

KERALA



Key Indexes of 'God's Own Country'

Parameters	Kerala	
Capital	Thiruvananthapuram	
Geographical area (sq km)	38,863	
Administrative districts (No)	14	
Population density (persons per sq km)	859	
Total population (million)	33.40	
Male population (million)	16.01	
Female population (million)	17.36	
Sex ratio (females per 1,000 males)	1,084	
Literacy rate (%)	94.0	
No of Schools/Students/Teachers	16,349/ 48 L / 2 L	
Tops National School Education Quality Index		
Tops in Overall Health Index		
Tops in key sustainable development goal		
Lowest infant mortality rate & Highest life expectancy in India		



KITE- Vision

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

<u>ദർശനം</u>

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



KITE- Mission

- To foster, promote and implement modernization of educational institutions in the State
 of Kerala, owned by the state or run under the aid of Government, through providing
 infrastructure including Information & Communication Technology Infrastructure,
 Capacity Building, Content Development, Connectivity, e-learning, satellite based
 education, support and maintenance mechanism, E-Governance or other related.
- To implement up gradation of the Government sector educational institutions on par with international standards in terms of infrastructure, facilities, resources, curriculum, pedagogy etc.
- 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.
- സംസ്ഥാനത്തെ വിദ്യാഭ്യാസ സ്ഥാപനങ്ങളെ അന്താരാഷ്ട്രതലത്തിലേക്ക് ഉയർത്തുന്നതിന് അനുയോജ്യമായ ഭൗതീകസൗകര്യങ്ങൾ, വിഭവങ്ങൾ, പാഠ്യപദ്ധതി, ബോധനതന്ത്രങ്ങൾ തുടങ്ങിയവ മെച്ചപ്പെടുത്തുന്നതിനുളള ഇടപെടീൽ നടത്തുക.



KITE- Mission

- 3. To formulate and implement projects for the use of Information and Communication Technology as a tool for the improvement of the education quality in the Kerala
- 4. To act as advisor or consultant to the Government and private sector in improving education quality through Information and Communication Technology.
 - വിദ്യാഭ്യാസ വകുപ്പിന് അനുയോജ്യവും സ്ഥായിയായതുമായ ഇ-ഗവേണൻസ് പ്രവർത്തനങ്ങളും അതിനാവശ്യമായ കണക്ടിവിറ്റി, സഹായസംവിധാനം തുടങ്ങിയവ ലഭ്യമാക്കുക.
 - ഐസിടിയിലൂടെ വിദ്യാഭ്യാസ നിലവാരം ഉയർത്തുന്നതിൽ സർക്കാരിനും സ്വകാര്യമേഖലയ്ക്കും നിർണായക നിർദ്ദേശങ്ങളും ഉപദേശങ്ങളും നൽകുക.

KITE- Activities

- 1. Empowering teachers with ICT trainings equipping them to take the classes effectively and with ease with the use of ICT tools.
- 2. Through KOOL, KITE's Open Online Learning, the MOOC model training platform for teachers, imparting various subject and syllabus wise trainings for teachers.
- 3. Making students ICT champions though dedicated trainings in diverse areas such as Animation, Robotics, Artificial Intelligence, IoT, 3D Modelling etc
- 4. Facilitating Little KITEs Student IT Clubs in 2000+ schools, the largest ICT network of students.
- 5. Equipping every State-run and State-Aided schools to become fully Hi-Tech with the deployment of latest ICT gadgets.
- 6. Transforming all classes in all Secondary schools to completely Hi-Tech and setting up Hi-Tech Labs in all Primary schools.

KITE- Activities

- 7. Periodically reviewing the ICT guidelines for schools recommending the minimum specification, maximum prices, and mandatory service conditions to be adhered to with respect to procurement of ICT equipments for schools.
- 8. Providing High Speed FTTH Broadband Internet Connectivity to all schools and Educational Offices in the States.
- Facilitating ICT learning environment by providing Samagra Digital Resource Portal which has digital contents for Std 1 to 12 and also for teachers.
- 10. Setting up essential support mechanisms such as Online system for ICT hardware distribution, complaint management portal supported by Call Centre facility etc to ensure proper running of all processes.
- 11. Ensuring adequate ICT Content Development processes, completely aligned with State Government's FOSS (Free and Open Source Software) policy.

KITE- Activities

- 12. Development and Deployment of FOSS based KITE GNU Operating System.
- 13. Development and maintenance of eGovernance applications for the General Education Department such as Sampoorna School Management Software, Sametham School Data Bank, Samanwaya Online Appointment approval and staff fixation application for teachers etc.
- 14. Creation of ICT textbooks for all classes.
- 15. Operating the KITE VICTERS educational channel and Studio complex 24/7.
- 16. Operating regional offices in 14 districts with a team of Master Trainers.
- 17. Implementation of physical school infrastructure upgradation projects such as enter for Excellence (Rs.5 Cr each category for 139 schools) and Betterment of Infrastructure facilities (Rs.3 Cr each category for 93 schools).

Pre-ICT era- Early 2000's

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.

Absence of dedicated or support for Teachers in upgrading to ICT.

Resistance to Change prevailed among teachers.

Government Intervention

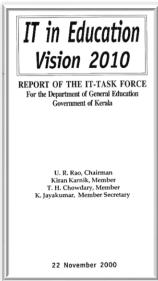
Constituted a Task Force headed by Prof.U.R.Rao in 2000.

Task Force recommended to setup a dedicated wing within

Education Dept to make interventions in IT in education.

Thus IT@School Project (presently KITE) was setup in 2001.



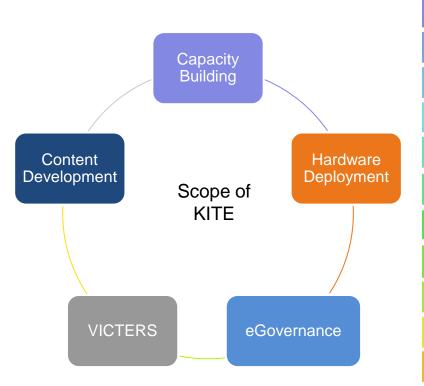


Kerala-Leading the way in Digital Education

- 1. First State to introduce ICT as a Subject in School Curriculum (2001-2003).
- 2. Only State where students write machine-based exam in 10th Board Exam.
- 3. World's largest deployment of FOSS in education in a particular territory.
- 4. First State to start a complete educational channel KITE VICTERS (2006).
- 5. First State to be Fully Digital in General Education (2020).
- 6. First State to establish Robotic Labs in 2000 schools- 12 lakh beneficiaries (2022).
- 7. First State to start a Resource portal (Samagra) fully in tune with pedagogy (2018).
- 8. Only State to have Smart class rooms (45000) for all classes from Std 8 to 12.
- 9. Only State to have 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 to have a complete eGovernance System for General Education Department.



