KERALA INFRASTRUCTURE AND TECHNOLOGY FOR EDUCATION

CORPORATE PRESENTATION

KITE

Kerala Infrastructure and Technology for Education

Government of Keralam · Section 8 Company · General Education Department



Students and teachers at a Little KITEs state camp

AGENDA

Our story in eleven chapters

01 **Who we are**
Kerala's context, KITE at a glance, vision and mission

02 **Genesis**
From the pre-ICT era to IT@School and KITE

03 **Mission and ecosystem**
Seventeen activities, one integrated model

04 **Infrastructure**
Hi-Tech classrooms and labs, support, open source

05 **Content and platforms**
Samagra, ICT textbooks, School Wiki, language labs

06 **eGovernance**
Sampoorna, Sametham, Sahitham, Samanwaya and more

07 **Media and reach**
KITE VICTERS, First Bell, Haritha Vidyalayam

08 **People and inclusion**
KOOL, Little KITEs, parents, special needs

09 **AI and robotics**
Samagra Plus AI, curriculum, kits, training

10 **100-day initiatives**
Digital Square, ARISE, Mukulam, Tharapadam

11 **Recognition**
Infrastructure upgrade, awards and contact

01

Who we are

Kerala’s context, KITE at a glance, our vision and mission









Kerala: the context for our mission



Thiruvananthapuram
Capital

38,863
Geographical area (sq km)

14
Administrative districts

859
Persons per sq km

35.69
Total population (million), 2026 estimate

17.12 | 18.57
Male | female (million)

1,087
Females per 1,000 males

95.3%
Literacy rate

16,349
Schools

48 lakh
Students

2 lakh
Teachers

Tops the National School Education Quality Index

Tops in the Overall Health Index

Tops in key sustainable development goals

Lowest infant mortality and highest life expectancy in India

Source: Wikipedia.com & globalstatistics.com

KITE at a glance

A Government of Kerala enterprise, registered as a Section 8 company, that holistically fosters, promotes and implements the modernization of educational institutions across the State.

Born as the IT@School Project in 2001; **a fully State-owned company since 2017.**

REACH

15,369
schools

43.62 lakh
students

1.65 lakh
teachers

14
district offices with Master Trainers

HI-TECH INFRASTRUCTURE AND CLUBS

45,000
Hi-Tech classrooms

4,752
secondary schools made Hi-Tech

11,257
primary schools with Hi-Tech labs

1.80 lakh
active Little KITEs members

Source: SAMETHAM School Data Bank portal (sametham.kite.kerala.gov.in), developed by KITE.

Our vision

> **To transform Kerala as a knowledge society by enhancing the quality of educational inputs through sustainable, inclusive, technology assisted interventions.**

IN MALAYALAM

ദർശനം

കേരള സംസ്ഥാന വിദ്യാഭ്യാസത്തിന്റെ ഗുണനിലവാരം ഉയർത്തി സംസ്ഥാനത്തെ ഒരു വിജ്ഞാന സമൂഹമായി മാറ്റുന്നതിന് അനുയോജ്യവും, സുസ്ഥിരവും , സമന്വയിപ്പിച്ചതും (inclusive) സാങ്കേതികവിദ്യാ സഹായത്തോടെയുള്ളതുമായ ഇടപെടലുകൾ നടത്തുക. (കേരള സംസ്ഥാന വിദ്യാഭ്യാസത്തിന്റെ ഗുണനിലവാരം ഉയർത്തുന്നതിന് അനുയോജ്യ മായതും കാലാനുസൃതവുമായ സാങ്കേതിക സംവിധാനങ്ങൾ പ്രയോജനപ്പെടുത്തിക്കൊണ്ട് വിദ്യാഭ്യാസ മേഖലയിൽ സാങ്കേതികമികവുള്ള സമൂഹത്തെ വാർത്തെടുക്കുന്നതിനുള്ള സ്ഥാപനമായി പ്രവർത്തിക്കുക.)

Sustainable, inclusive and technology-assisted: the three ideas that shape every programme in this deck.

- **Sustainable**
- **Inclusive**
- **Technology-assisted**

Our mission

1. To foster, promote and implement modernization of educational institutions owned by the State or run with Government aid: infrastructure including ICT, capacity building, content development, connectivity, e-learning, satellite-based education, support and maintenance, eGovernance and related areas.

- വിദ്യാഭ്യാസമേഖലയിൽ പ്രവർത്തിക്കുന്നവരുടെ ഐ സി ടി രംഗത്തെ പ്രയത്നശേഷി മെച്ചപ്പെടുത്തൽ , ഉള്ളടക്ക വികസനം, ഇ-ലേണിംഗ്, ബ്രോഡ്കാസ്റ്റിംഗ് സൗകര്യങ്ങൾ ഒരുക്കൽ, മറ്റ് അനുബന്ധ പ്രവർത്തനങ്ങൾ. വിദ്യാഭ്യാസ മേഖലയിൽ വിഭവനിർമ്മാണം, പരിശീലനം, ഇ-ലേണിംഗ് സംവിധാനങ്ങൾ, സംപ്രേണസൗകര്യങ്ങൾ തുടങ്ങിയവയുടെ പ്രയോജനം ഉറപ്പുവരുത്തുക.

2. To upgrade Government-sector educational institutions on par with international standards in infrastructure, facilities, resources, curriculum and pedagogy.

- സംസ്ഥാനത്തെ വിദ്യാഭ്യാസ സ്ഥാപനങ്ങളെ അന്താരാഷ്ട്രതലത്തിലേക്ക് ഉയർത്തുന്നതിന് അനുയോജ്യമായ ഭൗതീകസൗകര്യങ്ങൾ, വിഭവങ്ങൾ, പാഠ്യപദ്ധതി, ബോധനതന്ത്രങ്ങൾ തുടങ്ങിയവ മെച്ചപ്പെടുത്തുന്നതിനുള്ള ഇടപെടീൽ നടത്തുക.

3. To formulate and implement projects that use ICT as a tool to improve the quality of education in Kerala.

- വിദ്യാഭ്യാസ വകുപ്പിന് അനുയോജ്യവും സ്ഥായിയായതുമായ ഇ-ഗവേണൻസ് പ്രവർത്തനങ്ങളും അതിനാവശ്യമായ കണക്ടിവിറ്റി, സഹായസംവിധാനം തുടങ്ങിയവ ലഭ്യമാക്കുക.

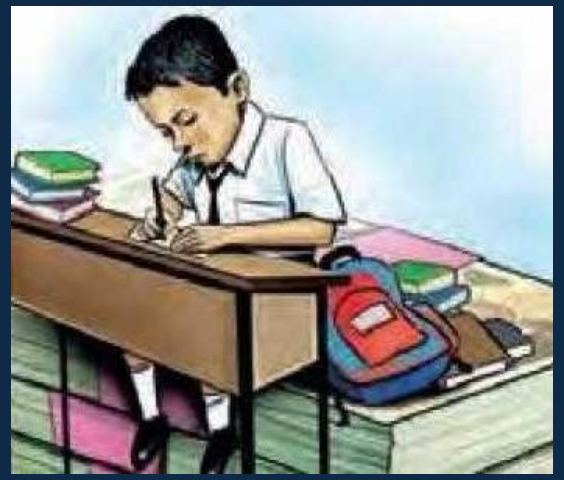
4. To act as advisor or consultant to Government and the private sector in improving education quality through ICT.

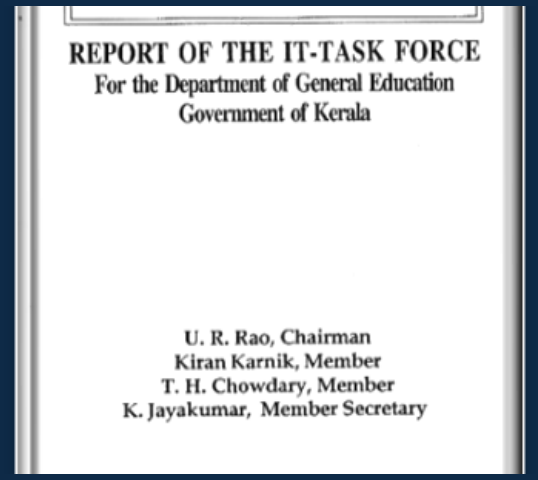
- ഐസിടിയിലൂടെ വിദ്യാഭ്യാസ നിലവാരം ഉയർത്തുന്നതിൽ സർക്കാരിനും സ്വകാര്യമേഖലയ്ക്കും നിർണായക നിർദ്ദേശങ്ങളും ഉപദേശങ്ങളും നൽകുക.

02

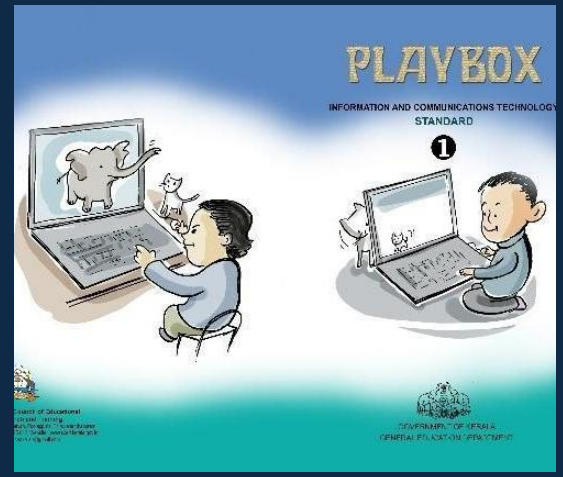
Genesis

From the pre-ICT era to IT@School and KITE



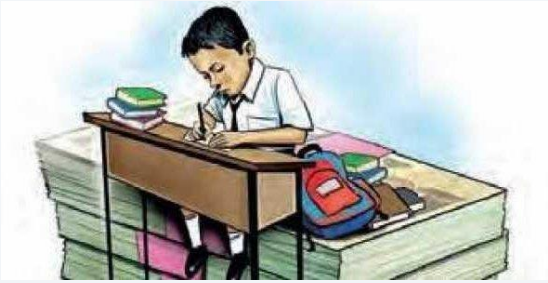






The starting point: Kerala schools in the early 2000s

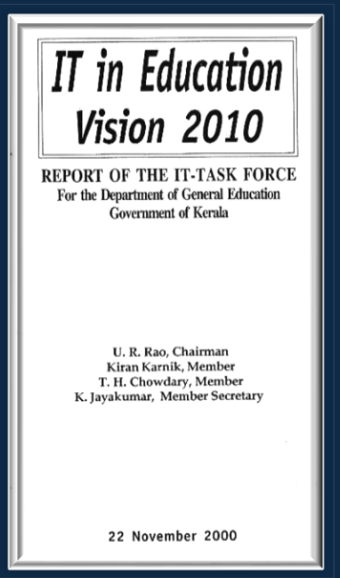
The pre-ICT era



- Few computers in some schools; no standardization in specifications
- No IT/ICT-enabled contents or syllabus prescribed
- Market-driven proprietary contents with no academic value were used
- No dedicated support for teachers to upgrade to ICT
- Resistance to change prevailed among teachers

Government intervention

1. A Task Force headed by Prof. U. R. Rao was constituted in 2000
2. It recommended a dedicated wing within the Education Department to drive IT in education
3. The IT@School Project, today's KITE, was set up in 2001



IT in Education: Vision 2010

From IT@School to KITE: 26 years of milestones

2000–2010 · The IT@School Project years

2000

Task Force on IT in education constituted; the IT@School Project initiated

2001

IT@School set up; ICT introduced as a subject in the curriculum (2001–03)

2003

IT made a compulsory subject in Class 8

2006

KITE VICTERS, the complete educational channel, begins

2007

Complete shift to the FOSS platform; broadband for schools

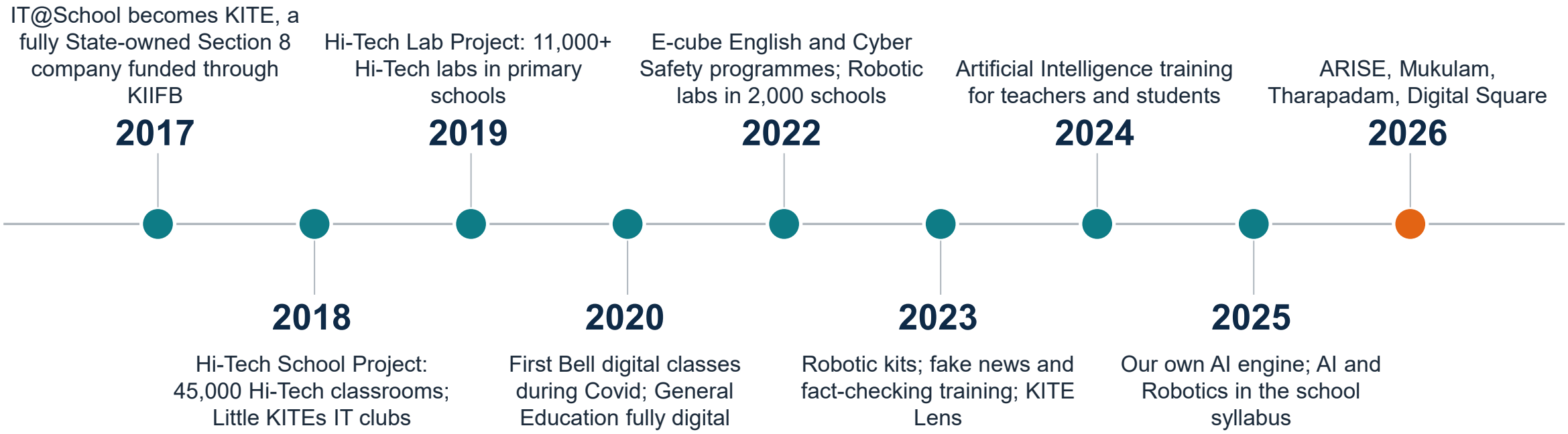
2010

From IT to ICT-enabled education; hardware clinics introduced

A decade of foundations: curriculum, an education channel, free software and connectivity, setting up the transformation that followed under KITE from 2017.

