related to early(prag) mathematics are presented attractively through games and activities
- Special learning resources made available for children with special needs

For Teachers:

- Helps document and evaluate children's learning progress
- To share children's learning outcomes with parents
- Helps prepare digital portfolios



Tablet
(Samsung
A7 Lite)

Language Development -

Listening and Comprehension- Fortification

- ▼ For developing listening and comprehension skills
- ▼ Teacher's stories and instructions can be recorded and played back
- ▼ Children get opportunities to record their own voices, listen, and develop language skills
- ▼ Teacher gets opportunities to record and evaluate children's verbal responses, storytelling, and songs.
- ▼ The teacher can document children's language development and share it with parents



**Voice
Recorder**
(Sony ICD UA 570)

Collection of Digital Resources

Portable Trolley Speaker

Benefits:

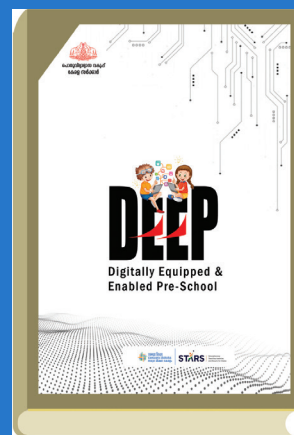
- ◆ Assists in language development, creativity development, and socio-emotional development
- ◆ Children get opportunities to present stories and songs confidently before an audience without stage fear
- ◆ Easy to carry; can be used in various learning centres: language corner, art corner, music corner, etc.



**Pen
Drive**
(64 GB)

Use of Digital Tools and Technology in Pre-Primary Classrooms

Pre -Primary Teacher Training Programme



Objectives :

- Familiarising teachers with the use of digital tools in pre-primary classrooms - approaches and possibilities
- Supporting teachers to plan classroom activities using technology
- Empowering pre-primary teachers to use digital tools safely and effectively
- Training teachers to document school-based assessment results digitally and systematically



Session 1:

Let's get to know the devices

Introduction to the digital devices made available to pre-primary schools.



Session : 2

Story

Watch and Tell

Use of digital devices in the transaction
of the pre-primary curriculum.
Understanding the possibilities of
a technology-friendly
classroom.





Session : 3

Puppet Show

Training pre-primary teachers to create learning materials and design classroom activities using technology.

Training teachers to effectively use the e-space on the classroom noticeboard.

Session : 4

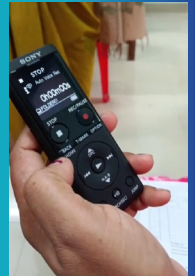
Digital Safety



 Training pre-primary teachers to use innovative digital equipment and resources safely and efficiently

Singing with Karaoke

Training pre-primary teachers to use digital equipment in daily classroom activities related to developmental domains



Smart Pre-Primary Classrooms

Use of modern technological
equipment in classrooms





Leju
Pre-primary
Teacher



"My class has become digital".

All digital equipment has been made available in my preschool.

The learning activities I plan can be presented very attractively before children in the classroom.

The audio system helps me communicate with children in a clear voice. It helps children share their ideas/opinions. They come forward to speak with great interest.

Activities using ICT—such as stories, songs, and pictures—were implemented very effectively in the classroom through the use of the television. It is observed that children's enthusiasm and attention have increased when watching and listening to stories and responding to them. Likewise, the tablet has helped document and store children's performances and show them to parents. The available digital devices are very useful in making children smarter, in keeping with the changes of the times. Since there are greater opportunities to listen to languages other than Malayalam, children are able to experience situations where they listen to, understand, and respond to English action songs and stories. These devices help in bringing learning strategies aimed at enhancing children's abilities into practice.



DEEP Pre-primary Training

The digital equipment provided by the Department of Education in connection with the Varnakoodaramhas had a significant influence on preschool children. This training was of great quality and helped create awareness among teachers about how these devices impact preschool children and what kind of excellence they can bring into preschool learning.

The training aimed to show how preschool learning experiences can be made joyful and interesting with the help of digital tools. Introducing each device through riddles was very enjoyable. Discovering children's creative stories and learning how to use the voice recorder to play them back to the children, how to use screen sharing to give characters in stories and songs in the teacher's own voice—these were all highly engaging experiences. The training also helped us understand how stories and songs from a mobile phone can be connected and shown on a TV.

There is no doubt that the fascinating experiences of the digital world will help spark curiosity in children, encourage them to ask questions, and improve their music, acting, and conversational skills. Through such enthusiastic and joyful training programmes that embrace both children and parents equally, we express our gratitude to SSK and the Department of Education for providing pre-primary teachers with this one-day training.

Asha Chandran
GLPS Attinkuzhi



Smart class is very dear to my daughter. Through it, she can understand and remember things quickly. One day in class, the teacher taught stories, daily routine activities, and songs. Usually, when learning songs from books, she didn't show much interest. However, in smart class, the teacher taught singing using karaoke and videos. How happy she was when singing with the mic! Even after coming home, she amazed me by singing new songs. That gave me the greatest happiness.

When learning using pictures and videos rather than looking at books, the subject becomes very easy for her to understand. When songs and games are added, learning becomes an enjoyable experience for her. This also helped her pay more attention in class. She loves answering questions and seeing new things.

Overall, I believe that smart class is an excellent method to make children's learning enjoyable and efficient. I wholeheartedly welcome the government's decision to continue such a new learning method."

Parent Testimonial:

Ansi Selvan

Child's Name:

Isabel Ann Shibu (UKG),
Govt. L.P.S Arampunna



Department of General Education
Government of Kerala

STARS (Strengthening Teaching-learning and Results for States) is an education project designed and implemented by the Central Government with World Bank assistance to improve education standards. Among the states of Himachal Pradesh, Odisha, Rajasthan, Madhya Pradesh, and Kerala implementing this project, Kerala was included considering its excellent education quality index. Kerala has been receiving the benefits of the STARS project since 2021. Numerous suitable and commendable education programmes for Kerala have been implemented as part of the STARS project.

This booklet presents one of the most important activities among them.