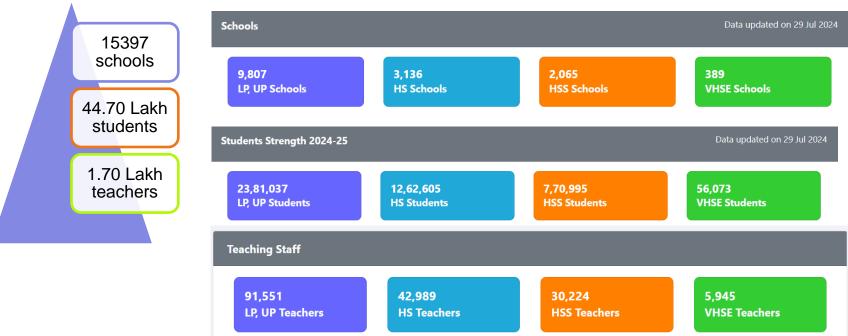
Over Two decades of Interventions in ICT@ Education



2001	IT@School Project initiated
2003	IT made a Compulsory Subject
2007	Shift to FOSS platform
2010	ICT enabled education
2016	Hi-Tech School project- Secondary schools
2017	IT@School made KITE, a Section 8 Company
2018	Hi-Tech Lab Project-Primary schools
2020	Complete Digital in Education
2021	First Bell Digital Classes
2022	Ecube English & Cyber Safety
2023	KITE Lens Content Creation Hub
2024	Artificial Intelligence (AI) Training

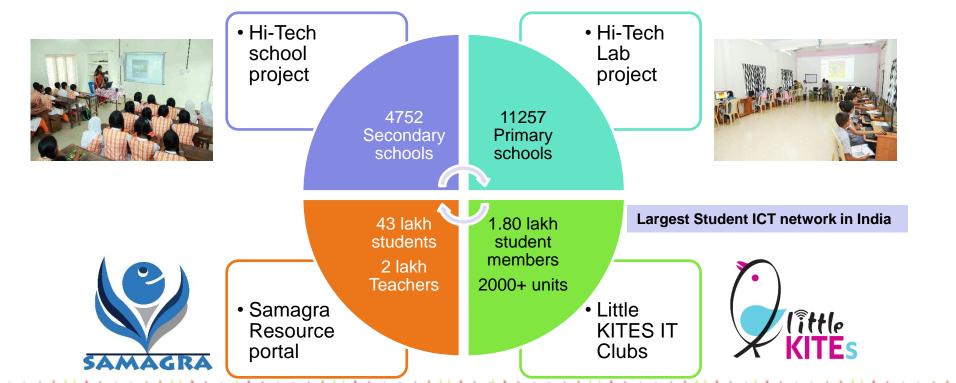
Key beneficiaries of programmes implemented by KITE





Source: SAMETHAM School Data Bank portal www.samethem.kite.kerala.gov.in developed by KITE

Kerala- 1st State to become Complete Digital in Education



Empowering Students, Teachers, Parents & Public

KOOL training platform for Teachers

Training for Little KITES students

MoJo (Mobile Journalism) training

Visual Media Literacy

ICT Training for Mothers

Cyber Safety Training

Artificial Intelligence (AI) Training











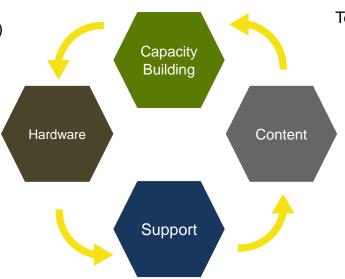
Holistic approach in integration in a single eco-system

Content Development

Adoption of FOSS in Education Making Information Technology (IT) a compulsory subject in curriculum ICT Textbooks for all classes Samagra Resource Portal Mobile Apps.

Hardware Deployment

Deployment of ICT hardware to schools using Central & State plans Broadband Connectivity Call center & Web portal support Hardware Clinics



Capacity Building

Teachers themselves became Trainers
No external IT resource engaged
Trainings for Teachers, Students,
Parents and Public
Training in ICT, Hardware and
Content Development

Support systems

eGovernance Monitoring systems VICTERS educational channel

Empowering existing Teachers themselves to teach IT

- Existing subject teachers in schools were trained to teach IT & ICT for their colleagues.
- Capacity Building for teachers was the key focus area.
- Specific training modules for teacher empowerment.
- KOOL- KITE's Open Online Learning
 (MOOC based training platform for teacher trainings.)
- 51516 teachers trained so far.



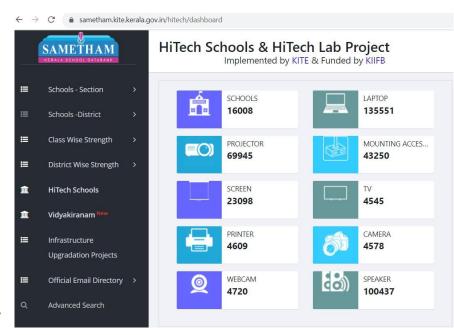




Ensuring sufficient ICT Infrastructure in schools



- Rs.793.50 Cr Hi-Tech projects in 16009 schools
- 4.50 lakh ICT equipment deployed to schools.
- All equipment have 5 years Comp Onsite Warranty
- Call center, Web portal & Insurance coverage.
- Strict guidelines for ICT hardware in schools.
- AMC Support to equipment beyond Warranty period.



Details of ICT equipment in schools available in Sametham portal-school / district wise

Ensuring sufficient ICT Infrastructure in schools

Hi-Tech school Project in 4752 Secondary Schools (Class 8 to 12)





Hi-Tech Lab Project in 11257 Primary Schools (Class 1 to 7)

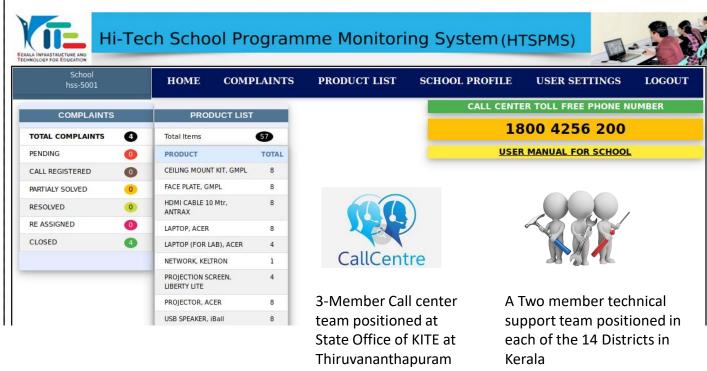




- 45000 Classrooms from Std 8 to 12 made Hi-Tech featuring Laptop, Projector, Screen, Sound System, Internet Connectivity & access to Resource Portal
- Rs.493.50 Cr funding from KIIFB
- Implemented during 2017-2019.

- Hi-Tech Labs setup in 11257 Upper Primary & Lower Primary schools.
- 54916 Laptops & USB Speakers, 23050 Projectors deployed
- Rs.300 Cr funding from KIIFB
- Implemented during 2018-2020

Robust support mechanism for ICT hardware in schools



All ICT equipments have a 5 year warranty.