From IT@School to KITE: 26 years of milestones

2017–2026 · The KITE years



Kerala: leading the way in digital education

01
First State to introduce ICT as a subject in the school curriculum (2001–2003)

02
Only State where students write a machine-based exam in the 10th Board Exam

03
World's largest deployment of FOSS in education in a particular territory

04
First State to start a complete educational channel, KITE VICTERS (2006)

05
First State to be fully digital in General Education (2020)

06
First State to establish Robotic Labs in 2,000 schools: 12 lakh beneficiaries (2022)

07
First State to start a resource portal (Samagra) fully in tune with pedagogy (2018)

08
Only State with Smart classrooms (45,000) for all classes from Std 8 to 12

09
Only State with broadband internet connectivity in all schools

10
India's largest ICT network of students: Little KITEs IT clubs

11
Only State that mandates teachers to pass an online course for probation (KOOL)

12
First State with a complete eGovernance system for the General Education Department

03

Mission and ecosystem

Seventeen activities, one integrated model









Seventeen activities (1 of 2): people and content

Capacity building

1. Empowering teachers with ICT training so they can take classes effectively and with ease
2. Subject- and syllabus-wise teacher training through KOOL (KITE's Open Online Learning), a MOOC-model platform
3. Making students ICT champions through training in Animation, Robotics, Artificial Intelligence, IoT, 3D Modelling and more
4. Facilitating Little KITEs student IT clubs in 2,000+ schools, the largest ICT network of students

Content development

5. Samagra Digital Resource Portal with digital content for Std 1 to 12 and for teachers
6. ICT content development completely aligned with the State Government's FOSS policy
7. Development and deployment of the FOSS-based KITE GNU Operating System
8. Creation of ICT textbooks for all classes

Seventeen activities (2 of 2): infrastructure and reach

Infrastructure and support

9. Equipping every State-run and State-aided school to become fully Hi-Tech with the latest ICT gadgets
10. Transforming all classes in all secondary schools to Hi-Tech and setting up Hi-Tech Labs in all primary schools
11. Reviewing ICT guidelines periodically: minimum specification, maximum prices and mandatory service conditions
12. High-speed FTTH broadband connectivity to all schools and educational offices in the State
13. Support mechanisms: online hardware distribution, complaint portal with call centre

Systems, media and field network

14. School infrastructure upgrade: Centres of Excellence (Rs 5 Cr each, 139 schools) and Betterment of Infrastructure (Rs 3 Cr each, 93 schools)
15. eGovernance applications for the General Education Department: Sampoorna, Sahitham, Sametham, Samanwaya and more
16. Operating the KITE VICTERS educational channel and studio complex 24 × 7
17. Regional offices in 14 districts with a team of Master Trainers

One integrated ecosystem

Content Development

- Adoption of FOSS in education
- IT as a compulsory subject in the curriculum
- ICT textbooks for all classes
- Samagra Resource Portal and mobile apps

Capacity Building

- Teachers themselves became trainers; no external IT resource engaged
- Trainings for teachers, students, parents and the public
- Training in ICT, hardware and content development



Hardware Deployment

- Deployment of ICT hardware
- Broadband connectivity
- Call centre and web portal support
- Hardware clinics
- ICT guidelines for schools
- e-Waste disposal programme

Support Systems

- eGovernance
- VICTERS educational channel
- Little KITEs IT clubs
- School Wiki
- E-cube Language Lab
- Sahitham Mentoring Portal

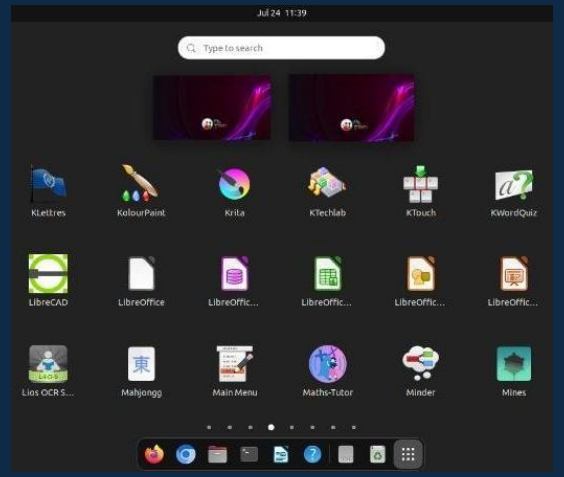
04

Infrastructure

Hi-Tech classrooms and labs, support systems and open source









Hi-Tech classrooms and Hi-Tech labs

Hi-Tech School Project

4,752 secondary schools · Class 8 to 12





- 45,000 classrooms from Std 8 to 12 made Hi-Tech: laptop, projector, screen, sound system, internet connectivity and access to the Resource Portal
- Rs 493.50 Cr funding from KIIFB
- Implemented during 2017–2019

Hi-Tech Lab Project

11,257 primary schools · Class 1 to 7





- Hi-Tech Labs set up in Upper Primary and Lower Primary schools
- 54,916 laptops and USB speakers, 23,050 projectors deployed
- Rs 300 Cr funding from KIIFB; implemented during 2018–2020

Rs 793.50 Cr
Hi-Tech projects in 16,009 schools

4.50 lakh
ICT equipment deployed to schools

5 years
comprehensive onsite warranty on all equipment

Sametham
school- and district-wise equipment details online

A robust support mechanism for school hardware

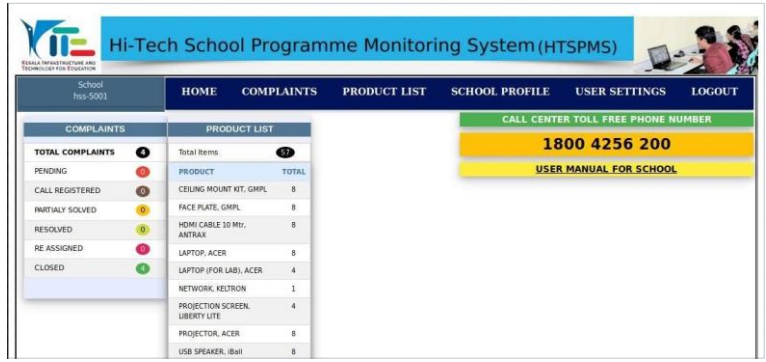
5 years
onsite warranty on all ICT equipment

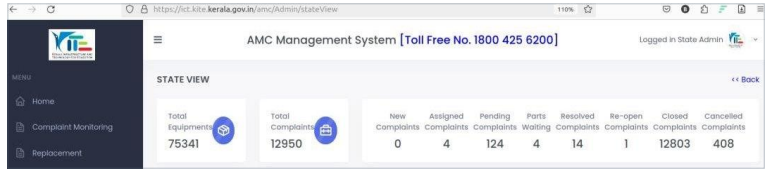
4.50 lakh
equipment items covered by insurance

3 + 28
3-member call centre at the State Office; 2-member technical team in each of the 14 districts

1,17,093 + 66,209
laptops and projectors under AMC beyond warranty

- Strict ICT guidelines for school hardware: minimum specification, maximum price, mandatory service conditions
- Web portal for complaints with call-centre support; hardware clinics; e-waste disposal programme
- Broadband internet connectivity provided to all schools







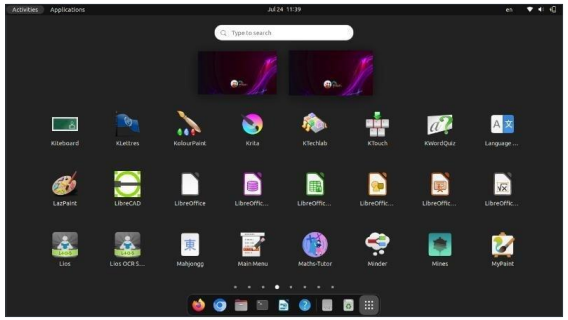
Free and Open-Source Software in education

Rs 3,000 Cr+

saved to the State exchequer

- FOSS enables unrestricted sharing and editing of educational content among students and teachers
- KITE developed a customised Linux-based operating system for schools
- World's largest deployment of FOSS in education in a particular territory





Name of Software	Category
Libre Office packages	Office Packages
GIMP, Krita	Raster image editing and drawing
Inkscape	Vector image editing
Synfig Studio, Draw SW	Animation
OpenShot video editor, Kden Live	Video editing
Odacity	Audio editing
GNUKhata	Financial accounting
Kalzium, PhEt, RasMol, Ghemical, KStars	Science
Quantum GIS, GPlates	GIS
Geogebra	Mathematics
Sunclock, Marble, KGeography	Earth studies
Stellarium	Desktop planetarium
GCompris, pySio game	Edutainment software
Blender	3D Graphics
Scribus	Desktop publishing
QT 5	Interface designer
Geany, IDLE	Programming IDEs
Scratch	Visual programming
GCC	Combiner
Firefox, Chromium, Web	Web browsers
FileZilla	FTP, SFTP & FTPS client
Orka Gimage reader	Tools for visually challenged
Transmission	Bit Torrent client
YouTube DL	Video downloader
PDF Shuffler, PDF Viewer, Xplayer	PDF utilities
VLC, Totem, SM player, Xplayer	Media players
Audacious	Audio players
WinFF, Handbrake	Media format converters
Kasm, GTK recording, MyDeskop, Simple Screen recorder	Screen capturing software
K3b, Brasero	CD / DVD Burner
GParted, Gnome Disk	Partition tools
testdisk	Data recovery
Sigil	E-Pub file editor
Lyx	Latec editor
FET	Timetable generator

Shown: tweet by the NITI Aayog chief, KITE GNU/Linux 22.04 desktop, and the list of applications pre-loaded in the OS.

KITE GNU/Linux and our global open-source partners













KITE GNU/Ubuntu 22.04

A customised Linux-based operating system for schools. Both versions can be downloaded free from the KITE website.

DOWNLOAD

kite.kerala.gov.in/KITE/index.php/welcome/downloads

Collaboration with international agencies and universities to customise the pre-loaded FOSS applications

GeoGebra
University of Salzburg

Scratch
MIT

PhET
University of Colorado Boulder

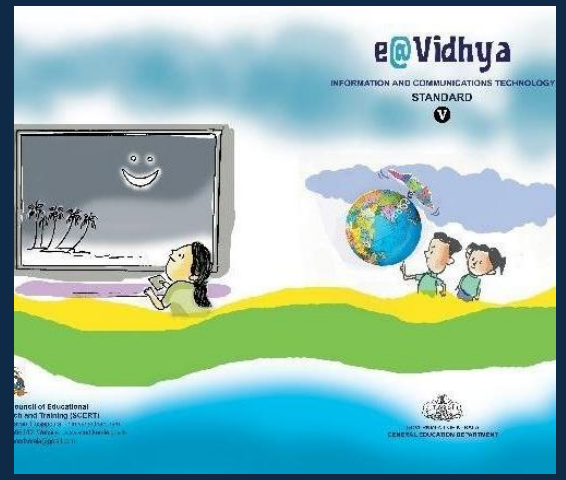
GCompris
GNU Project

05

Content and platforms

Samagra, ICT textbooks, School Wiki, language labs and KITE Lens









Samagra: the resource portal, in tune with pedagogy

samagra.kite.kerala.gov.in

- Digital materials matched to the lesson plans of teachers
- Digital resources for all subjects in all classes, Class 1 to 12
- All content developed by teachers using FOSS tools

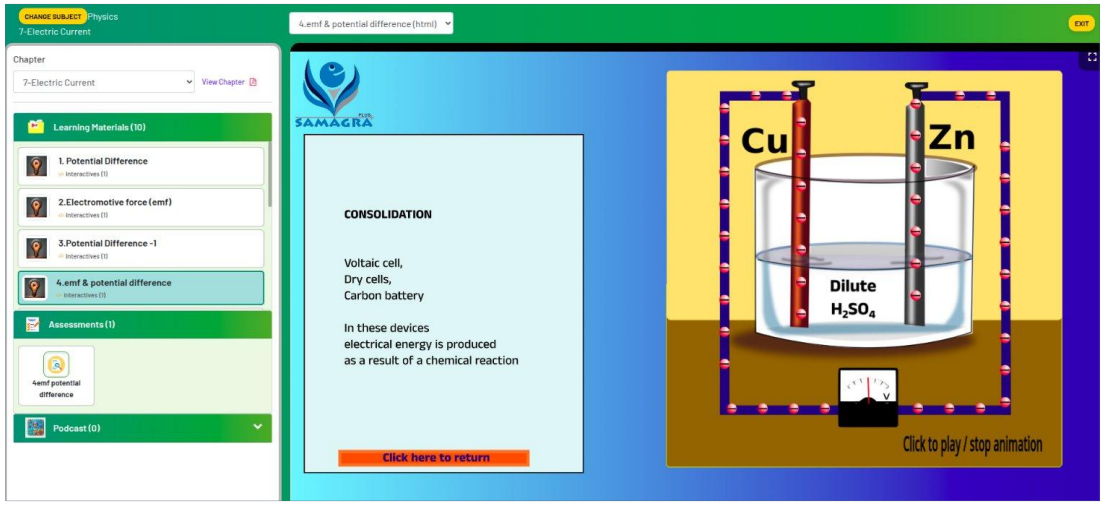
Used for academic monitoring through Samagra, and the foundation for Samagra Plus AI (see chapter 09).

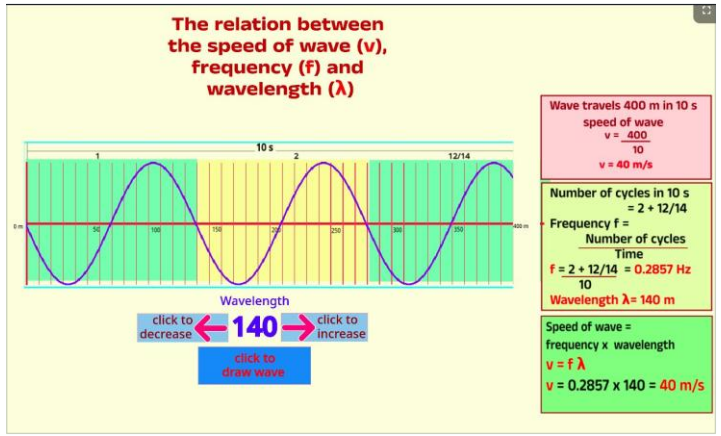


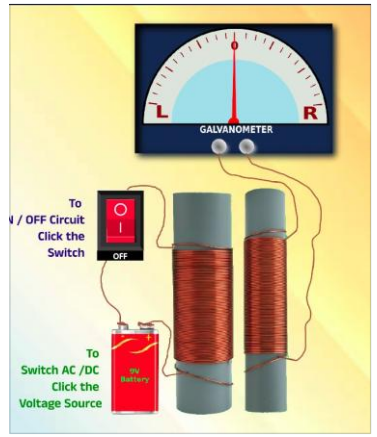
New in Samagra: Learning Room and Question Repository

- **Learning Room**
- **Activity presentation**
- **Question Repository**
- **Podcast**
- **Classroom**
- **Class Observation Report**
- **SRG Minutes**

Highlighted: the newest additions

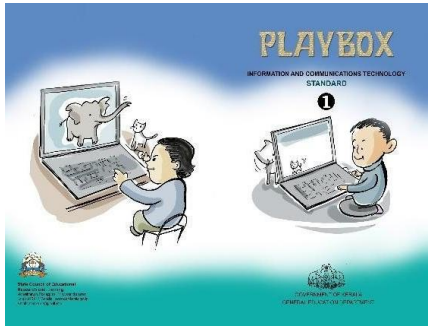


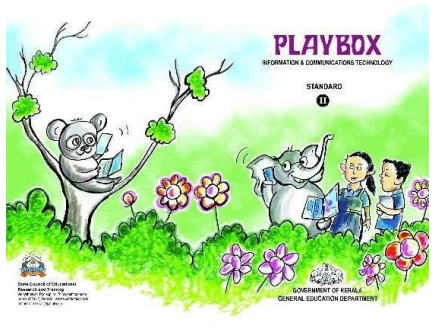


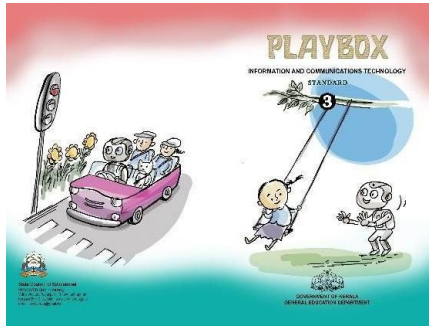


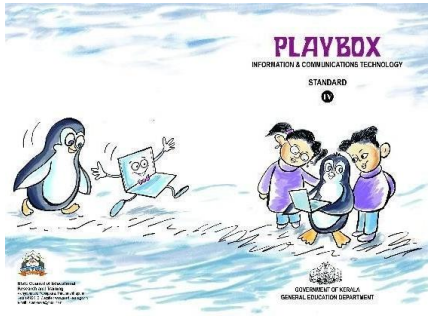
ICT textbooks for all classes

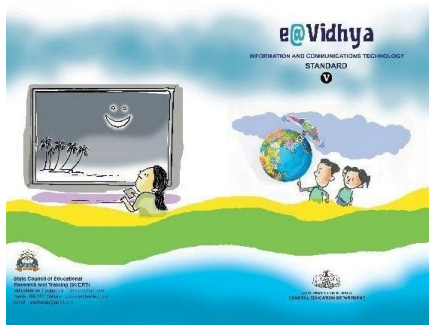
Std 1 to 8







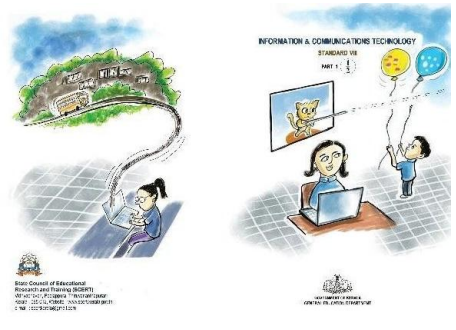


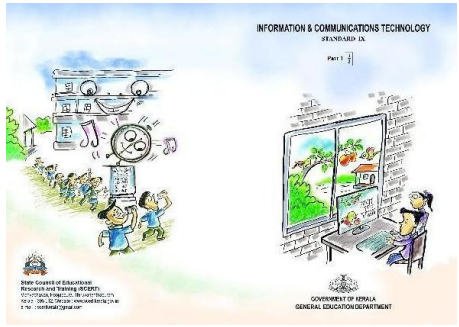




Std 9 & 10









AI in the Class 7 textbook

Robotics in the Class 10 textbook

AVGC across the new textbooks

AVGC and digital arts in the new ICT textbooks



A Animation

V Visual effects

G Gaming

C Comics

KITE integrated Animation, Visual effects, Gaming and Comics (AVGC) into the school ICT textbooks

