

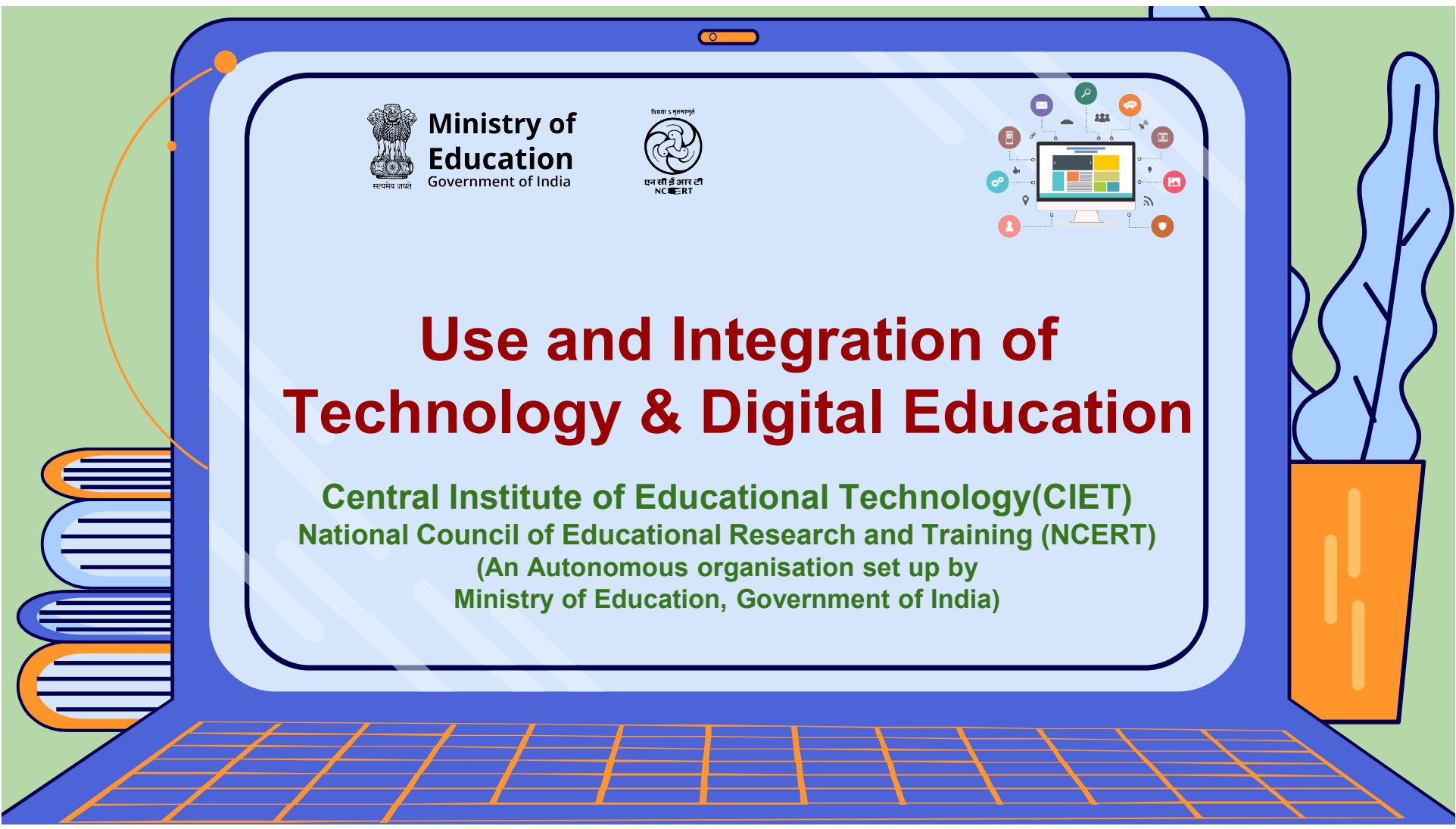
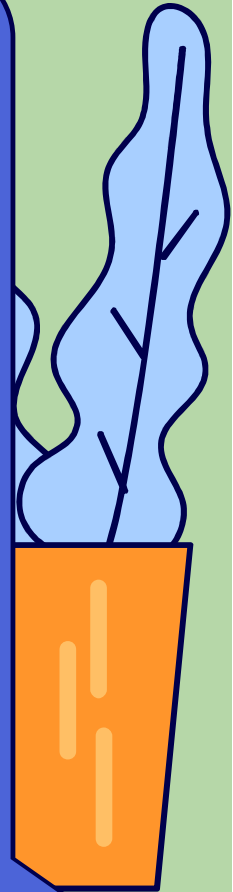