Insurance coverage provided to over 4.50 lakh ICT equipments deployed to schools

Broadband Internet Connectivity to all schools



10,000 primary schools to get free Wi-Fi facility soon

Initiative Under IT@School To Cover 40% Institutions By Dec

TIMES NEWS NETWO

Thiruvanthapuram: As many as 10,000 lower and upper primary schools reconstruct primary schools are constructed in the school sc

 THE VI-Fcombine thirty of
differs with
surface with provided to
the stage will be provided to

become the largest of its kind

Also, the TIRSChool would be sufficient to the state of the before end of December 1 the remaining by 161.7 The theorem on the sum of the the sum of the s

issues pertaining to interne

100 Mbps broadband connectivity for schools

KITE, BSNL tie up for 12.5 times faster connectivity

STAFF REPORTER
THIRUVANANTHAPURAM

The Kerala Infrastructure and Technology for Education (KITE) and BSNL have joined hands to provide 100 Mbps broadband Internet connectivity in high schools, higher secondary schools, and vocational higher secondary schools in the State.

The current 8 Mbps FTTH (Fibre to the Home) connections in schools will now be upgraded to 100 Mbps that is 12.5 times faster. The memorandum of understanding (MoU) was signed by K. Anvar Sadath, CEO, KITE, and C.V. Vinod, Chief General Manager, Kerala circle. BSNL, in the presence of Minister for General Education V. Sivankutty and General Education Principal Secretary A.P.M. Mohammad Hanish.

45,000 classrooms

45,000 classrooms
The 100 Mbps broadband Internet connectivity will benefit 45,000 classrooms in
4,685 schools included in
the Hi-Tech School project
through better ICT-enabled
education. As part of the HiTech School project in 2018,
KTTE had deployed laptops,



KITE Chief Executive Officer K. Anvar Sadath and BSNL Kerala circle CGM C.V. Vinod with the memorandum of understanding for upgrade of school broadband Internet speed to 100 Mbps. General Education Minister V. Sivankuty and Principal Secretary A.P.M. Mohammad Hanishare seen.

projectors, USB speakers, and networking in these classes.

Even though the Samagra resource portal and the Sahitham mentoring portal are available in all classrooms in offline mode, with the availability of the 100 Mbps connection in classrooms, all such digital/online systems can be used more effectively. This will also enable the availability of KITE Victers education channel in all classrooms.

BSNL has agreed to en-

hance the broadband connection in schools to 100 Mbps without any additional cost and adhering to the existing rate of 10,000 (+GST) at which the earlier 8-Mbps broadband connection was provided. Each school can use up to 3,300 GB data a month as per this plan.

"This step, the first in the country, will strengthen the initiatives of the State towards becoming a knowledge society," Mr. Sivankutty said.

- Internet connectivity provided to all schools & educational offices through BSNL & RailTel.
- 12637 schools including 7887 Primary schools & 4750
 Secondary schools & 248 Educational Offices
- Presently broadband connections are provided through K-FON Kerala Fibre Optic Network

Use of Free & Open Source Software (FOSS) in Education

- FOSS enables unrestricted sharing and editing of educational content among students & teachers.
- KITE developed customised Linux based Operating System for schools.
- Over Rs.3000 Cr saved to State Exchequer.





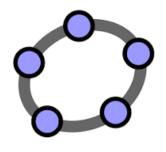
Tweet by NITI Ayog Chief

KITE GNU Linux 22.04 Desktop

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
CCT	Timetable generator

List of applications pre-loaded in OS

Collaboration with International Agencies & Universities for customizing FOSS applications pre-loaded with OS









GeoGebraBy University of Salzburg

Scratch
By Massachusetts
Institute of Technology (MIT)

PhET
By University of
Colorado Boulder

GComprisBy GNU Project

Customised Linux based Operating System for schools KITE/GNU Ubuntu 22.04



The Operating System will be installed in more than 14,000 schools comprising 45.29 lakh students and 1.72 lakh teachers before the start of the next academic year.



The OS will be installed in over 14,000 government and governmentaided schools across the state, in over 2 lakh computers.



Govt Schools In Kerala To Use Linux-Based Free OS, Saving Rs 3000 Cr

How switching to Linux-based free OS is saving Kerala govt schools Rs 3,000 crore

1.3K Shares Pattambi, Riyas Ali and 5K others 234 Comments 1.3K Shares

It's FOSS

Good News! Indian State Saves Over \$400 Million by Choosing Linux

Last updated May 14, 2019 By Abhishek Prakash - 15 Comments



Schools in Indian state of Kerala are expected to save ₹3000 crore (roughly \$428 million) by choosing Linux as their choice of operating system for school computers under a state-wide project.





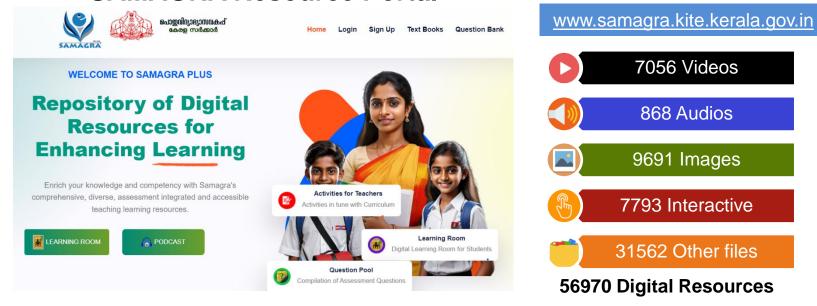
New KITE GNU-Linux Lite

THENEWSMINUTE.COM



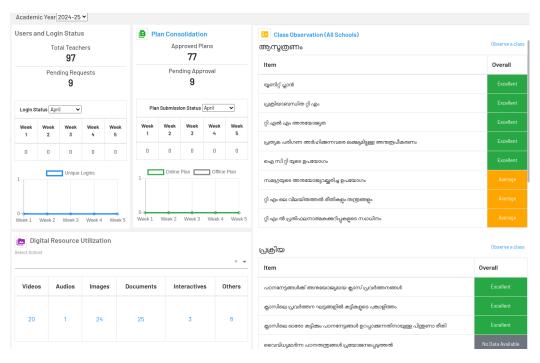
Both versions can be downloaded for free from https://kite.kerala.gov.in/KITE/index.php/welcome/downloads

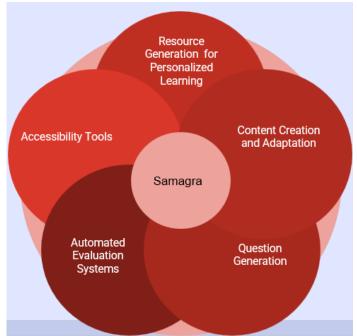
Content in tune with pedagogy SAMAGRA Resource Portal



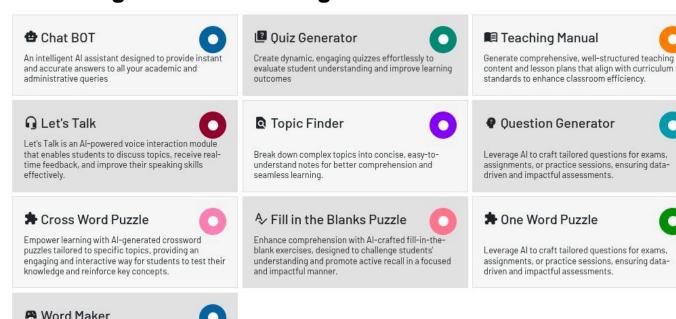
- Providing necessary digital materials according to Lesson Plans of Teachers.
- Digital resources for all Subjects across all classes (Class 1 to 12).
- All content developed by teachers using FOSS tools.