A learning opportunity in alignment with the AVGC-XR (Extended Reality) policy introduced by the Government

The new curriculum introduces students to digital arts and music from a young age

Uses free software such as Omnitux, GCompris, Musescore, Audacity and the KITE-developed ‘Thalam’ software

School Wiki: a knowledge base of every school

A comprehensive knowledge database of all schools in Kerala

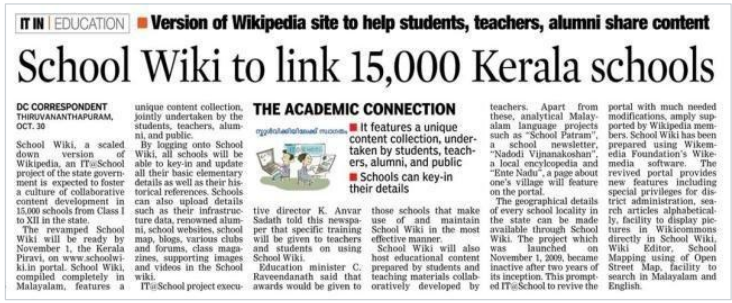
www.schoolwiki.in

1,97,533
articles

85,340
registered users

29,61,129
updates made (as on 24.02.2026)





IT IN EDUCATION ■ Version of Wikipedia site to help students, teachers, alumni share content

School Wiki to link 15,000 Kerala schools

DC CORRESPONDENT
THIRUVANANTHAPURAM, OCT. 30

School Wiki, a scaled down version of Wikipedia, an IT@School project of the state government is expected to foster a culture of collaborative content development in 15,000 schools from Class I to XII in the state.

The revamped School Wiki will be ready by November 1, the Kerala Piravi, on www.schoolwiki.in portal. School Wiki, compiled completely in Malayalam, features a unique content collection, jointly undertaken by the students, teachers, alumni, and public.

By logging onto School Wiki, all schools will be able to key-in and update all their basic elementary details as well as their historical references. Schools can also upload details such as their infrastructure data, renowned alumni, school websites, school map, blogs, various clubs and forums, class magazines, supporting images and videos in the School wiki.

IT@School project executive director K. Anvar Sadath told this newspaper that specific training will be given to teachers and students on using School Wiki.

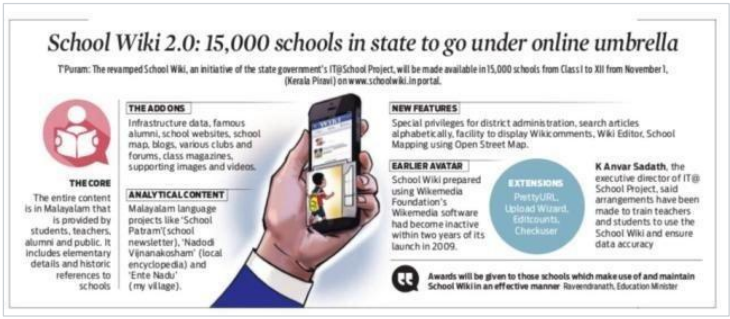
Education minister C. Raveendanath said that awards would be given to those schools that make use of and maintain School Wiki in the most effective manner.

School Wiki will also host educational content prepared by students and teaching materials collaboratively developed by teachers. Apart from these, analytical Malayalam language projects such as "School Patram", a school newsletter, "Nadodi Vijnanakosham", a local encyclopedia and "Ente Nadu", a page about one's village will feature on the portal.

The geographical details of every school locality in the state can be made available through School Wiki. The project which was launched on November 1, 2009, became inactive after two years of its inception. This prompted IT@School to revive the portal with much needed modifications, amply supported by Wikipedia members. School Wiki has been prepared using Wikimedia Foundation's Wikimedia software. The revived portal provides new features including special privileges for district administration, search articles alphabetically, facility to display pictures in Wikicommons directly in School Wiki, Wiki Editor, School Mapping using of Open Street Map, facility to search in Malayalam and English.

THE ACADEMIC CONNECTION

■ It features a unique content collection, undertaken by students, teachers, alumni, and public
■ Schools can key-in their details



School Wiki 2.0: 15,000 schools in state to go under online umbrella

T'Puram: The revamped School Wiki, an initiative of the state government's IT@School Project, will be made available in 15,000 schools from Class I to XII from November 1, (Kerala Piravi) on www.schoolwiki.in portal.

THE CORE
The entire content is in Malayalam that is provided by students, teachers, alumni and public. It includes elementary details and historic references to schools

THE ADD ONS
Infrastructure data, famous alumni, school websites, school map, blogs, various clubs and forums, class magazines, supporting images and videos.

ANALYTICAL CONTENT
Malayalam language projects like 'School Patram'('school newsletter), 'Nadodi Vijnanakosham' (local encyclopedia) and 'Ente Nadu' (my village).

NEW FEATURES
Special privileges for district administration, search articles alphabetically, facility to display Wikicomments, Wiki Editor, School Mapping using Open Street Map.

EARLIER AVATAR
School Wiki prepared using Wikimedia Foundation's Wikimedia software had become inactive within two years of its launch in 2009.

EXTENSIONS
PrettyURL, Upload Wizard, Editcounts, Checkuser

K Anvar Sadath, the executive director of IT@School Project, said arrangements have been made to train teachers and students to use the School Wiki and ensure data accuracy

Awards will be given to those schools which make use of and maintain School Wikiin an effective manner Raveendranath, Education Minister

Little KITEs members uploaded 5,000+ photographs of the State Sports Meet to School Wiki.

E³ English Language Lab: free software for language learning

- Programme to enhance the language proficiency of primary-class students
- Activities that are enjoyable, game-like, competency-based and assessment-integrated
- No need for separate hardware, centralized servers, internet or exclusive networking
- Can piggyback on the computers already in schools
- Built on the Moodle platform under GNU GPL; English and Hindi versions developed
- Impact assessment shows significant improvement in students' English proficiency



E³ Hindi Language Lab (Prayogshaala)

E³ Hindi Language Lab software, ‘Prayogshaala’, developed

163

schools: piloted across the State during 2025

3 levels

covering Grades 5 to 7

Extensive training given to Hindi teachers of Class 5 to 7

Same design principles as the English lab: free software, no extra hardware, game-like and assessment-integrated.







KITE Lens: our content generation hub

KITE Lens
Educational Content Creation Hub

INAUGURATED

15.05.2023

- Facilitates attractive, knowledgeable educational content
- Supports teachers in developing innovative, creative content
- Teachers trained to use digital cameras, smartphones and AI to produce quality digital content
- Content development process decentralised





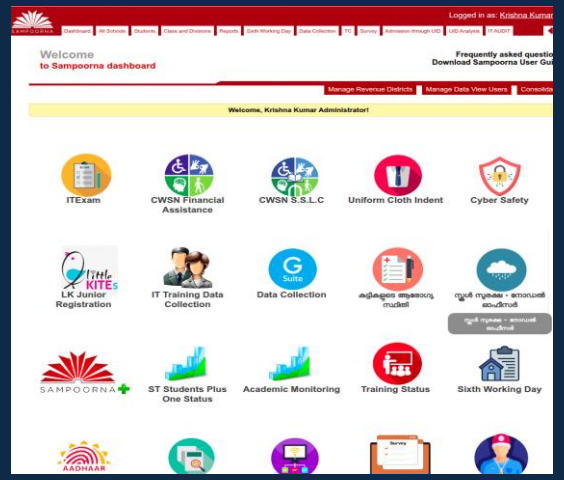




06

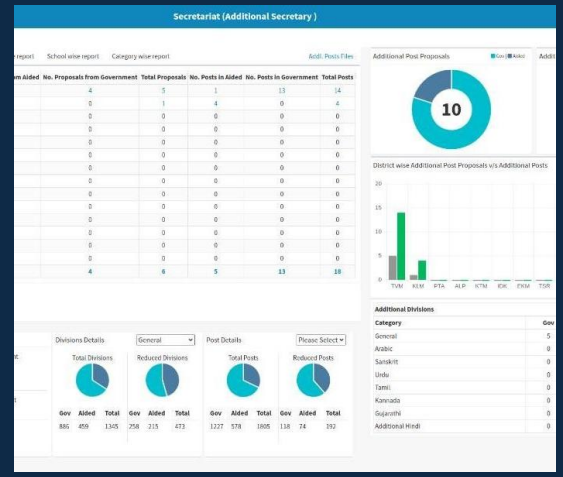
eGovernance

Sampoorna, Sametham, Sahitham, Samanwaya and more

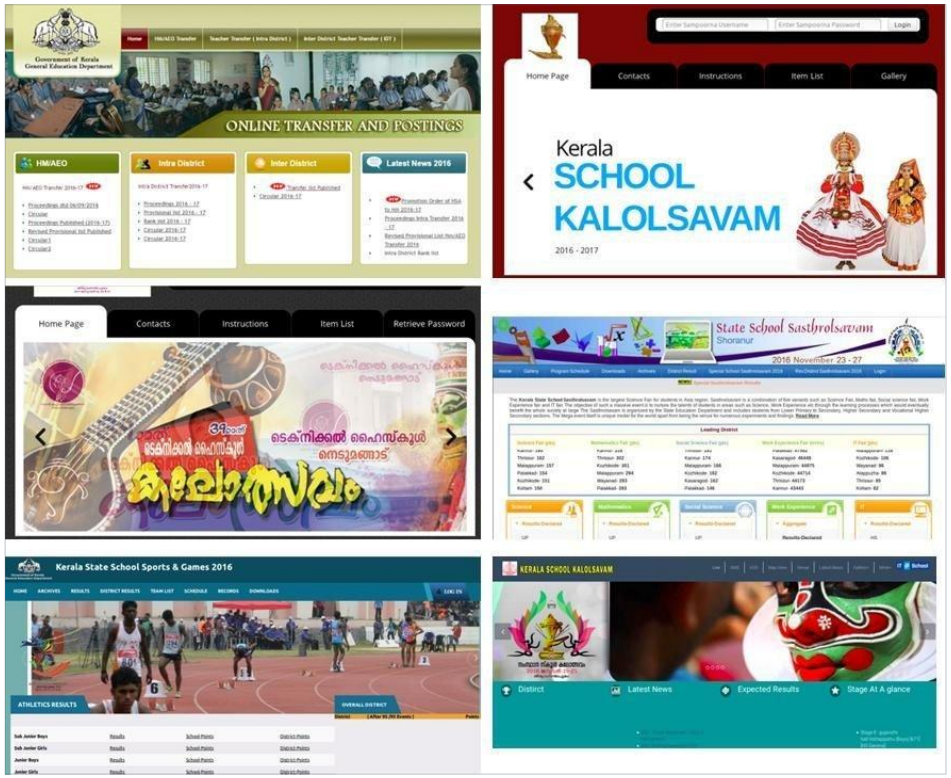








eGovernance for the General Education Department



SAMPOORNA

SAMPOORNA

School Management Software for students and teachers, Class 1 to 12

SAMETHAM
KERALA SCHOOL DATABANK

SAMETHAM

Public database of all schools in Kerala

SAMANWAYA

Staff fixation and appointment approval software

SAHITHAM

SAHITHAM

Mentoring portal for holistic development of students, Class 1 to 10

SAMPOORNA: school management software

SAMPOORNA

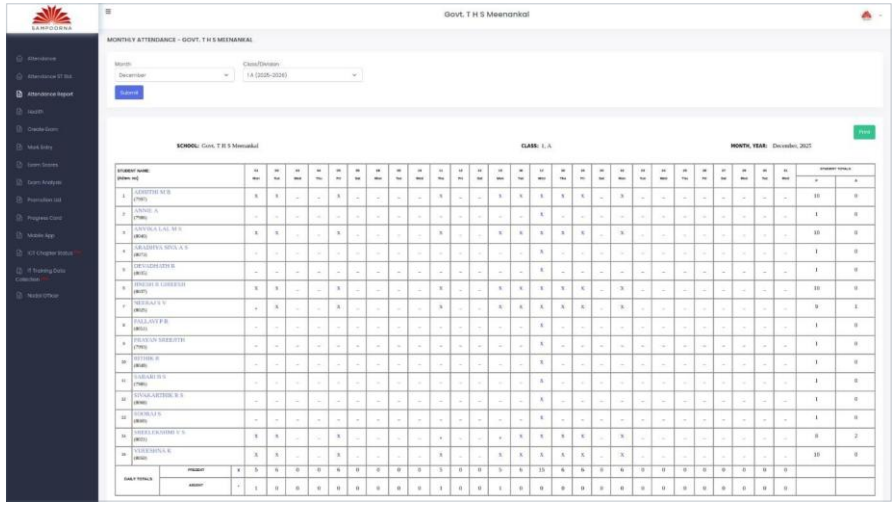
2010
in use since

1 crore+
records handled in 14 years

45 lakh
students captured every year

1.8 lakh
teachers captured every year

- Student admission, Transfer Certificates, reports and entry forms
- Sampoorna Plus mobile app records attendance, learning progress and progress reports; eases school–parent interaction
- Separate logins for students, teachers and parents; SMS alert to parents when a ward is absent









SAMETHAM: the school data bank

Academic and infrastructural details of Government, Aided and Recognised Un-aided schools in Kerala.

sametham.kite.kerala.gov.in

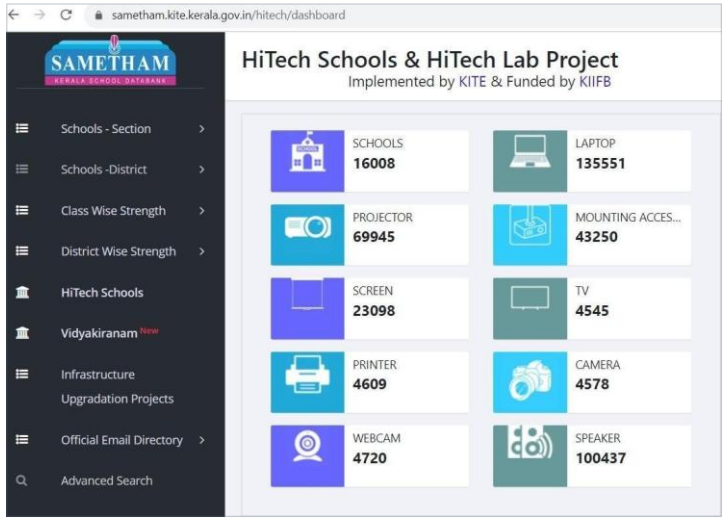
15,369
schools

43.62 L
students

1.65 L
teachers

Source of the school, student and teacher figures used throughout this presentation, and of the school-wise and district-wise ICT equipment details.