**Ministry of
Education**
Government of India



Use and Integration of Technology & Digital Education

Central Institute of Educational Technology(CIET)
National Council of Educational Research and Training (NCERT)
(An Autonomous organisation set up by
Ministry of Education, Government of India)





**Imparting equitable quality education
and lifelong learning is the goal**

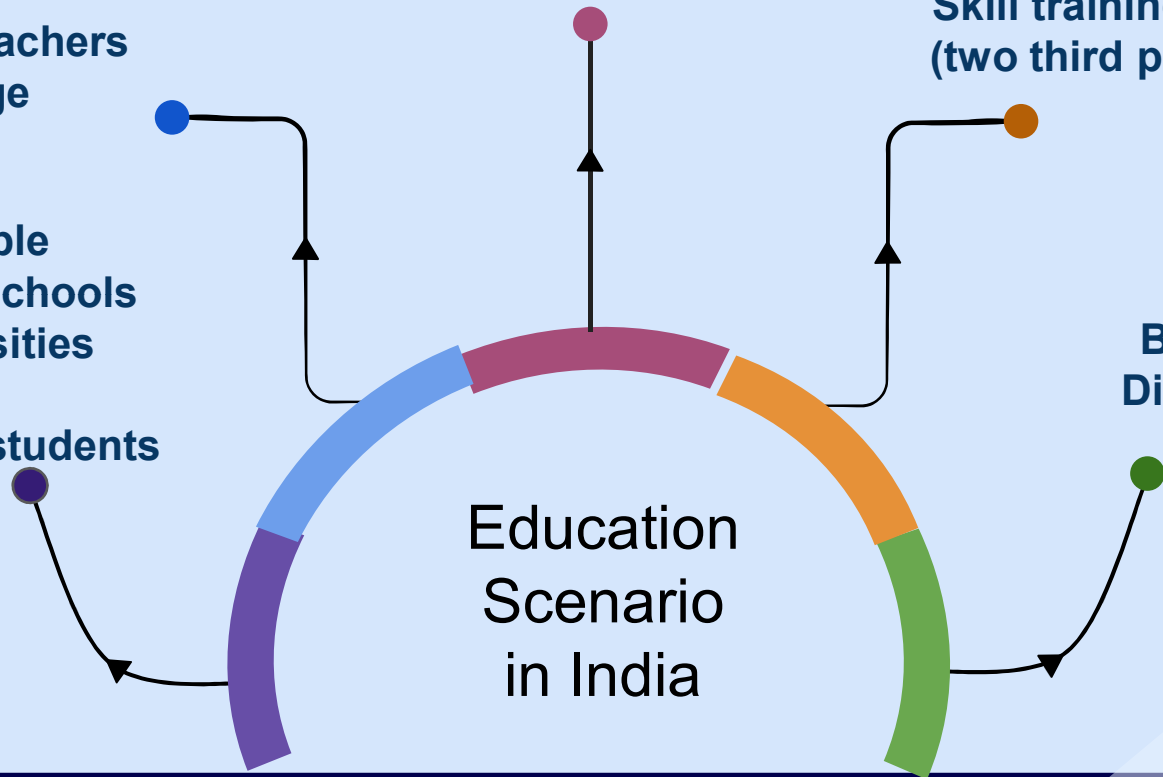
**CPD of
10 million Teachers
is a challenge**