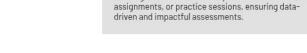
Our own AI Engine developed and prototyped. Samagra Plus AI platform





Empowering Education and Innovation with Samagra AI Tools Revolutionising Education through AI Powered Tools and Innovations

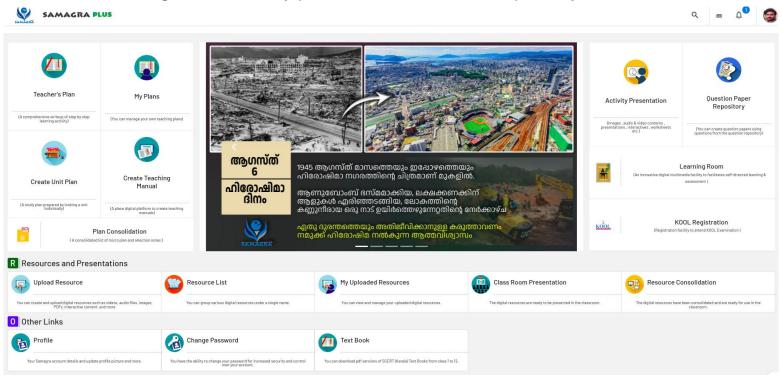




Leverage AI to craft tailored questions for exams,

New additions in SAMAGRA Resource Portal

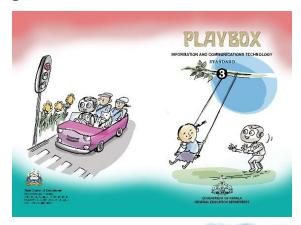
Learning Room, Activity presentation, Question Repository, Podcast



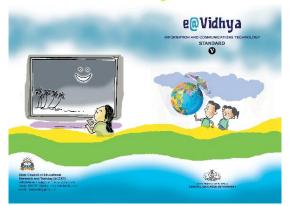
ICT Textbooks for Std 1 to 8





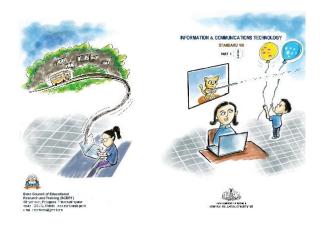




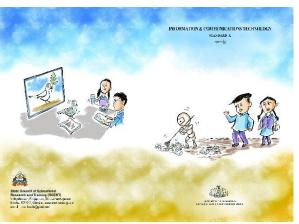


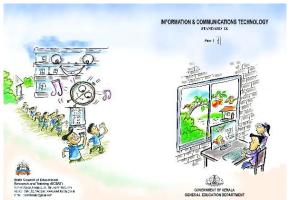


ICT Textbooks for Std 9 to 12









Innovations in Open Hardware

Arduino Robotic Kits for High Schools

ExpEYES - "Lab-On-Lap" - For Higher Secondary Physics







Experiments for Young Engineers and Scientists

Discover the Joy of Science!

Difference on degenering experiments and demonstrations conging from high school, to post graduate levels.

The science of the science of

- 29000 Arduino Robotic Kits deployed to 2100 schools.
- Each Robotic Kit comprises of Arduino Uno Rev3, LEDs, SG90 Mini Servo Motor, LDR Light Sensor Module, IR Sensor Module, Active Buzzer Module, Bread Button, Jumper wires and Resistors.
- Over 100 physics experiments can be performed using ExpEYES in classrooms / labs.
- Comprises of resistor, capacitor, magnet, microphone & DC motor

Launch of Arduino Robotic Kits for Little KITEs IT Clubs



സംസ്ഥാനത്തെ 2000 ഹൈസ്കൂളുകളിലെ ലിറ്റിൽ കൈറ്റ്സ് യൂണിറ്റുകളിലൂടെ വിനൃസിക്കുന്ന 9000 റോബോട്ടിക് കിറ്റുകളുടെ പ്രവർത്തനോദ്ഘാടനം മുഖ്യമന്ത്രി പിണറായി വിജയൻ നിർവഹിക്കുന്നു





Exhibition of products created by students using Robotic Kits













Exhibition was conducted as part of the State Camp for Little KITEs

Little KITEs Awards





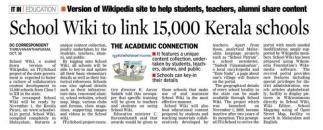
 On July 6, 2024, Hon. Chief Minister handed over the trophies, Prize Awards & Citation to the State level winning 4 schools for Best Little KITEs IT Clubs.

Collaborative Content Development School Wiki

www.schoolwiki.in

A Comprehensive knowledge database of all schools in Kerala







As on 11.04.2025, School Wiki features 1,72,714 Articles, 71,835 Users and 26,78,994 updates

Power of Free Software in Language Lab



E³ (E-Cube)English program aims to enhance the English proficiency of students.

eLanguage Lab activities are enjoyable, game like, competency based and assessment integrated.

Impact assessment study shows significant improvement of students' English proficiency.



E-cube Hindi Language Lab software



- E³ Hindi Language Lab software (Prayogshaala) developed
- Piloted in 163 schools across the State during 2025
- Extensive training was given to Hindi teachers of Class 5 to 7.
- E³ Hindi has 3 levels (Grades 5–7),

Little KITEs IT Clubs Largest ICT Network of Students in India



- Little KITEs are Student IT Clubs formed in 2174 schools with the aim of empowering students in creatively using ICT in learning.
- Also supports the upkeeping of 4.50 lakh ICT equipment in schools.
- 20-40 students in each school supported by 2 teachers.
- Trained in Animation, Robotics & IoT, Hardware, Electronics, Language
 Computing, Cyber Safety, Mobile App Development, Artificial Intelligence.

1.80 Lakh Active members

3.75 Lakh member so far

4 Lakhs Parents trained in Digital Media Literacy

19.66 Lakh students trained in identification & prevention of fake news







Students get trained in Artificial Intelligence, Robotics, **Animation and much more**

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.

at the start-up complex at Kalamasserry in the sec-ond week of August aimed at unleashing their entre-preneurial and innovative





Improvise whith their works even if unphagered fiforts were firm and Copers source. The door will not lock their treemen SOTEMBER OF OUR CONTROL OUR CONTROL OF OUR CONTROL OF OUR CONTROL OF OUR CONTROL OF OUR CONTROL OU THE CAMP VERY WELL DEMONSTRATED participated. The 1143 students selected from them
participated in district The Innovative Brown Service of the Company of the



KITE ignites their passion

VINOD NEDUMUDYIDC 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 Raveendranath left after inaugurating a camp for the techies of future.