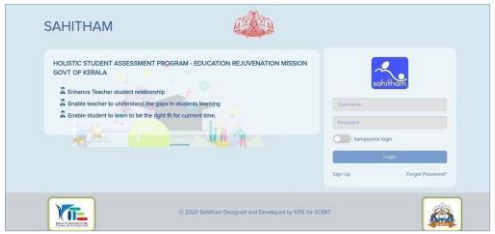


SAHITHAM: mentoring portal for Classes 1 to 7

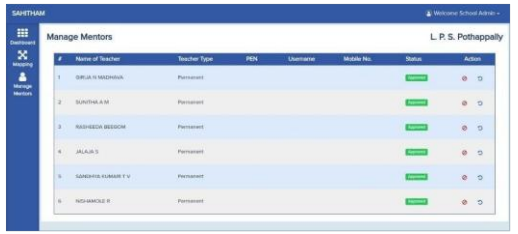
- Facilitates holistic mentoring and development of all students from Class 1 to 7
- Mentor teachers observe, study and record online, building each student's digital portfolio of academic and social-emotional skills
- Teachers use the portfolio to mentor every student across academic, social-emotional and innate qualities

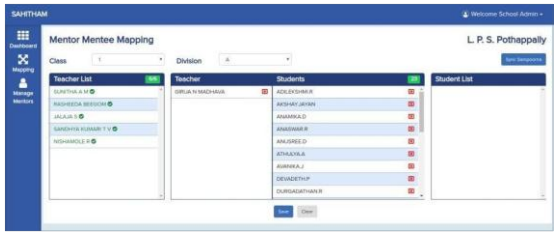
NEW: STUDENT ANALYTICS

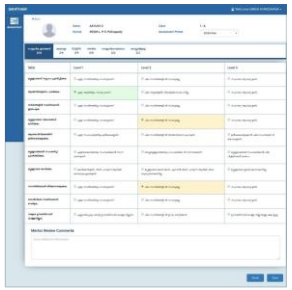
Head Masters map mentors → Teachers assess students → Analytics show each learner's progress

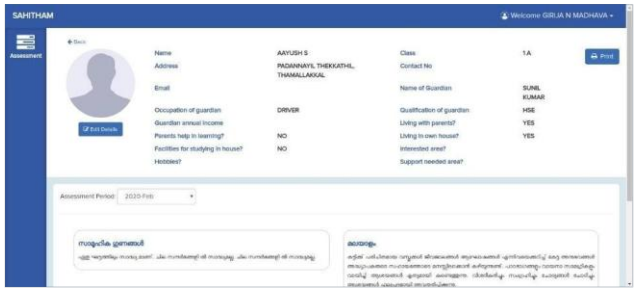




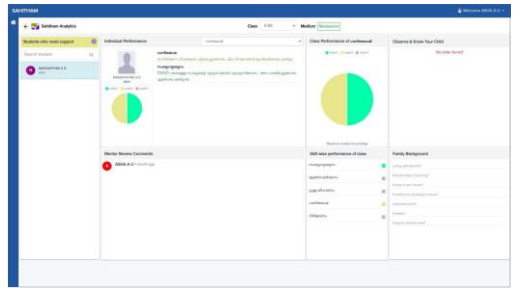






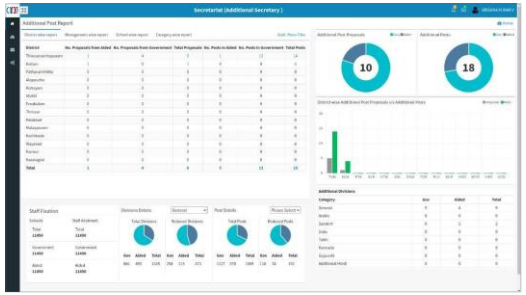


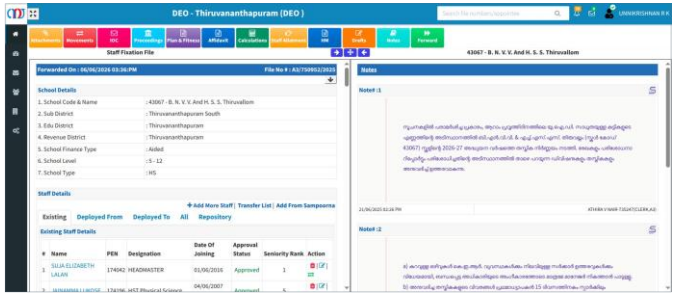


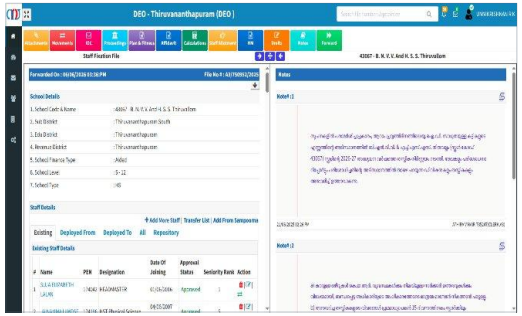


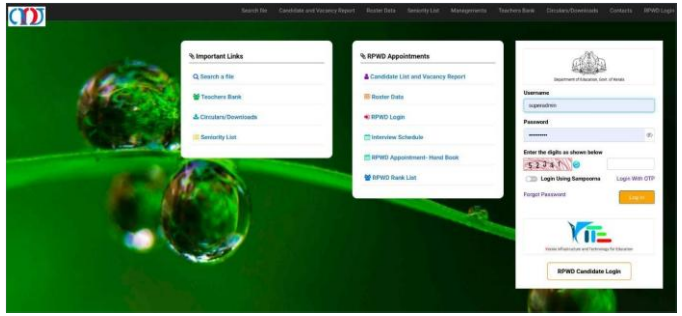
SAMANWAYA: appointment approval and staff fixation

Online approval of teacher appointments in aided schools and staff fixation for all teachers of the department. The dashboard shows applications submitted, approved, rejected and on hold, with multi-level monitoring.







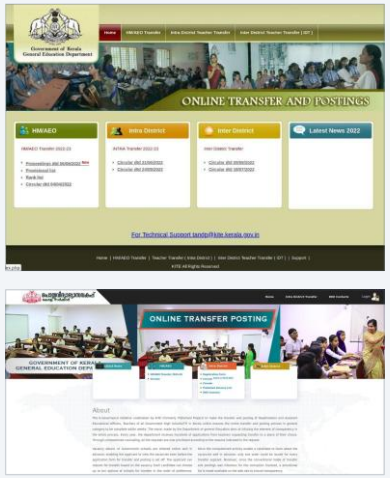


New additions

- New UI for file view, Seniority Rank list and Staff list
- Staff Fixation and Additional Post Proposal analytics dashboard

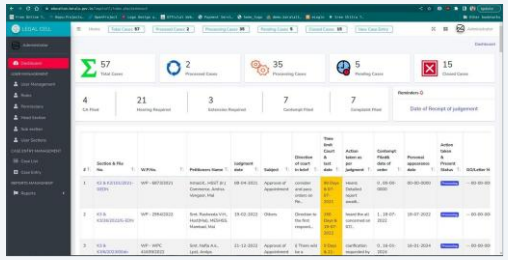
RPwD appointments: end-to-end Rights of Persons with Disabilities appointment process fully digitalised, ensuring transparency, accuracy and efficiency.

Teacher services and ICT support portals



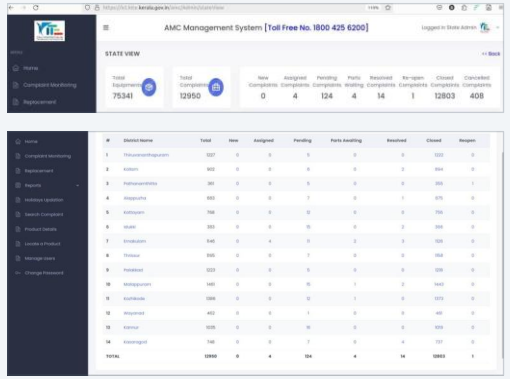
Online transfer and posting of teachers

Apply, track and process transfers by seniority and eligibility. A new portal replaces the earlier system.



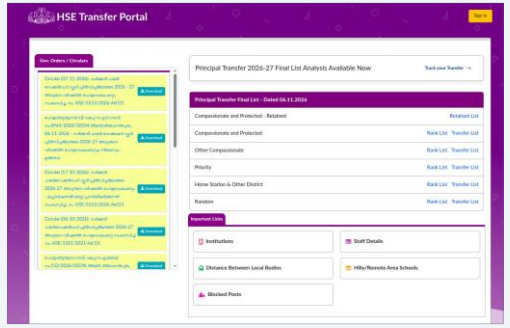
Legal cases application

New application for managing legal cases in the General Education Department.



AMC support portal

Processes AMC support for ICT equipment beyond warranty: 1,17,093 laptops and 66,209 projectors.



Higher Secondary Principal and Teachers transfer

Portal for managing transfers and postings of Higher Secondary School Principals and Teachers.

Portals for student programmes and guidance



NSS Digital Portal

- PRISM: Platform for Responsible Initiative and Service Management
- 1,529 higher secondary units, 2 lakh students



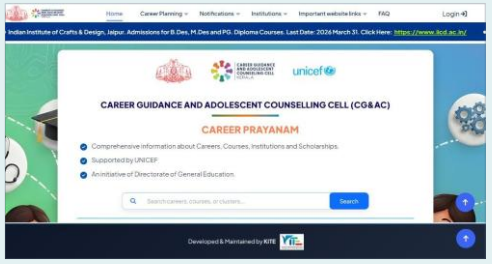
Students Saving Scheme

- Promotes thrift, financial discipline and responsible money management
- Builds financial literacy from an early age



Student Police Cadet

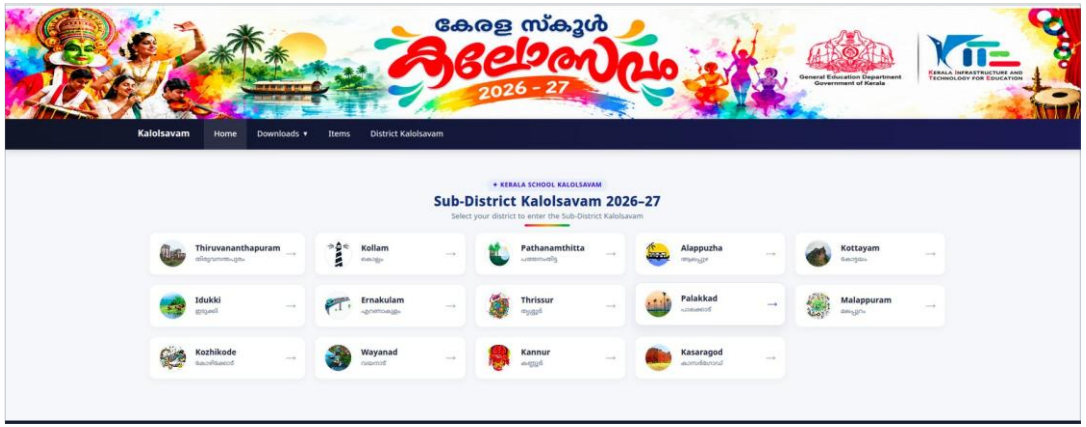
- Registration, activity planning, attendance and score entry
- Secure data handling; Government IT and security standards



Career Prayanam

- Supported by UNICEF; careerprayanam.education.kerala.gov.in
- 400 careers, 900 institutions, 1,000 employers

Digitalising Kalolsavams: arts, sports and fairs



ulsavam.kite.kerala.gov.in

Sports: portal features

- Sub-District, Revenue District and State championships
- Athlete registration and eligibility verification
- Event scheduling and result processing
- Automated qualification and advancement logic
- Consolidated reporting and analytics

Kalolsavams: portal features

- Official notifications
- Online registration of schools and participants
- Contestant details, programme and venue scheduling
- Fee collection and payment tracking
- Result entry, verification and publication
- Reports at sub-district, district and State levels

EVENTS COVERED

- Kerala School Kalolsavam
- Special School Kalolsavam
- TTI / PPTTI Kalolsavam
- Varnappakittu (Transgender Kalolsavam), Social Justice Dept
- Sargolsavam, Scheduled Tribe Dept
- Technical School Kalolsavam, Technical Education Dept
- Kerala School Sports and Games
- Technical School Sports, Technical Education Dept
- Kalikkalam, Scheduled Tribe Dept

07

Media and reach

KITE VICTERS, PM eVidya, First Bell and Haritha Vidyalayam









KITE VICTERS: the complete educational channel

KITE VICTERS

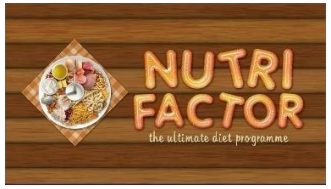
victers.kite.kerala.gov.in

- Educational programme: First Bell Digital Classes
- Live streaming of events over social media handles
- Content developed by in-house teams and teachers; tie-ups with institutions and media firms













24/7

Operational since 2006, telecasting round the clock

93%+

of households in Kerala covered; available on all DTH and cable networks

3.34 M

subscribers on the KITE VICTERS YouTube channel

New programmes and 100 hours of live sports

100 hours

of live feed of the Kerala School Sports Meet

- December 2024: KITE facilitated 100 hours of live telecast of the Kerala School Sports Meet on KITE VICTERS
- Later uploaded to its YouTube channel
- Little KITEs members uploaded 5,000+ images to School Wiki
- Portal sports.kite.kerala.gov.in gave registration, results, progress and meet records

New programme: Mukulam, entrance coaching classes




मेरी मछली नहीं मेरी मछली ecube Hindi Level 3



KITE gives technological edge to coverage of State school sports meet

KITE Victers, a State-owned free-to-air children's educational entertainment television channel, is broadcasting live visuals from three key venues starting from 6.30 a.m. till 8 p.m. every day

The Hindu Bureau

KOCHI

The Kerala Infrastructure and Technology for Education (KITE), under the Department of General Education, has implemented a range of technological solutions to give a high-tech edge to the organisation and coverage of the latest edition of the Kerala School Sports & Games 2024 here.

The idea is to ensure that the latest edition lives up to its billing of being modelled along the Olympic Games by combining athletics and games for the first time ever in the history of the meet.

Expanded coverage

Unlike previous years when coverage focussed on a primary venue, this time around all 17 venues were being covered with expanded facilities, for which a team of over 70 technical personnel had been deployed, said K. Anvar Sadath, chief executive officer of KITE.

All 17 venues are being covered with expanded facilities, for which a team of over 70 technical personnel has been deployed

K. ANVAR SADATH
CEO of KITE

KERALA INFRASTRUCTURE AND TECHNOLOGY FOR EDUCATION

KITE Victers, a State-owned free-to-air children's educational entertainment television channel owned and operated by KITE, is broadcasting live visuals from three key venues starting from 6.30 a.m. till 8 p.m. every day. The main studio has been set up at the Maharaja's College ground with additional coverage from the Kadavanthra Regional Sports Centre and M.A. College, Kothamangalam. A deferred live model will be followed in the case of other venues.

Highlights

Deployment of helicam for real-time streaming of cycling events will be one of the highlights of the coverage.