**Skill training of youth
(two third population)**

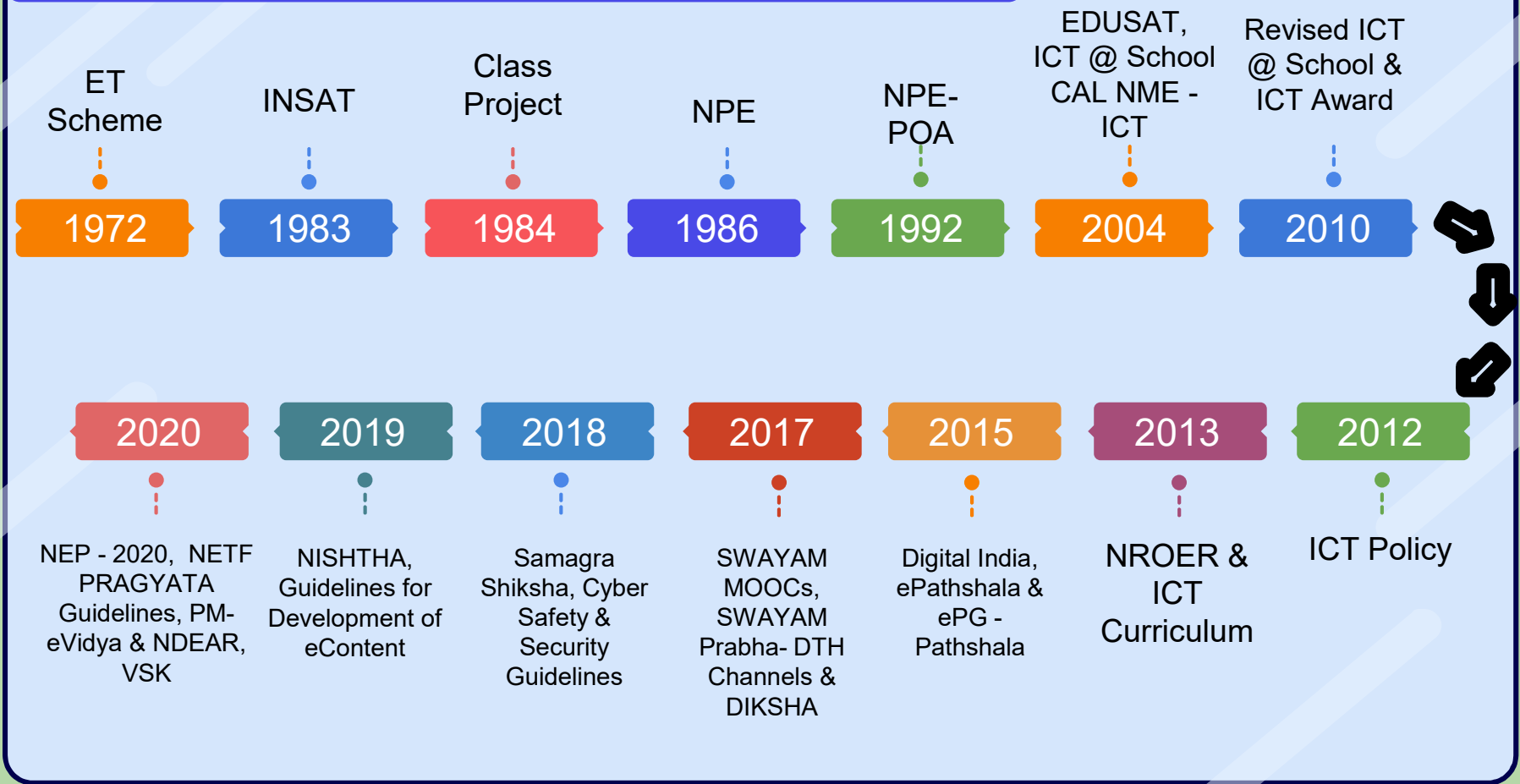
**1.3 bn. People
1.5 million Schools
900+ universities
14000+ TEIs
330 million students**