The device was made by Muhammed using the Rapsberry Pi, a pocketsized 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 cabiernment in a school near-

"This device could 'plot' pictures from an image metal parts in a frame,"

One student showcased a Smart Cupboard, anoth- tion to artificial intellier a Smart Agriculture gence to augmented reali-Field and yet another a ty and virtual reality, they Smart Eco Waste Basket, are leaving no stone Saji Gopinath are heading 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. - SUNOI NINAN MATHEW

KITE under the department of education which net. He developed the Rapsberry Pi each and device using the facility some training in robotics at an Atal Tinkering Lab and animation while askset up by the central gov- ing them to play with each to improvise and innovate their own ideas. The bright young minds ignited the Startup on the screen on a paper Complex with their down and in the larger unique solutions in a twoapplication it can fix day state camp that began on Thursday. The camp is said Muhammed. He is being organised by the one among the many KITE in association with Kerala Startup Mission.

From robotics to animaunturned to leap into the

The students number- future experimenting ing 231 have been brought with and displaying their to the Startup Complex by exhibits and learning lessons from the experts that KITE and Startup gave the young ones a Mission have lined up for them in the camp. The 231 Class X students for the 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 Finally the 231 students were selected for the state camp based on their tive technical output KITE vice-chairman K Anwar Sadath and Startup Mission CEO Dr

Satyameva Jayathe Digital Literacy Campaign for Students



1st Phase

- Feb 2021
- Awarenes s through **KITE VICTERS**

2nd Phase

- June 2021
- Training given to Students of Class 8 to 12

3rd Phase

- Aug 2022
- Training given to students of Class 5 to 12

4th Phase

- June 2023
- In Class 5 to 7 **Textbooks**

- Training for identifying and preventing Fake news
- 19.66 Students trained so far.
- 2 lakh teachers trained
- 3 phases of implementation
- Telecast through KITE VICTERS channel

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

HS students - 10.26 lakh

ICT Training for Parents











- Little KITEs students provides the ICT training for Parents.
- · Focusses on Safe usage of Smart phones & Internet, Password, OTPs, PIN,
- · Fake news identification and prevention, Cyber Attacks, Online transactions etc
- Over 4 lakh Parents trained so far.

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

UNICEF terms Little KITEs as a Global model in Education



Unicef study commends Kerala's digital edu model

TIMES NEWS NETWORK

Thiruvananthapuram: A Unicef India study released here on Saturday has showered praise on Kerala's digital education initiatives (Ed-Tech), calling it a model for middle-income and developed countries.

The report, titled 'Empowering Adolescents with Future-Ready Skills - The Inspiring Story of Little KITEs', focused on Little KITEs programme — the largest ICT network of students in India implemented by the Kerala Infrastructure and Technology for Education (KITE) across 2,174 high schools in report notes that Kerala sathe state. Aligned with global and national efforts to develop future-ready skills alongside the United Nation's global framework, the study offers 10 data-driven

The report notes Kerala saved ₹3.000 crore by using open-source software

recommendations.

Kerala's KITE-led Ed-Tech model, without relying on profit-driven vendors, is both scalable and adaptable. making it valuable for other regions. The study emphasizes that choosing free and open-source (FOSS) over proprietary software has technological, economic, social and pedagogical benefits, as demonstrated by KITE's success. The ved Rs 3,000 crore by using open-source software, and even Finland has expressed interest in replicating the Little KITEs model.

The report goes beyond

commending Kerala's infrastructure, including the deployment of 9,000 robotic kits and AI / IoT training for Little KITEs, "In closing, it is evident that Little KITEs is a well-sown seed in the fertile ground of EdTech in Kerala. It has grown rapidly and has promoted a wide range of students across the public school system to explore creativity and problem-solving, to connect school to life in innovative ways, and to architect safe digital futures," the study said.

General education department principal secretary Rani George received the study report from Unicef India educational specialist Pramila Manoharan, in the presence of chief minister Pinarayi Vijayan and general education minister V Si-



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

Artificial Intelligence Training for Public

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.

- First batch 466 participants
- Second batch- 750 participants
- Total: 1216 participants



Al learning included in School Curriculum

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 pro-

FIRST IN THE COUNTRY

gramme that can recognize human facial expressions. This programme will be ablet o identify up to seven different emotions on a person's face.

"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' packa-



It is the first time in India that all students in a class are getting an opportunity to learn Artificial Intelligence (AI) uniformly said K Anvar Sadath, CEO of KITE

ge, 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, eduActiva, OmniTux, and TuxPaint which cover drawing, reading, language learning, numeracy, operations, and rhythm.

In addition to these, app-

lications developed by KI-TE 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.

- Al learning in ICT textbook of Class 7
- 1st time in the Country that all students in a class will learn AI in a uniform manner.
- 4 lakh students of Class 7 will get familiarized with AI.
- Includes Computer Vision chapter that helps students create their own Al program which can recognize human facial expressions.

eGoverning Critical processes of General Education Department









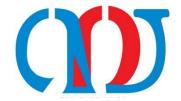








Public database of all schools



SAMANWAYA
Staff fixation and approval software

Some eGovernance applications developed by KITE

SAMPOORNA School Management Software

A comprehensive Web based Software for capturing and processing details of students and teachers from Class 1 to 12.

- SAMPOORNA in use since 2010. Over 1 Cr data handled in past 14 years.
- Captures details of 45 lakh students & 1.8 lakh teachers per year.
- Facilitates Student admission, issuing Transfer Certificate, various reports, entry forms etc.
- Sampoorna plus Mobile App helps to record students' attendance, learning progress and progress reports.
- App eases interaction between schools and parents.
- Separate login facilities for students, teachers and parents.
- SMS alert for parents when his/ her ward is absent from class.





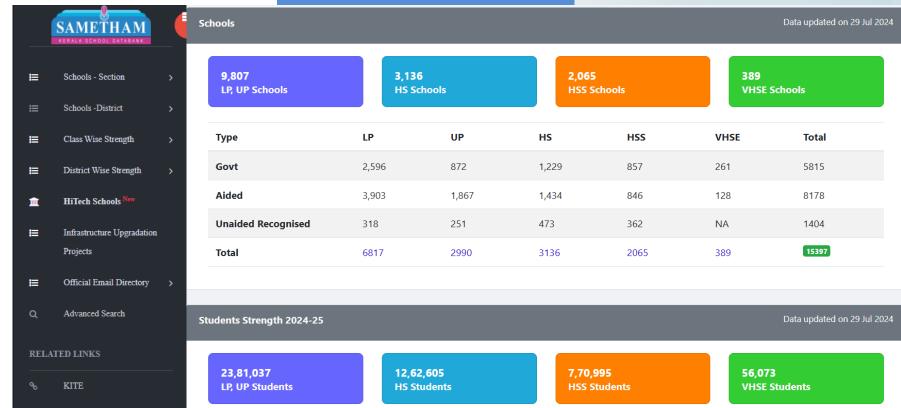




SAMETHAM School Data Bank

Academic and infrastructural details of Govt, Aided and Recognized UnAided schools in Kerala.