Cycling events in the Under-19 category for boys and girls will be held on the picturesque Container Terminal Road on November 8.

Besides, sprint events are also being covered using helicam. Live telecast, which commenced with the inaugural ceremony on Monday, includes detailed updates on results, point standings, interviews, and slow-motion replays of finals on KITE Victers. Renowned sports commentators from the Athletics Federation of India, including Sreekumaran Nair, Griselda Xavier, Abhilash, Simi Maryam, and Mahesh, have been roped in to provide full-time commentary.

Viewers can also tune in via the KITE Victers app, victers.kite.kerala.gov.in, KITE's YouTube channel itsvicters, and the e-Vidya Kerala channel.

Photo updates

In addition, SchoolWiki, KITE's dedicated platform (www.schoolwiki.in), has been giving continuous photo updates from all 17 venues. Under the guidance of Little KITES, a network of IT clubs featuring over one lakh student members, student teams have been engaged in handling documentation, creating promotional videos, fillers, and social media reels. Students from Kerala Media Academy are also participating in the documentation activities.

PM eVidya channels and First Bell 3.0

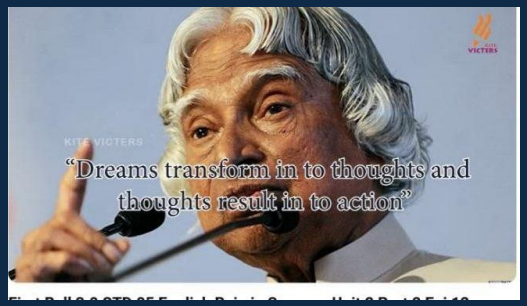
5 PM eVidya channels for Grades 1 to 12



Ch 103	Class 1 to 4
Ch 104	Class 5 to 8
Ch 105	Class 9 to 10
Ch 106	Class 11 and 12
Ch 107	General edutainment programmes

Telecast started in July 2023.

First Bell 3.0 (2025–26)





- Telecast on KITE VICTERS from July 2025
- Content on the updated curriculum for Classes 1 to 10
- Over 1,000 videos developed, emphasising academic activities
- Primary lessons carry more activities for interactive learning
- Video lectures for value education; core subjects: Science, Mathematics, Social Science and English

Covid-19 in 2020: keeping learning alive

30 Jan — Kerala reports the first Covid case in India

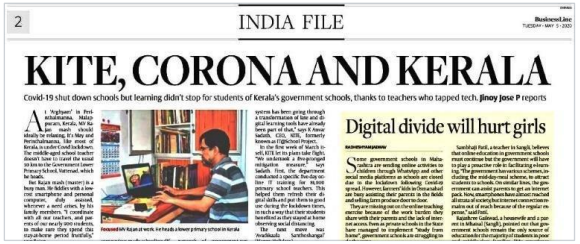
17–25 Mar — Schools closed; online training provided to 74,000 teachers

23 Mar — Complete lockdown imposed in the country

Apr–May — Student engagement programmes: Avadhikala Santhoshangal and Akshara Vriksham

> ***"We could achieve this as a result of our various programmes spanning over a decade."***







First Bell digital classes, 2020 to 2022

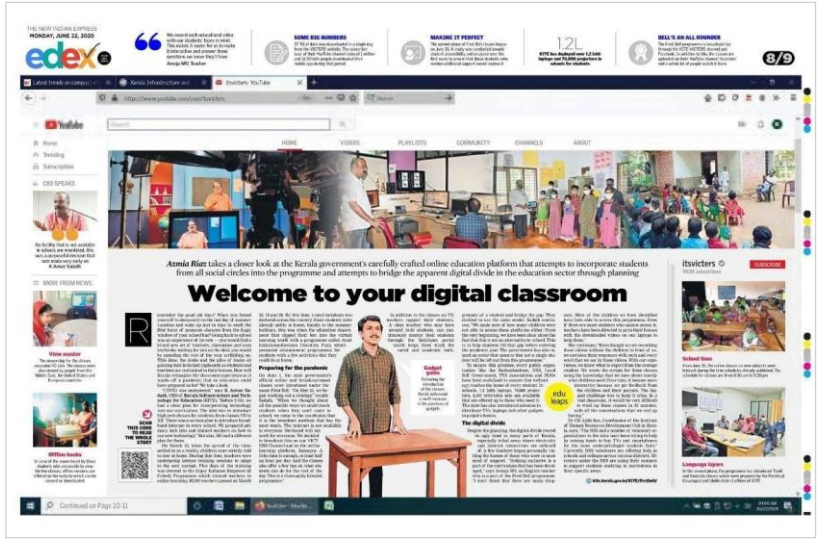
18,000

digital classes prepared by teachers

2 years

01.06.2020 to 30.05.2022

- An interim arrangement for regular classes in the wake of the pandemic
- Broadcast through KITE VICTERS with Facebook LIVE and the YouTube channel
- Classes prepared by teachers; all content FOSS-based
- First week was a trial run; regular classes began in the second week of June 2020





Haritha Vidyalayam: a national stage for schools



First of its kind in the country: a platform for schools to showcase unique initiatives and best practices

Editions: 2011, 2017, 2022 and the 4th in 2026

Telecast on KITE VICTERS; all videos at hv.kite.kerala.gov.in

SEASON 4 SELECTION FUNNEL

885 schools applied

86 schools in 1st round

20 schools in 2nd round







08

People and inclusion

KOOL, Little KITEs, parents, and learners with special needs









Empowering teachers, students, parents and the public

SEVEN TRAINING STREAMS

1. Training for teachers through KOOL
2. Training for Little KITEs students
3. Visual media literacy
4. ICT training for parents
5. Cyber safety training
6. Artificial Intelligence (AI) training
7. Academic monitoring through Samagra



60,283

teachers trained through KOOL

KOOL: KITE's Open Online Learning

MOOC-based platform for teacher training; 60,283 teachers trained. Teachers themselves became trainers, with no external IT resource engaged. Passing a KOOL course is mandatory for probation.



Teachers trained in ICT, hardware and content development, and in subject- and syllabus-wise modules.

Little KITEs: India’s largest student ICT network

Student IT clubs formed in 2,174 schools to use ICT creatively in learning

- Supports the upkeep of 4.50 lakh ICT equipment in schools
- 20–40 students in each school, supported by 2 teachers
- Trained in Animation, Robotics and IoT, Hardware, Electronics, Language Computing, Cyber Safety, Mobile App Development and Artificial Intelligence







1.80 lakh
active members

3.57 lakh
members so far

4 lakh
parents trained in digital media literacy

19.66 lakh
students trained to identify and prevent fake news

Little KITEs Awards, July 2026







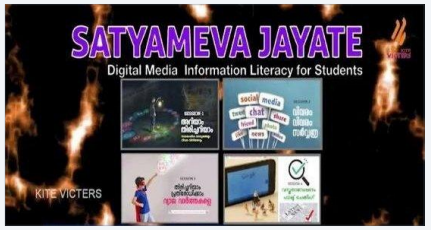


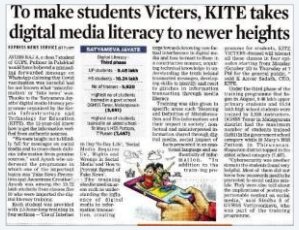


The Hon. Chief Minister handed over trophies, prize awards and citations to the best Little KITEs IT clubs at State and district levels.

Digital literacy and cyber safety for all

Satyameva Jayate: students




To make students Victers, KITE takes digital media literacy to newer heights

- **Phase 1** Awareness through KITE VICTERS
- **Phase 2** Training for students of Class 8 to 12
- **Phase 3** Training for students of Class 5 to 12
- **Phase 4** In Class 5 to 7 textbooks
- **Phase 5** In Class 5 to 10 textbooks

Trains students to identify and prevent fake news: 19.66 lakh students and 2 lakh teachers trained; telecast on KITE VICTERS.

ICT training for parents











Sl no	District Name	Total
1	Thiruvananthapuram	27295
2	Kollam	23347
3	Pathanamthitta	13111
4	Alappuzha	23232
5	Kottayam	19300
6	Idukki	9685
7	Ernakulam	27870
8	Thrissur	23319
9	Palakkad	24812
10	Malappuram	134216
11	Kozhikode	23940
12	Wayanad	10127
13	Kannur	21599
14	Kasaragod	19307
Total Number of Parents Trained:		401160

Delivered by Little KITEs students: safe use of smartphones and the internet, passwords, OTPs, fake-news identification, cyber attacks and online transactions. **Over 4 lakh parents trained.**

UNICEF: Little KITEs is a global model



Empowering Adolescents with Future-Ready Skills: The Inspiring Story of Little KITEs

unicef.org/india/reports/empowering-adolescents-future-ready-skills-study-little-kites-programme

KEY OBSERVATIONS OF THE STUDY

1. Builds student abilities in learning digital technologies and learning through them
2. Cultivates higher-order thinking skills
3. Collaborative knowledge construction
4. Gender inclusivity in STEM
5. Active participation in school life
6. Universal reach in educational equity
7. Contribution to a knowledge society
8. Parental involvement and training
9. Community connect
10. Students could create school magazines

Little KITEs in the spotlight



KITE ignites their passion

VINOD NEDUMUDY|DC
KOCHI, AUGUST 8

Muhammed Hudaif, Class X student of Markaz HSS, Karanthur, was 'plotting' with the device that he had developed using robotics at the Startup Complex, Kalamassery, on Thursday, shortly after General Education Minister Prof C. Raveendranath left after inaugurating a camp for the techies of future.

The device was made by Muhammed using the Rapsberry Pi, a pocket-sized computer that the Kerala Infrastructure and Technology for Education (KITE) had provided him. The external components of the device were made using the parts of a CD drive, key board and cabinet. He developed the device using the facility at an Atal Tinkering Lab set up by the central government in a school nearby.

"This device could 'plot' pictures from an image on the screen on a paper down and in the larger application it can fix metal parts in a frame," said Muhammed. He is one among the many there.

One student showcased a Smart Cupboard, another a Smart Agriculture Field and yet another a Smart Eco Waste Basket, to name a few.

Students from various districts exhibiting their robotic innovations at Little Kite two-day state level camp at Kerala Startup Complex in Kochi on Thursday. – SUNOJ NINAN MATHEW.

The students numbering 231 have been brought to the Startup Complex by KITE under the department of education which gave the young ones a Rapsberry Pi each and some training in robotics and animation while asking them to play with each to improvise and innovate with their own ideas. The bright young minds ignited the Startup Complex with their unique solutions in a two-day state camp that began on Thursday. The camp is being organised by the KITE in association with Kerala Startup Mission.

From robotics to animation to artificial intelligence to augmented reality and virtual reality, they are leaving no stone unturned to leap into the future experimenting with and displaying their exhibits and learning lessons from the experts that KITE and Startup Mission have lined up for them in the camp. The 231 Class X students for the state camp were selected in a two-layer screening.

First, KITE conducted a sub-district-level camp in which 13,404 students participated out of whom, 1143 were selected to participate in district-level 'Little KITEs' camp. Finally the 231 students were selected for the state camp based on their improvised and innovative technical output. KITE vice-chairman K. Anwar Sadath and Startup Mission CEO Dr Saji Gopinath are heading the state camp.



TAKING TO THE TECH WORLD

Technology floors the new generation, but there are hardly any efforts to create a platform for them to engage with it. The KITE state level camp, organised at Kalamassery recently, sought to plug that gap. The 231 Class X students drawn from state schools made the most of the start-up eco-system.

DC CORRESPONDENT
KOCHI, AUG. 21

Students working on their projects at the state level KITE camp organised in Kalamassery

THE CAMP VERY WELL DEMONSTRATED THE TREMENDOUS POTENTIAL OF OUR BUDDING TECHIES, ACCORDING TO K. ANVAR SADATH, VICE-CHAIRMAN AND EXECUTIVE DIRECTOR, KITE.

Muhammed Hudaif of Markaz HSS, Karanthur, with his line plotter

T. Devananda of CKGMHS, Chingapuram, with her smart solar harvest system



IN FOCUS: KITE

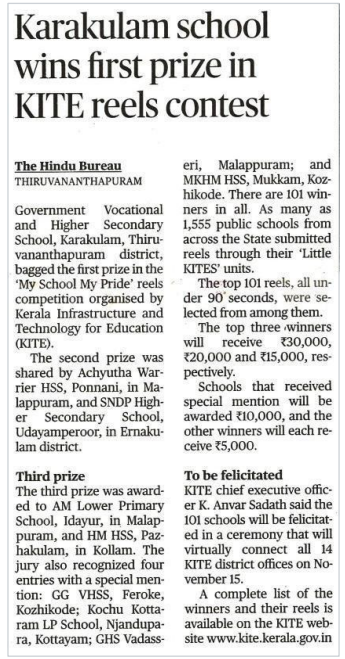
KITE'S Role in Kerala's AI-ENABLED CLASSROOM REVOLUTION

Over the past two decades, Kerala Infrastructure and Technology for Education (KITE), formerly IT@School, has led a digital transformation in Kerala's education sector. Since 2001, KITE has advanced initiatives in teacher training, ICT content creation, and digital infrastructure. Today, its scope includes AI training for teachers, student robotics programs, and AI curriculum integration—making Kerala a global model for technology-enabled education.

Transforming Classrooms

As part of the state's Public Education Rejuvenation Mission, KITE led the Hi-Tech School Project (2016–2019), converting 45,000 classrooms across 4,752 schools into hi-tech learning spaces. Each classroom was equipped with a laptop, projector, speakers, and access to SAMAGRA, KITE's digital content portal. Following this, the Hi-Tech Lab Project extended similar upgrades to 11,257 primary schools. Over 450,000 ICT devices were deployed, supported by broadband internet and a robust support system, including maintenance contracts and a dedicated call center.

62 JUNE 2025



Karakulam school wins first prize in KITE reels contest

The Hindu Bureau
THIRUVANANTHAPURAM

Government Vocational and Higher Secondary School, Karakulam, Thiruvananthapuram district, bagged the first prize in the 'My School My Pride' reels competition organised by Kerala Infrastructure and Technology for Education (KITE).

The second prize was shared by Achyutha Warrier HSS, Ponnani, in Malappuram, and SNDP Higher Secondary School, Udayamperoor, in Ernakulam district.

Third prize

The third prize was awarded to AM Lower Primary School, Idayur, in Malappuram, and HM HSS, Pazhakulam, in Kollam. The jury also recognized four entries with a special mention: GG VHSS, Feroke, Kozhikode; Kochu Kottaram LP School, Njandupara, Kottayam; GHS Vadasseri, Malappuram; and MKHM HSS, Mukkam, Kozhikode. There are 101 winners in all. As many as 1,555 public schools from across the State submitted reels through their 'Little KITES' units.

The top 101 reels, all under 90 seconds, were selected from among them.

The top three winners will receive ₹30,000, ₹20,000 and ₹15,000, respectively.

Schools that received special mention will be awarded ₹10,000, and the other winners will each receive ₹5,000.

To be felicitated

KITE chief executive officer K. Anvar Sadath said the 101 schools will be felicitated in a ceremony that will virtually connect all 14 KITE district offices on November 15.

A complete list of the winners and their reels is available on the KITE website www.kite.kerala.gov.in

Taking to the tech world

Students are trained in Artificial Intelligence, Robotics, Animation and much more.

Reels challenge

"Ente School Ente Abhimanam" (My School My Pride) built Little KITEs members' video skills. Students handled anchoring and interviews: 101 winners from 1,555 schools.