www.sametham.kite.kerala.gov.in



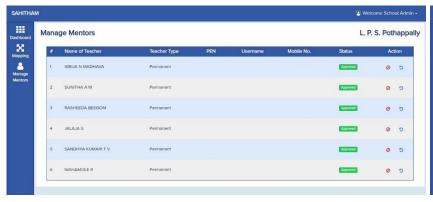
SAHITHAM Mentoring Portal

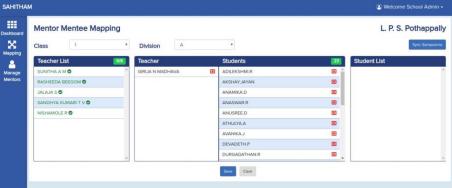


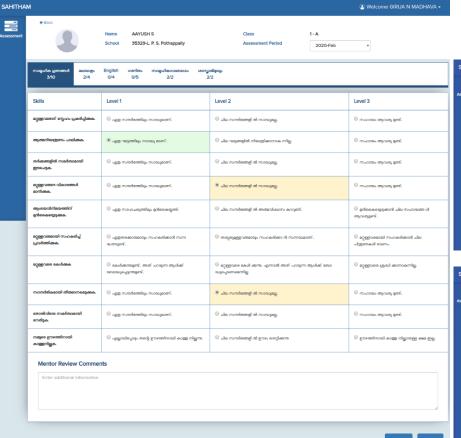
- Sahitham Mentoring Portal aims at facilitating the holistic mentoring and development of all students from Classes 1 to 10.
- Mentor teacher can closely observe, study & record online and prepare the digital portfolio of each student which consist of academic and social emotional skills.
- Using digital portfolio, teachers support and mentor each student and ensure students' development in academic, social-emotional and innate qualities.



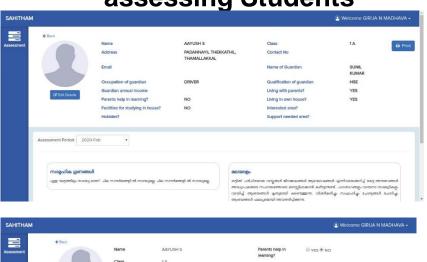
SAHITHAM – Head Masters Mapping the Mentors







SAHITHAM –Teachers assessing Students



Guardian

occupation

Guardian Name

Guardian annual

qualification

DRIVER

SUNII KUMAR

HSE

Living in own house?

Facilities for

studying in house?

Support needed in

Interested area

® VES ⊕ NO

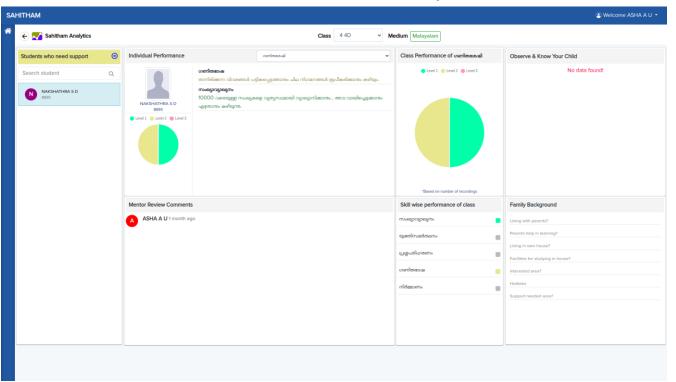
Ø YES ® NO

Other (Mention below)

Other (Mention below) *

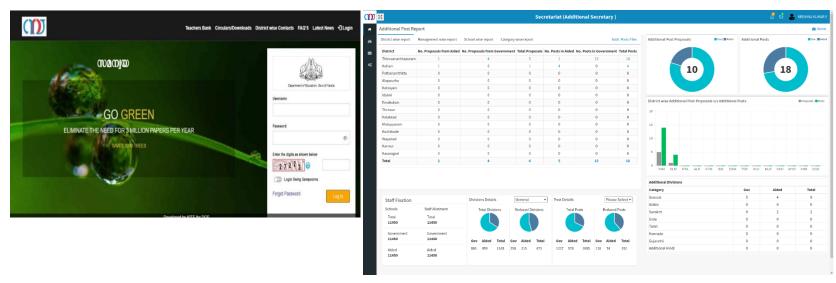
New additions in SAHITHAM Mentoring Portal

Inclusion of Student Analytics



SAMANWAYA

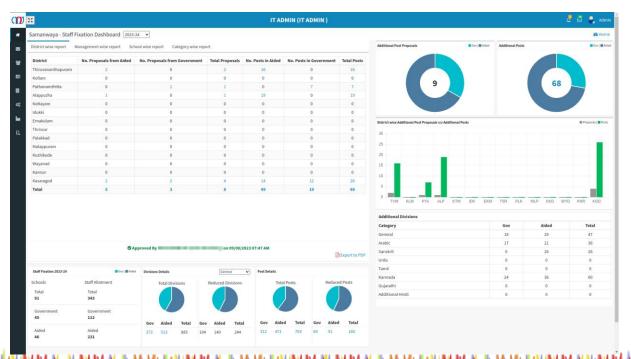
Appointment approval and Staff fixation Software



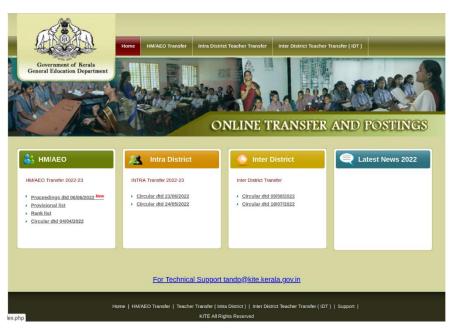
An online system for approval of appointments of teachers of aided schools and staff fixation of all teachers under General Education Department. Dashboard lists out the details of applications submitted, approved, rejected and those which are put on hold. Application features multiple level monitoring systems for authorities.

New additions in SAMANWAYA portal

New UI for file view, Seniority Rank list & Staff list Staff Fixation & Additional Post Proposal Analytics Dashboard



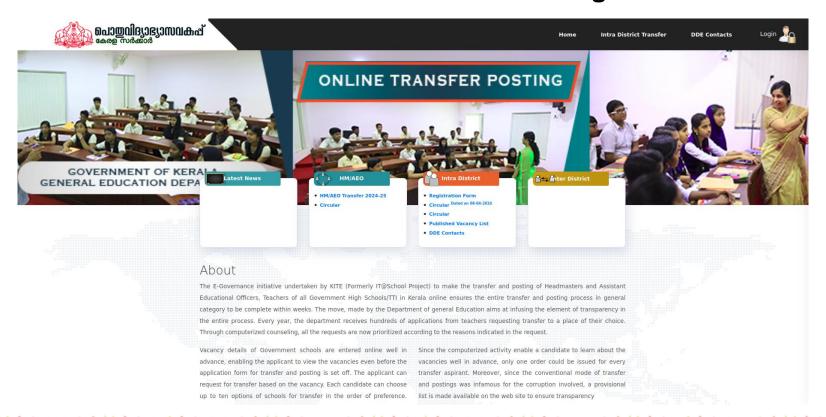
Online Transfer and Posting of Teachers



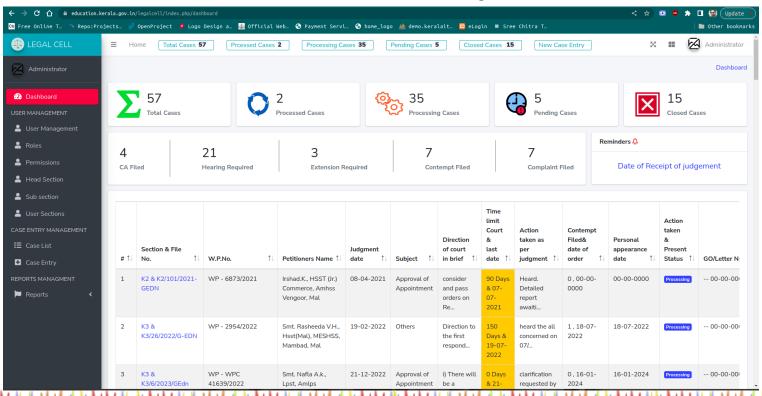
- An online system for applying, tracking and processing Transfer and Posting of teachers, based on their seniority and eligibility.
- Provides hazzle free processing of applications