Supporting those who are needy and special

White Board Project

0.125 million differently abled students and 2,500 resource teachers; class videos uploaded to a dedicated YouTube channel

Online advanced computer training

Inaugurated for visually challenged teachers

Regional-language classes

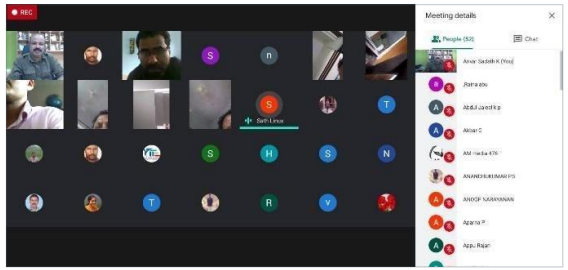
YouTube channels for Tamil classes (Idukki, Palakkad) and Kannada classes (Kasaragod)

Mazhavil Poovu for tribal students

Classes prepared in 13 tribal languages with 2,500 resource teachers; videos on YouTube









Kerala Begins E-Learning In Tribal Dialects For Students In Wayanad

Under the project Implemented by Samagra Shiksha Kerala (SSK), the mentors translate the Malayalam content aired through the government-run education channel Kite Victers, into tribal dialects.

The Logical Indian Crew

Kerala | 13 July 2020 / Updated : 14 July 2020 9:06 AM



Teachers as creators: film-making and IT Fest

Mobile film-making workshop

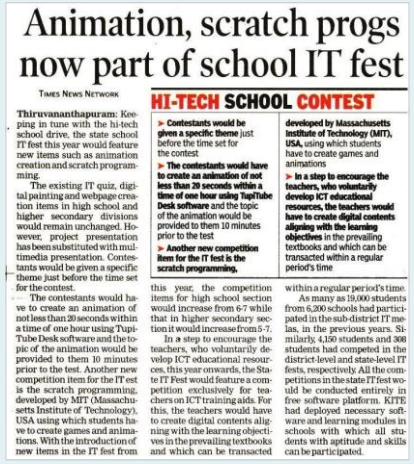
A 7-day course in film-making using mobile phones for 30 selected teachers.





IT Fest for students and teachers

- 7 competition items, including newly added Animation and Scratch programming
- Spot demonstration as part of Multimedia Presentation
- First-of-its-kind ICT Training Aids competition for teachers



Animation, scratch progs now part of school IT fest

TIMES NEWS NETWORK

HI-TECH SCHOOL CONTEST

Thiruvananthapuram: Keeping in tune with the hi-tech school drive, the state school IT fest this year would feature new items such as animation creation and scratch programming.

The existing IT quiz, digital painting and webpage creation items in high school and higher secondary divisions would remain unchanged. However, project presentation has been substituted with multimedia presentation. Contestants would be given a specific theme just before the time set for the contest.

The contestants would have to create an animation of not less than 20 seconds within a time of one hour using TupiTube Desk software and the topic of the animation would be provided to them 10 minutes prior to the test. Another new competition item for the IT fest is the scratch programming, developed by MIT (Massachusetts Institute of Technology), USA using which students have to create games and animations. With the introduction of new items in the IT fest from this year, the competition items for high school section would increase from 6-7 while that in higher secondary section it would increase from 5-7.

In a step to encourage the teachers, who voluntarily develop ICT educational resources, this year onwards, the State IT Fest would feature a competition exclusively for teachers on ICT training aids. For this, the teachers would have to create digital contents aligning with the learning objectives in the prevailing textbooks and which can be transacted within a regular period's time.

As many as 19,000 students from 6,200 schools had participated in the sub-district IT melas, in the previous years. Similarly, 4,150 students and 308 students had competed in the district-level and state-level IT fests, respectively. All the competitions in the state IT fest would be conducted entirely in free software platform. KITE had deployed necessary software and learning modules in schools with which all students with aptitude and skills can be participated.

- Contestants would be given a specific theme just before the time set for the contest
- The contestants would have to create an animation of not less than 20 seconds within a time of one hour using TupiTube Desk software and the topic of the animation would be provided to them 10 minutes prior to the test
- Another new competition item for the IT fest is the scratch programming, developed by Massachusetts Institute of Technology (MIT), USA, using which students have to create games and animations
- In a step to encourage the teachers, who voluntarily develop ICT educational resources, the teachers would have to create digital contents aligning with the learning objectives in the prevailing textbooks and which can be transacted within a regular period's time





Cyber Safety Protocol 2026 for school children



The revised protocol KITE issued to every public school on 7 March 2026 (Circular KITE/2026/1065): a safe digital learning environment where AI is used responsibly.

THE FOUR Cs OF RISK

Content · **Contact** · **Conduct** · **Contract**

AI grooming, deepfake blackmail, voice cloning, online luring, cyberbullying, harmful content, data breaches and excessive screen time.

Head of institution

Safe, supervised internet access; school cyber safety committee

Teachers

Guide safe, responsible use, including AI tools

Students

Protect passwords, think before sharing, report problems

Parents

Know the apps, set screen-time limits, listen without blame

HOW IT REACHES SCHOOLS

Cyber Safety Clinics, ICT textbooks for Classes 1–10, Little KITEs clubs, Samagra Plus and KITE VICTERS.

Report cybercrime: call 1930

or cybercrime.gov.in. Inform the school coordinator first.

09

AI and robotics

Samagra Plus AI, the AI curriculum, robotic kits and training









AI at KITE: five stages of progress

1

AI training for teachers

Awareness about AI technology, teaching tools and pedagogical approaches; responsible AI

For: Teachers

Completed

2

AI in the school curriculum

Introduction from Class 7: practical applications, programming and robotics, ethical AI focus, inclusive learning

For: Teachers and students

Completed

3

Samagra AI engine

Integration of an LLM to provide various services to students and teachers

For: Teachers and students

Progressing

4

AI insights for the public

Video series on the basics of AI, giving AI literacy to the public through KOOL and KITE VICTERS

For: General public

Completed

5

AI-enabled research

Tools and practices that can be integrated into research

For: Research scholars, college students, faculty

In pipeline

Milestones: AI training for 80,000 teachers (2024); AI Essentials course for the public (2025); Samagra Plus AI and AI training for 6 lakh parents (2026). Source: KITE About page.

AI learning in the school curriculum

- AI learning is part of the Class 7 ICT textbook
- First time in the country that all students in a class learn AI in a uniform manner
- **4 lakh Class 7 students** become familiar with AI
- A Computer Vision chapter helps students create their own AI program that recognises human facial expressions



Kerala includes AI learning in school texts

TIMES NEWS NETWORK

Thiruvananthapuram: With the introduction of Artificial Intelligence (AI) learning in the Information & Communication Technology (ICT) textbook of Class VII, over 4 lakh students in Kerala are set to get familiar with AI in the ensuing academic year.

One of the activities in the 'Computer Vision' chapter will involve students creating their own AI programme that can recognize human facial expressions. This programme will be able to identify up to seven different emotions on a person's face.

FIRST IN THE COUNTRY

"It is the first time in India that all students in a class are getting an opportunity to learn AI uniformly", said K Anvar Sadath who is the Chairman of ICT Textbook Committee and the CEO of KITE.

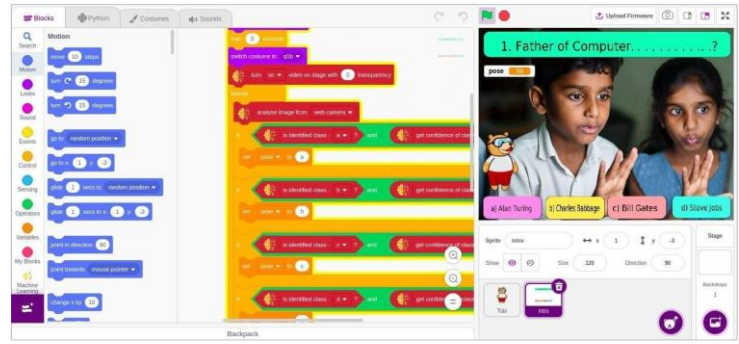
The 'PictoBlox' package, along with 'Scratch' software that teaches visual programming, has been introduced in the textbooks to enable students to practice programming, AI, robotics, etc. Kerala Infrastructure and Technology for Education (KITE), the technology arm of the general education department, will make available all the essential software for this in the laptops deployed in schools.

The new ICT textbooks for Classes I and III include FOSS (Free and Open-Source Software) based educational applications such as GCompris, eduActiv8, OmniTux, and TuxPaint which cover drawing, reading, language learning, numeracy, operations, and rhythm.

In addition to these, applications developed by KITE such as Traffic Signal - through which children learn about traffic rules, and Waste Challenge - which teaches waste disposal through gaming mode are also included in the ICT textbook. Further, language labs are also featured in the new textbooks.

"The new ICT textbooks present practical ICT activities that nurture life skills while also helping in studying other subjects and providing guidance on cybersafety and fake news identification", Anvar said.

KITE commenced the AI training for 80,000 secondary school teachers from May 2 this year onwards and so far 20,120 teachers completed the training.



A PROGRESSION FROM CLASS 7 TO 12 (KITE AI PORTAL)

Class 7

How AI works; face detection; a model that recognises seven facial expressions

Class 8

Machine learning, including a model for Indian Sign Language

Class 9

Natural language processing, LLMs, prompt engineering and AI agents

Class 10

Robotics: a face-recognition "smart door" built with Arduino

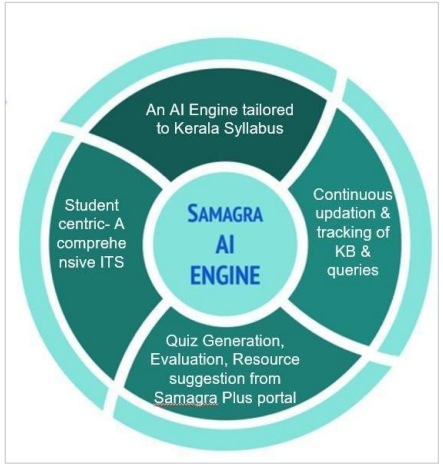
Class 11 & 12

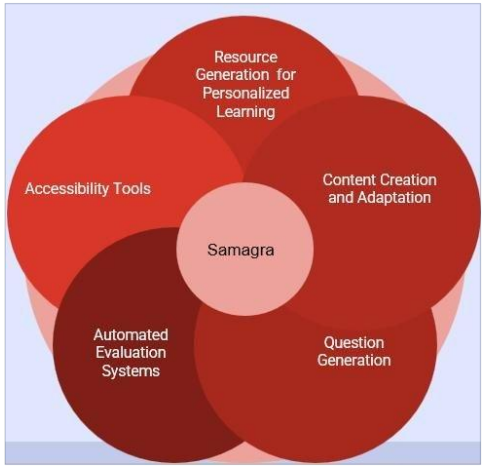
Empower teachers with thousands of digital interactive resources and AI-generated questions to enhance classroom teaching and support students' self-learning.

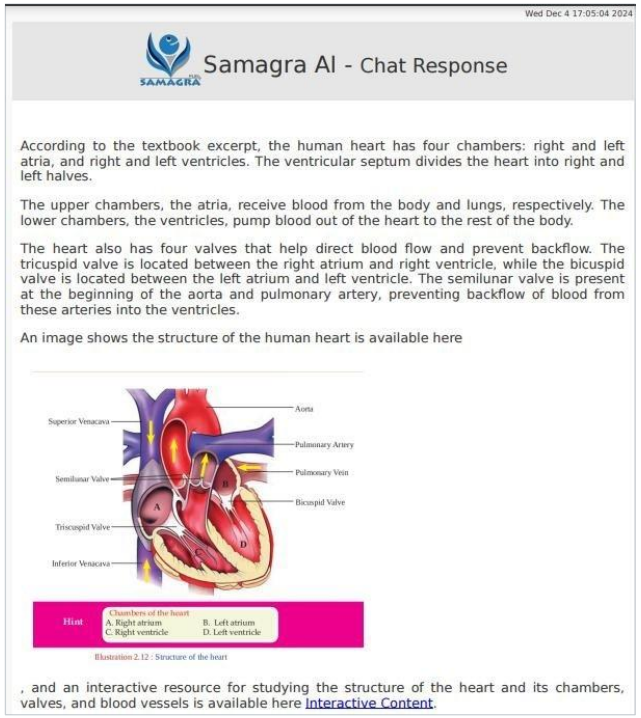
Samagra Plus AI: Kerala's indigenous AI engine

Our own AI engine, developed and prototyped by KITE: AI-powered tools and innovations that revolutionise education.

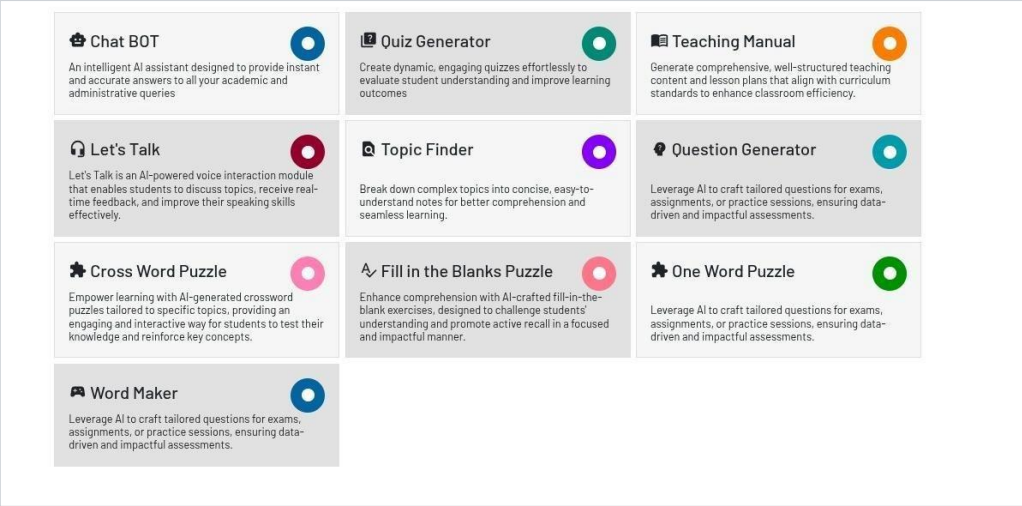
- Built on the Samagra Resource Portal: content developed by teachers using FOSS tools
- Part of the Samagra Plus platform: Classroom, Learning Room and Canvas Connect
- Curriculum-aligned services for students and teachers (as described on KITE's AI portal)

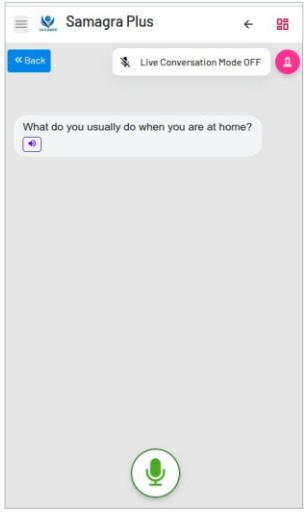


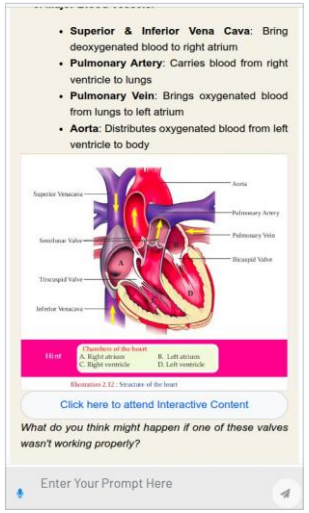


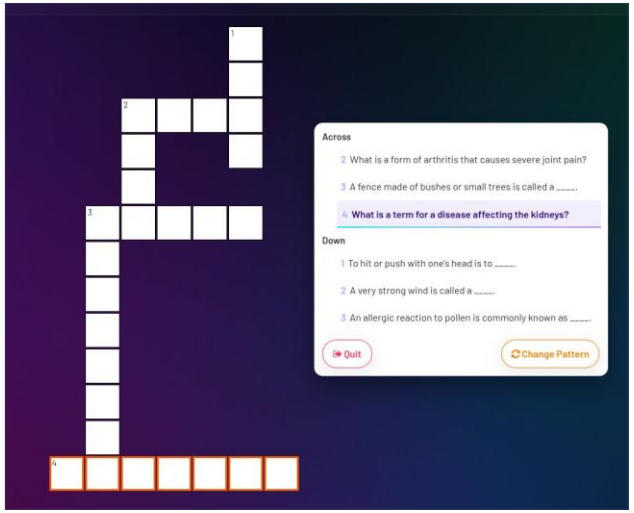


Samagra Plus AI tools in action









SERVICES FOR STUDENTS AND TEACHERS

- **Teaching Manual generator (new)**
- Multilingual translation: English, Malayalam, Tamil, Kannada
- 24/7 concept-explanation chatbot
- Quiz generator and HOTS question generation
- “Let’s Talk” speaking practice
- 5,000+ teacher-vetted AI learning resources

The KITE model for Responsible AI in schools

1. Basics of AI and Machine Learning introduced to students

2. Gesture-based software leveraged for Children with Special Needs (CWSN)

3. Little KITEs students harness AI to assist CWSN

Ethical and inclusive use of AI is a stated focus from the first lesson.



The Telegraph

16-08-2024

MODULES ON FACT-CHECKING

Kerala schools teach kids how to detect fake news

K.M. RAKESH

Bengaluru: Schools in Kerala have introduced modules on fake news detection for students of Classes V and VII as part of a larger initiative on cyber safety and the digital inclusion drive in the state.

The IT textbooks for these two classes were revised and launched in June with modules on fact-checking at a time fake news has become a menace to the society.

Britain recently announced that its schoolchildren would be taught how to spot extremist content and fake news in the wake of the recent anti-immigration riots.

"We have introduced modules on how to detect fake news for all students of Classes V and VII from this academic year (that started in June). The fact-checking modules will be introduced to students of Classes VI, VIII, IX and X once their textbooks are revised the next academic year," K. Anvar Sadath, CEO of the Kerala Infrastructure and Technology for Education (KITE), the technology arm of the Kerala general education department, told The Telegraph on Tuesday.

At present, schools teach how to identify fake news in only Classes V and VII because only their textbooks have been revised this year. "This means that about 20 lakh students of Classes V to X will be taught how to detect fake news starting the next academic year, which in itself is a significant initiative since everyone is vulnerable to fake content."

A snapshot of the chapter on fake news from the Class VII textbook on information and communications technology

The students are taught how to cross-check and verify the information they might be receiving on social media or via messaging apps. "Let's say they get a message saying schools are closed for a day due to rain. They would be taught how to ensure the authenticity of the information," he said.

They would be also taught to verify the information with the official websites of the education department or district authorities. "The students will get to learn why it is dangerous to trust everything they find online and when to delete or ignore such content."

For example, a chapter titled "Let's Search and Find" in the Class VII textbook displays a conversation between two students. While one of them says she fell for a fake message claiming there were no classes, her classmate tells her how his teacher has taught them how to verify such information on official websites.

He said Kerala is the only state where IT is a mandatory subject for students from Classes I to X. "This makes it even more important to impart skills to identify fake news at a time all kinds of false information is floating around in cyberspace."

KITE, Sadath assured, has always tried to keep pace with fast-changing technology to provide the latest updates to students.

"What they learned in 2020 is vastly different from what they are going to learn in 2025. Our job is to provide the right kind of learning modules for students and teachers to help them keep abreast with the latest developments in technology. It is the same with providing the latest tools and knowledge to check facts," Sadath observed.

KITE has already trained 80,000 teachers in artificial intelligence, its benefits and dangers. "Similar modules on the benefits and dangers of AI will be introduced in high schools (once the textbooks are revised next year)," he added.







AI Essentials for the public and Lakshadweep teachers

AI ESSENTIALS: 4-WEEK ONLINE COURSE FOR THE PUBLIC

466
first batch

750
second batch

1,216
participants in total



KITE launches 4-week online AI course for general public

T'Puram: The general education department's technology arm Kerala Infrastructure and Technology for Education (KITE) has come up with an online training programme to enable the general public to effectively utilise AI tools in their daily lives. The four-week 'AI Essentials' online course is designed to benefit the general public, including students, by covering areas such as how to use AI tools for daily tasks, including office work and creating social media content. AI tools that can be used in the fields of art, music and literature will also be introduced. In addition to video classes and resources, the course will also include weekly online contact classes. "KITE has ensured the service of dedicated mentors for every 20 participants. The new course is an updated version of the AI training module that KITE previously conducted for 80,000 school teachers across the state. The training will be conducted on the KOOL platform, which has provided online training to the teachers," KITE CEO K Anvar Sadath said. The first batch will include the first 2,500 people who register through the website www.kite.kerala.gov.in. Registration is open until March 5.

110 **post-graduate teachers of Lakshadweep**

- ICT training and online AI training delivered by KITE
- Used the 'AI Essentials' module for the public
- Sessions: AI at Your Fingertips, Art Gallery, Mastering AI, AI in Everyday Life and responsible use of AI
- 100 Robotic Kits provided for Lakshadweep schools



AI training for 6 lakh parents

6 lakh parents to receive AI training

Little KITEs students impart AI training to parents statewide.

The 2026 programme builds on the 4 lakh parents already trained in digital media literacy.

State to roll out AI training for 6L parents

TIMES NEWS NETWORK

Thiruvananthapuram: Kerala Infrastructure and Technology for Education (KITE), general education department's technology wing, will soon train around six lakh parents to use artificial intelligence (AI) and also to detect misuse such as deepfakes, forged images and cloned voices to help safeguard against scams.



Students of 2,000 Little KITE units will provide training until June 30. The two-hour training module is designed to give equal importance to both opportunities and risks associated with AI

SARVAM AI MAYAM

KITE launched "Sarvam AI Mayam" (AI is Everywhere) initiative, wherein students of 2,000 Little KITE units will provide AI training to parents through state's public schools until June 30.

Each unit will train an average of 300 parents.

The two-hour training module is designed to give equal importance to both opportunities and risks associated with AI.

It begins with a simplified introduction to machine learning—the core technology that allows machines to process data and make decisions like humans.

To illustrate the creative power of AI, parents are shown videos in which the classic paintings of Raja Ravi Varma are brought to life through animation.

"The sessions focus heavily on the practical use of AI in daily life via smartphones. Parents are trained to use AI-powered tools to identify birds and plants or to translate signboards from other languages, such as Tamil, into Malayalam in real time. The training also offers hands-on experience in using AI assistants to write poems, plan travel itineraries and generate recipes from available household ingredients. Additionally, the module demonstrates how AI can be used for photo restoration to preserve and enhance old family photographs," said K Anvar Sadath, CEO, KITE, in a statement.

The project also issues vital warnings about the potential dangers of the digital landscape.

"The curriculum includes specific techniques for identifying AI-generated deepfake videos, forged images and cloned voices, providing parents with the necessary precautions to avoid falling for such scams. It also aims to build resilience against emotional misinformation and 'fake news' on social media, while emphasising the importance of internet etiquette. Parents are also introduced to 'Samagra Plus Learning Room', an AI-based educational platform developed by KITE to help them support their children's studies," he added.

The training will incorporate the most recent security standards, including IT Intermediary Amendment Rules 2026, which are set to take effect on Feb 20.

This initiative serves as a follow-up to the successful cyber security training provided to 400,000 parents in 2023-24.













Open hardware: Arduino kits and ExpEYES

Arduino Robotic Kits for high schools



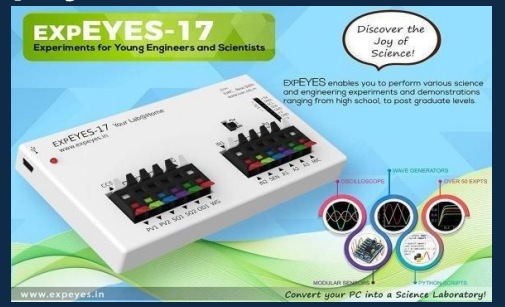


29,000 kits deployed to 2,100 schools

EACH KIT

- Arduino Uno Rev3
- LEDs
- SG90 mini servo motor
- LDR light sensor module
- IR sensor module
- active buzzer module
- breadboard
- jumper wires
- resistors

ExpEYES: “Lab-on-Lap” for Higher Secondary physics





100+ Over 100 physics experiments can be performed in classrooms and labs

COMPRISES

- resistor
- capacitor
- magnet
- microphone
- DC motor

Exhibition of products built by students













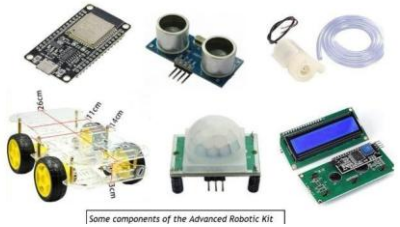
The exhibition was part of the State Camp for Little KITEs.

Models included automatic water-tank systems, smart car parking and model villages.

Advanced Robotic Kits for high schools

2,500 Advanced Robotic Kits deployed to schools, continuing the 29,000 kits of 2024–25




Some components of the Advanced Robotic Kit

Micro-controllers · breakout boards · sensors · submersible mini water pump · LCD display module · 4WD smart car chassis

STUDENTS BUILD

- line-following robots
- automatic plant-watering systems
- motion-activated security systems
- smart weather stations









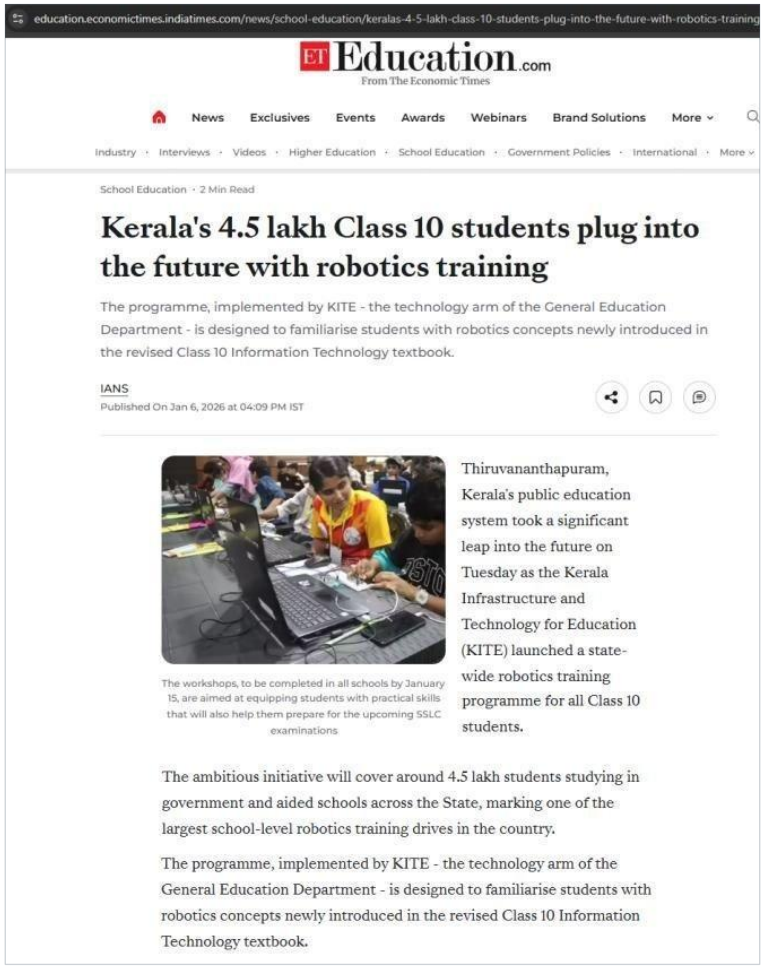
Robotics training for every Class 10 student

3,30,445 Class 10 students in Government and Government-aided schools received robotics training

- Delivered through the Little KITEs network in schools
- Practical experience of the Robotics topics in the revised Class 10 IT textbook, helping students prepare for SSLC
- Created awareness of the importance of Robotics and its applications

THE FUNDAMENTAL COMPONENTS OF A ROBOTIC SYSTEM

INPUT — Sensors → **PROCESSOR** — Micro-controllers → **OUTPUT** — Actuators



education.economictimes.indiatimes.com/news/school-education/keralas-4-5-lakh-class-10-students-plug-into-the-future-with-robotics-training

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School Education · 2 Min Read

Kerala's 4.5 lakh Class 10 students plug into the future with robotics training

The programme, implemented by KITE - the technology arm of the General Education Department - is designed to familiarise students with robotics concepts newly introduced in the revised Class 10 Information Technology textbook.

IANS
Published On Jan 6, 2026 at 04:09 PM IST

The workshops, to be completed in all schools by January 15, are aimed at equipping students with practical skills that will also help them prepare for the upcoming SSLC examinations

Thiruvananthapuram, Kerala's public education system took a significant leap into the future on Tuesday as the Kerala Infrastructure and Technology for Education (KITE) launched a state-wide robotics training programme for all Class 10 students.

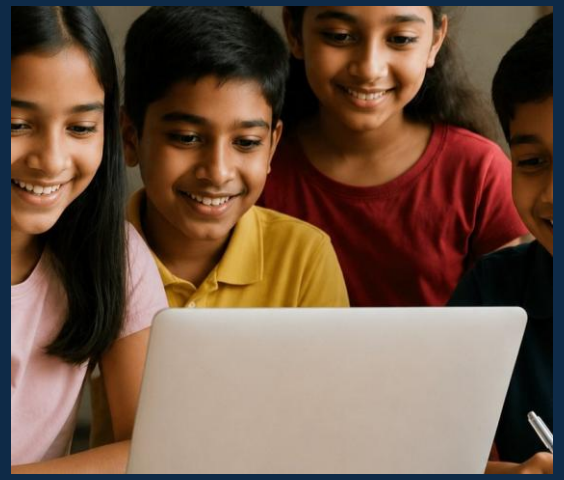
The ambitious initiative will cover around 4.5 lakh students studying in government and aided schools across the State, marking one of the largest school-level robotics training drives in the country.

The programme, implemented by KITE - the technology arm of the General Education Department - is designed to familiarise students with robotics concepts newly introduced in the revised Class 10 Information Technology textbook.

10

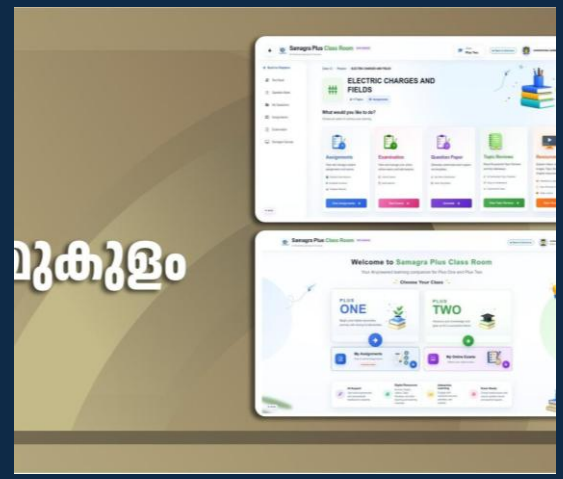
100-day initiatives

Digital Square, ARISE, Mukulam, Tharapadam and SchoolWikithon









The 100-day action plan: five KITE initiatives

Launched in July 2026 as part of the State Government's 100-day action plan, with milestones running to 30 September. Progress below is as reviewed on 2 September 2026.