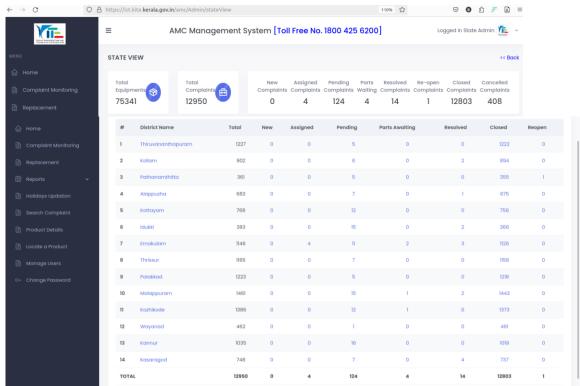
New Portal for Online Transfer and Posting of Teachers



New application for Legal Cases in General Education Department



New portal for processing AMC Support for ICT equipments beyond Warranty



AMC provided to 1,17,093 Laptops & 66,209 Projectors

VICTERS – The complete educational channel



www.victers.kite.kerala.gov.in





- Operational since 2006- Telecasts 24/7.
- Educational program- First Bell Digital Classes
- Available in all DTH & Cable networks
- Overs 93% households in Kerala covered.
- Contents developed by Inhouse teams & teachers.
- Tie-ups with institutions and media firms.
- YouTube channel has over 3.34 Million subscribers.





New Programmes in KITE VICTERS channel



KITE beams 100 hours of Live Feed during School Sports Meet.

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

he Kerala Infrastructure and Technology for Education (KITE), under the Department of General Education, has implemented a range of technological solutions to give a hightech 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 histo-K. ANVAR SADATH ry 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



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

KERALA INFRASTRUCTURE AND

KITE Victers, a Stateowned 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.

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

Highlights

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

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

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-Vidva Kerala channel.

Photo updates

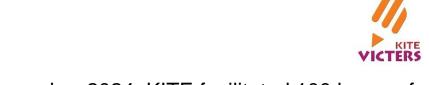
In addition, SchoolWiki, KITE's dedicated platform (www.schoolwiki.in), has been giving continuous photo updates from all 17 venues. Under the guidance of Little KITES, a network of IT clubs featuring over one lakh student members, student teams have been engaged in handocumentation, creating promotional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

reels. Students from Kerala

Media Academy are also

participating in the docu-

mentation activities.



- In December 2024, KITE facilitated 100 hours of Live Telecast of Kerala School Sports Meet through KITE VICTERS educational channel.
- This was later uploaded in its YouTube channel for future viewing.
- Little KITEs members uploaded over 5000 images of the Sports Meet to School Wiki portal.
- Portal developed by KITE portal sports.kite.kerala.gov.in also provided comprehensive details of all competitions including registration, results, progress and meet records.

5 PM eVidya channels allocated to Kerala for Grades 1 to 12



Channel No.103

Class 1 to 4

Channel No.104

Class 5 to 8

Channel No.105

Class 9 to 10

Channel No.106

Class 11 & 12

Channel No.107

General Edutainment Programmes

Telecast of these channels started from July 2023.

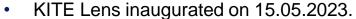
KITE LENS Educational Content Generation Hub











- Facilitates creation of attractive and knowledgeable educational contents
- Provides support for teachers in developing their innovative and creative contents.
- Training has been given to teachers for using digital camera and AI, smart phones and AI in producing quality digital contents.
- Educational digital content development process decentralized.

Activities during Covid-19 pandemic phase



INDIA FILE

KITE, CORONA AND

1 Yughyan' in Peri-nthalmanna, Malap-param, Kerala, MV Ra-jan mash should ideally be relating, it's May and Perinthalmanna, like most of Kerala, is under Could be khown. The middle aged school teacher doesn't have to travel the usual ost smartphone and personal computer, duly assisted, wherever a need erises, by his family members. If coordinate with all our teachers, and pur-

es of our nearly and studen





mitigation measure," says Sadath. First, the department conducted a specific five-day on-line. IT training for 80,000 primary school teachers. This helped them refresh their di-gital skills and put them to good use during the lockdown times,

Digital divide will hurt girls

spread. However, farmers' kids in Osmanahar share with their parents and the lack of inte

must continue but the observment will have

National Story-Business Line-05.05.2020

First Bell for online classes in State schools from June 1

Sessions to be made available through KITE Victors channel and other mechanisms for all classes except class II



line mechanisms.

The Kerala Infrastructure the KITE Victors website, monitor the academic protion (KITE) on Friday brought out the timetable for conducting the classes.

The sessions will be held from 8.30 a.m. to 5.30 p.m. from Monday to Friday for all classes from 1 to 12, except es vary from half-an-hour to the second week

The programmes will be classes will be prepared by bours, friends living nearby,

sons for class 10 will be con- Education Department such Classes for State school stu- ducted at 5.30 p.m. the same as the State Council of Edudents, under the name First day, those for class 12 will be cational Research and Train-Bell, will get under way on repeated at 7 p.m. For class-ing, KITE, Samagra Shiksha June 1 through the KITE Vic- es 1 to 9, the repeats will on Kerala (SSK), and the State ters channel and other on- Saturday and Sunday. The ti- Institute of Educational merable will be available on Technology. The SCERT will

and Technology for Educa- KITE Victors channel, and social media. The sessions on Victers channel will be available si-Victors website, mobile app,

In the first week, the classes class 11, on the channel. The will be telecast on a trial ba- view the classes either in real time slots for different class- sis. These will be repeated in The modules for different or Internet facilities of neigh-

cess and KITE will take up

Class teachers and school

the technical coordination.