01

Digital Square

Classes 1 to 7

Gamified, self-learning digital space in primary schools, on free software.

5,183 schools shortlisted

02

ARISE

AI & Robotics

AI and robotics labs for every high school, building on Advanced Robotic Kits.

2,043 high schools equipped

03

Mukulam

Classes 11 and 12

AI-powered coaching portal for NEET, JEE, KEAM and CUET.

Pilot in 500 schools

04

Tharapadam

Classes 1 to 12

Academic monitoring dashboard on Samagra Plus, with skills recorded class by class.

75% complete

05

SchoolWikithon

Public knowledge

Campaign to refresh 12,500+ School Wiki pages with public participation.

12,826 pages surveyed

Progress review: 10 of 15 milestones complete

INITIATIVE	SET-UP AND LAUNCH	PREPARATION	COMPLETION
Digital Square	**25 Jul · Completed** Scheme launched; guidelines released	**24 Aug · Completed** 5,183 schools selected	**30 Sep 2026 · Target** Resources deployed to schools
ARISE	**20 Jul · Completed** Robotic kits in 2,043 high schools	**5 Aug · Completed** Guidelines released at launch	**30 Sep 2026 · Target** ARISE labs set up in all high schools
Mukulam	**25 Jul · Completed** AI-enabled exam-prep portal ready	**31 Jul · Completed** Piloted in 25 schools	**30 Sep 2026 · Target** Rollout in all HSS and VHSE schools
Tharapadam	**25 Jul · Completed** Unified monitoring dashboard ready	**20 Aug · Completed** 10,972 teachers trained	**30 Sep 2026 · Target** Recording and analysis in schools
SchoolWikithon	**31 Jul · Completed** 12,826 school pages surveyed	**20 Aug · Completed** 10,772 teachers trained online	**30 Sep 2026 · Target** School Wiki updation completed

MILESTONES COMPLETE



10 of 15 · remaining 5 due 30 Sep 2026

ARISE: AI & Robotics Initiative for School Education



2,200+

high schools to receive AI & Robotics labs and hubs

Advanced AI- and robotics-based laboratories in all high schools, building basic awareness among every child.

Foundational exposure

Hands-on introduction to AI, machine learning and robotics for students.

Teacher readiness

Training in cutting-edge tools and lab safety protocols.

Design thinking

Solving real-world problems in agriculture, healthcare and water management.

Responsible technology

Ethical AI awareness, critical thinking and responsible tech use.

ARISE: AI and Robotics in every high school

AI AND ROBOTICS INITIATIVE FOR SCHOOL EDUCATION

AI and robotics labs in all high schools, giving every child basic awareness of these technologies.

Existing IT labs and tinkering spaces become ARISE Hubs, with ESP32 projects such as traffic lights, gas detection and IR security controllers.

2,043
high schools got robotic kits by 20 Jul

4 → 7 → 10
coding, AI, robotics: Classes 4, 7, 10

20 Jul — Completed

Kits delivered

Advanced Robotic Kits reached 2,043 Government and aided high schools.

5 Aug — Completed

Guidelines released

ARISE guidelines released at Sikshak Sadan, Thiruvananthapuram; Minister joined online.

30 Sep — Target

ARISE labs set up

All Government and aided high schools to have Advanced Robotic Kits and working labs.

Digital Square

A self-learning common space in primary schools.

Gamified learning

Builds creativity and self-learning capabilities through play.

Free-software platform

GCompris, eCube language labs, drawing and animation tools on one FOSS platform.

Built for Classes 1–7

Accessible tech spaces where young learners explore at their own pace.



The Digital Square home screen: a playful, free-software learning space

Digital Square: a self-learning space in primary schools





GAMIFIED LEARNING, CLASSES 1 TO 7

A free-software learning space where primary pupils learn through play, build creativity and learn on their own.

Tools include e-Cube language labs, GCompris, Tux Paint, Scratch and more, on KITE GNU/Linux 22.04. Builds interest in animation, visual effects, gaming and comics (AVGC).

5,183
schools shortlisted, 50% of those eligible per district

2+
computers per school for the units

25 Jul — Completed

State launch

Launched at Malappuram District Panchayat Hall by the General Education Minister; guidelines released.

24 Aug — Completed

Schools selected

List of 5,183 schools published, district by district.

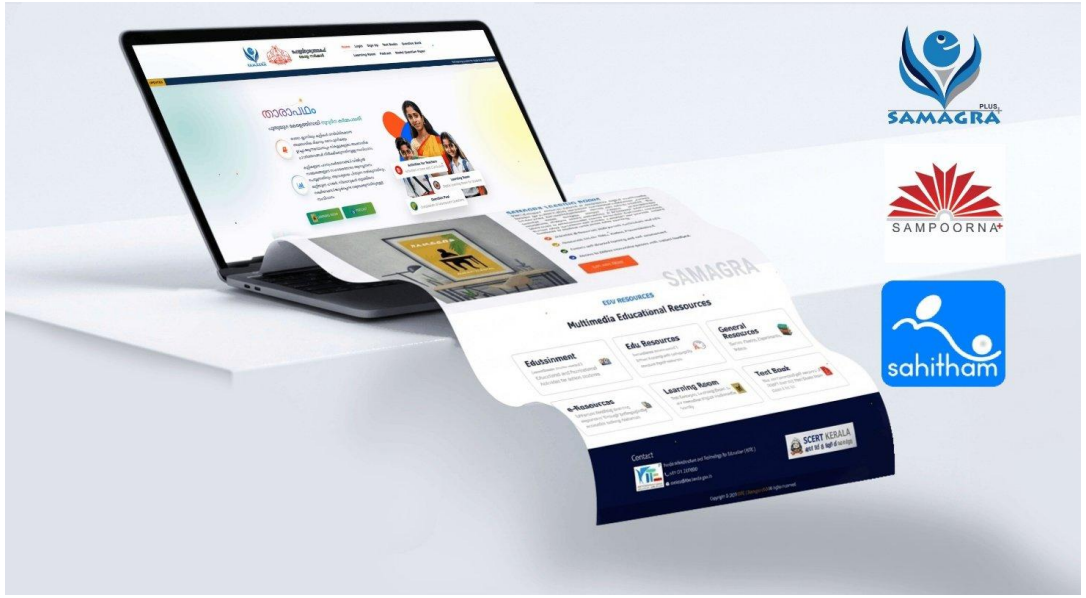
30 Sep — Target

Resources deployed

Software is ready and is being supplied to the schools.

Tharapadam

Unified dashboard for academic monitoring & school administration



താരാപഥം
Unified Dashboard for Academic Monitoring & School Administration

Monitors the academic activities of schools while ensuring the skills every child must achieve in each class.

Academic planning

Digital resources, learning plans, classroom activities and academic monitoring.

Mentoring records

Records of the skills to be acquired in each class.

School administration

Attendance, exam scores and analysis.

Staff management

Staff fixation, aided school appointment approval, appeals and seniority lists.

Elevates Class 1–12 standards by unifying digital technology and physical infrastructure into one network for curriculum, teaching, assessment and administration.

Tharapadam: academic monitoring for Classes 1 to 12

Tracks each child's academic progress and the skills to be achieved in every class, on Samagra Plus.

DIGITAL ACADEMIC MONITORING DASHBOARD

One framework with Sampoorna, Samagra, Sahitham and the Cyber Raksha protocol. Teachers plan, headmasters oversee, officers monitor.

75%
of the scheme complete on 2 Sep

10,972
teachers and headmasters trained

25 Jul — Completed

Portal ready

Unified dashboard for real-time monitoring and data-based decisions is live.

20 Aug — Completed

Training done

Special training on the scheme for primary and high school teachers completed.

30 Sep — In progress

Recording and analysis

Class 1 skills are in the portal; attendance recording and term-exam score entry are ready.

Mukulam: opening doors to new possibilities

മുകുളം

Ensuring every Higher Secondary student in Kerala has equal opportunities for higher education and career success.

A rich bank of questions and digital resources lets students prepare for entrance exams, strengthen concepts and assess themselves at their own pace, with personalised feedback on where to improve.

Digital Learning Resources

Videos, interactives, images and review topics.

NEET · JEE · KEAM · CUET

Dedicated competitive-exam support.

Online Exams & Assignments

Support continuous learning and progress.

Personalised Study Plan

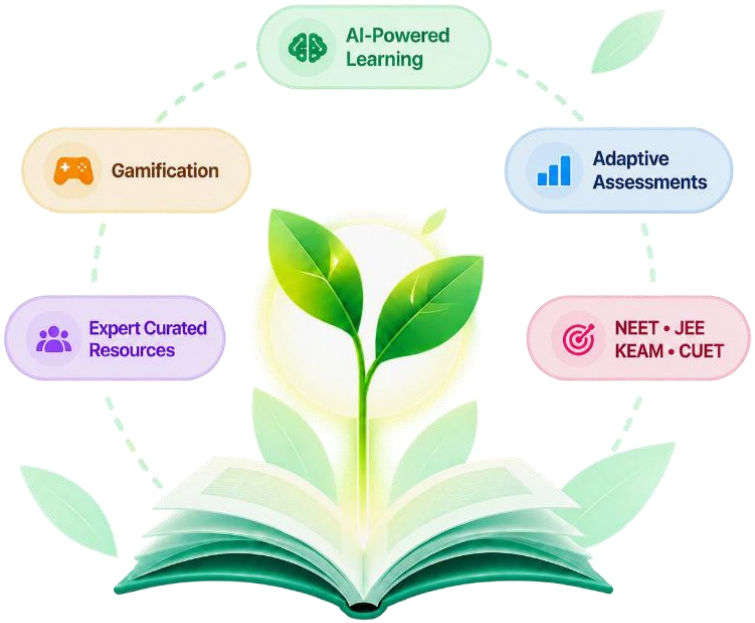
AI-driven study plans and performance analysis.

Samagra Canvas & Connect

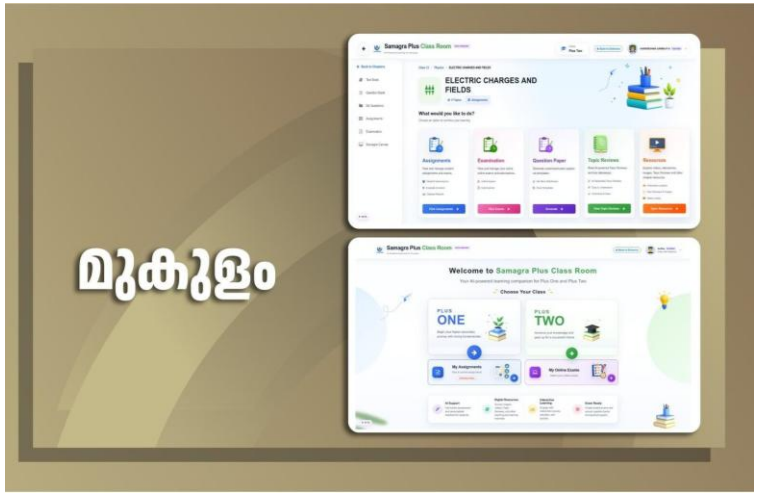
An interactive digital whiteboard for teachers.

Exam Score Entry & Analytics

Manage and analyse student exam results.



Mukulam: opening doors to higher education



AI-POWERED ENTRANCE COACHING, CLASSES 11 AND 12

Every Higher Secondary student gets equal opportunity to prepare for NEET, JEE, KEAM and CUET.

A rich question bank and digital resources, personalised feedback and AI study plans. Video classes on KITE VICTERS; separate logins for students, teachers and principals.

500
pilot Higher Secondary and VHSE schools

25
schools piloted by 31 Jul

25 Jul — Completed

Portal ready

Entrance-exam practice portal set up, with AI features included.

31 Jul — Completed

Pilot in 25 schools

Piloted in 25 schools where Higher Secondary teachers prepare the resources.

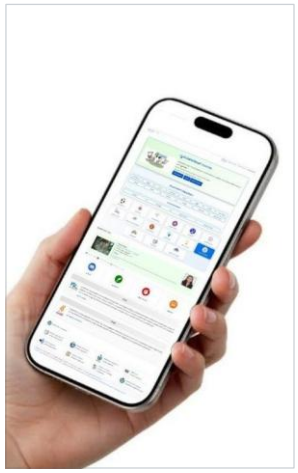
30 Sep — Target

Rollout to schools

All Higher Secondary and VHSE schools to be able to run Mukulam.

SchoolWikithon: refreshing 12,500+ School Wiki pages





PUBLIC PARTICIPATION, SCHOOLWIKI.IN

A campaign to update the School Wiki pages of Kerala's public schools: history, facilities, activities, achievements and pictures.

Quality checks: accuracy, language, images, copyright and categories.

12,826
school wiki pages surveyed

10,772
teachers trained online

31 Jul — Completed

Page survey

Pages of 12,826 schools across the State surveyed and updated.

20 Aug — Completed

Teacher training

Special online training for 10,772 teachers who needed it.

30 Sep — Target

Updation completed

All updation work under the 100-day plan to be finished.

11

Recognition

Infrastructure upgradation, State, national and international awards









Infrastructure upgradation of schools

- Elevating Government schools into ‘Centres of Excellence’
- Transforming education to enhance life skills
- Regaining the primacy of the public education system through a participatory approach at grass-root level

STATUS OF INFRASTRUCTURE PROJECTS

Rs 5 Cr category (139 schools)

139 completed

Rs 3 Cr category (93 schools)

93 completed









State and national accolades

Technology Sabha Award 2024
Robotics / AI

State Television Award 2023
Best Documentary, Best Anchor
Best students' Programme

Social Media for Empowerment Award 2021
First Bell Digital Classes

Technology Sabha Award 2018
Samagra

Technology Sabha Award 2021
First Bell Digital Classes

State Television Award 2020
KITE VICTERS First Bell (Best students' programme)
KITE VICTERS Educational programme(Best Anchor)

State Television Award 2018
KITE VICTERS Best students' programme
KITE VICTERS Best Anchoring (Edu. programme)
KITE VICTERS Best Documentary(General)
KITE VICTERS Best Commentator
KITE VICTERS Special Jury Mention (Documentary)

State Television Award 2017
KITE VICTERS- Best narration.
KITE VICTERS- Best Educational Programme.

CIET-AICEAVF 2018
Award for Best Video programme in Senior Secondary division

eIndia Award for ANTS (Animation Training for Students) 2011
IT@School

Social Media For Empowerment Award (Special Mention) 2017
School Wiki

eGovernance Champion Award 2022
First Bell Digital Classes

Governance Now Digital Transformation Award 2025
Samagra Plus AI Learning Platform

Education Technology Transformation Award 2025
Samagra Plus AI Learning Platform

Technology Sabha Award 2023
E³ ENGLISH

CM's Award for Innovations in Public Policy 2022
"Little KITEs" & "First Bell" Digital Classes

Technology Sabha Award 2022
Platform for online classes

Technology Sabha Award 2022
Platform for online classes

State Television Award 2019
KITE VICTERS Documentary (Best Students' programme)

Technology Sabha Award 2020
School Wiki / Akshara Vriksham

National eGovernance Award 2006
IT@School

International recognitions



Stockholm Award (Honorable mention) 2010
IT@School



World Education Summit Award 2018
Hi-Tech school project



Finalist in eAsia Award 2011
Sampoorna



World Education Summit Award 2022
Platform for online classes



mBillionth Award 2021
First Bell Digital Classes



ODF Alliance International Award 2008
IT@School



World is Open Award 2008
IT@School

International recognitions for KITE (erstwhile IT@School Project), including the Stockholm Challenge honourable mention (2010), World Education Summit awards and the mBillionth Award South Asia.

THANK YOU

Thank you

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