headteachers have been gi-Kudumbashree units for a soven the task of ensuring that students have access to tele-Teachers should get in vision, smart phone or comtouch with the students Samagra Shiksha Kerala time or later. The alternatives can include television ing worksheets for students of

classes 1 to 7 and monitoring

ble with Little KTTEs more

bers too can be used. If sto

dents experience any

can turn to parent-teacher as-

sociations, local bodies, or

Kerala reports 1st case in India

Mar 17-25

Jan 30

 Schools closed. Online training provided for 74000 teachers

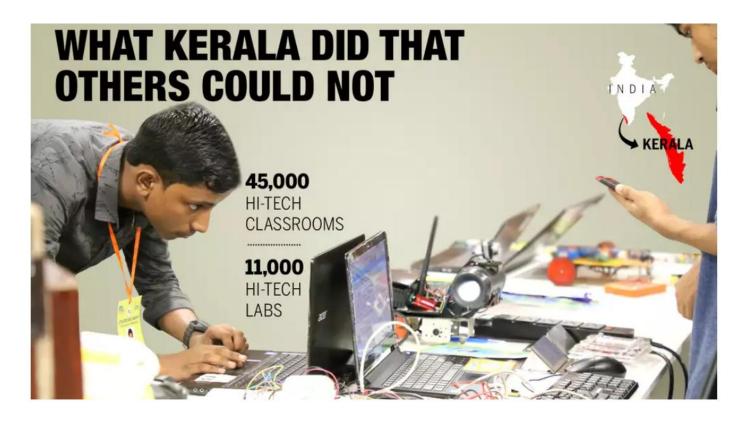
Mar 23

Complete Lockdown imposed in the Country

Apr-May

 Student engagement programs Avadhikala Santhoshangal & Akshara Vriksham

Article - The Hindu - 30.05.2020



https://timesofindia.indiatimes.com/india/what-kerala-did-that-others-could-not/articleshow/78783667.cms

First Bell Digital classes through KITE VICTERS channel





Interim arrangement for regular classes in wake of Covid-19 pandemic

Broadcast through VICTERS along with Facebook LIVE and YouTube channel

18000 Digital Classes prepared by teachers & all contents FOSS based

From 01.06.2020 to 30.05.2022

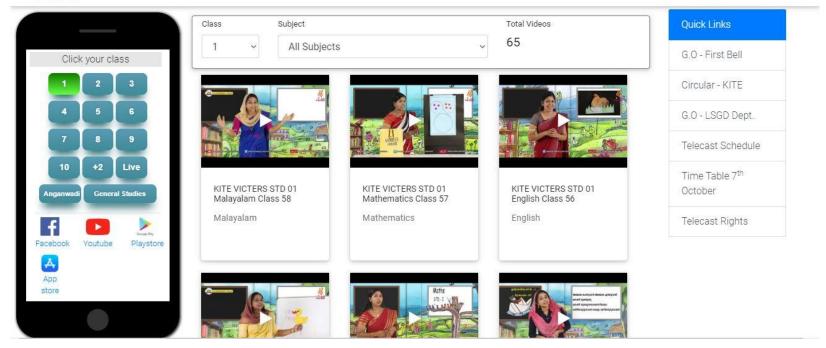


First Bell Digital Classes through KITE-VICTERS









- We could achieve this as a result of our various programs spanning over a decade.
- First Week was Trial run followed by Actual classes which started from 2nd week of June 2020

Haritha Vidyalayam Education Reality Show-Season 3

- 1st of its kind in the Country
- Platform for schools to showcase unique initiatives & best practices,
- 1st Prize-20 lakhs
- 2nd Prize-15 lakhs
- 3rd Prize-10 lakhs
- 1st Edition held in 2011
- 2nd Edition held in 2017
- All videos available at www.hv.kite.kerala.gov.in

753 schools applied

109 schools 1st round

20 schools 2nd round





Supporting those who are needy and special





YouTube channel for Tamil Classes for students in Idukki and Palakkad districts



YouTube channel for Kannada classes for students in Kasaragode district





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

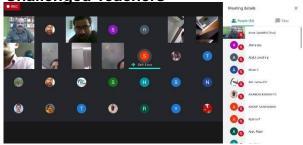
Under the project Implemented by Samagra Shiksha Kerala (SSK), the mentors translate the Malayalam content aired through the governmentrun education channel Kite Victers, into tribal dialects.

The Logical Indian Crew Kerala | 13 July 2020 / Updated: 14 July 2020 9:06 AM

White Board Project

- 0.125 Million differently abled students
- 2500 Resource Teachers
- Class videos uploaded in specific YouTube channel.

Inaugurated the Online Advanced Computer Training for Visually Challenged Teachers



Mazhavil Poovu Project for Tribal Students

- Classes prepared in 13 Tribal languages
- 2500 Resource Teachers
- Class videos uploaded in YouTube

Mobile Film making workshop for Teachers





Training in Film Making using Mobile (a 7 day course) was given to 30 selected teachers during Sept- Oct 2019

IT Fest for Students and 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 Tupi-Tube 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 est 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

- ➤ 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.
- 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

- 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.

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. Si milarly, 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.

Total of 7 competition items in IT Fest, including newly added Animation & Scratch programming Spot demonstration as part of Multimedia Presentation First of its kind Competition for Teachers-'ICT Training Aids' added to the event.

Infrastructure upgradation of schools and colleges

- Elevating Govt Schools into 'Centres of Excellence'
- Transforming education for enhancing life skills.
- Regaining primacy of public education system through participatory approach at grass-root level

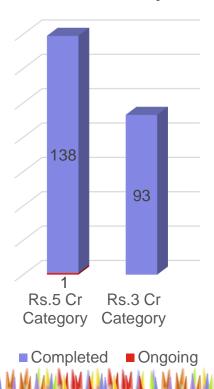








Status of Infra Projects



National and International Accolades for KITE





State Television Award 2023

Best Documentary. Best Anchor Best students' Programme



CM's Award for Innovations in Public Policy 2022

"Little KITEs" & "First Bell" Digital Classes



eIndia Award for ANTS (Animation Training for Students)

IT@School



Technology Sabha Award 2023

E 3 ENGLISH



State Television Award 2020

KITE VICTERS First Bell (Best students' programme) KITE VICTERS Educational programme(Best Anchor)



Stockholm Award (Honorable mention) 201Ó

IT@School



ODF Alliance International Award 2008

IT@School



Technology Sabha Award 2022

Samanwaya Online Software



State Television Award 2019

KITE VICTERS Documentary (Best Students' programme)



World is Open Award 2008

IT@School



National eGovernance Award 2006

IT@School



Technology Sabha Award 2022

Platform for online classes



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)



World Education Summit Award 2022

Platform for online classes



Finalist in eAsia Award 2011

Sampoorna



Technology Sabha Award 2021

First Bell Digital Classes



State Television Award 2017

KITE VICTERS- Best narration. KITE VICTERS- Best Educational Programme.



WORLD World Education Summit Award 2018

Hi-Tech school project



th mBillionth Award 2021

First Bell Digital Classes



Technology Sabha Award 2020

School Wiki / Akshara Vriksham



CIET-AICEAVE 2018

Award for Best Video programme in Senior Secondary division



Social Media for Empowerment Award 2021

First Bell Digital Classes



Social Media For **Empowerment Award (Special** Mention) 2017

School Wiki



Technology Sabha Award 2018

Samagra



eGovernance Champion Award 2022

First Bell Digital Classes



Thank You

State Office

KITE

Office of IT@School Project

Poojapura

Trivandrum -695012

Kerala,India

KITE IT Division

Phone: +91-471-2529800,

Fax-+91-471-2529810,

Email: contact@kite.kerala.gov.in

KITE Infrastructure Division

Phone: 0471 2327670

Email: infra@kite.kerala.gov.in