**Bridging the
Digital Divide
is the goal**

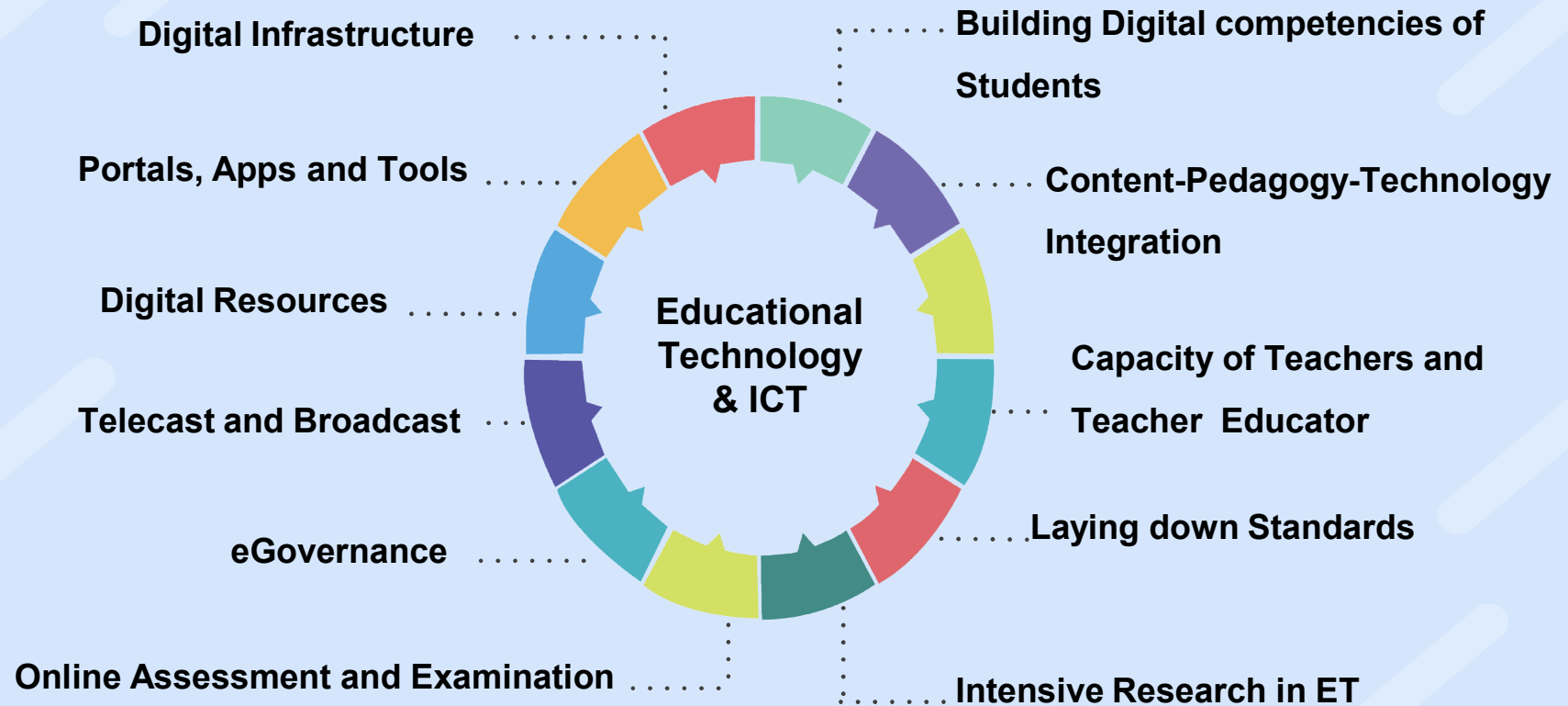
**Education
Scenario
in India**



ICT Use in India: Policy Directions



NEP-2020: Recommendations for Online and Digital Education



CIET - NCERT develops...

variety of digital contents



Energized books



Assessment questions



Infographics



eCourses

Guidelines/ Handbooks



Videos, ISL videos



Interactive &
Immersive content



Audios, Talking
Books, Audio Books



Worksheets

Major Digital Initiatives

1

PMeVIDYA



2

DIKSHA



3

ePathshala



4

NISHTHA



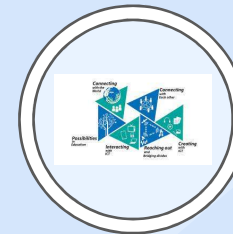
5

SWAYAM



6

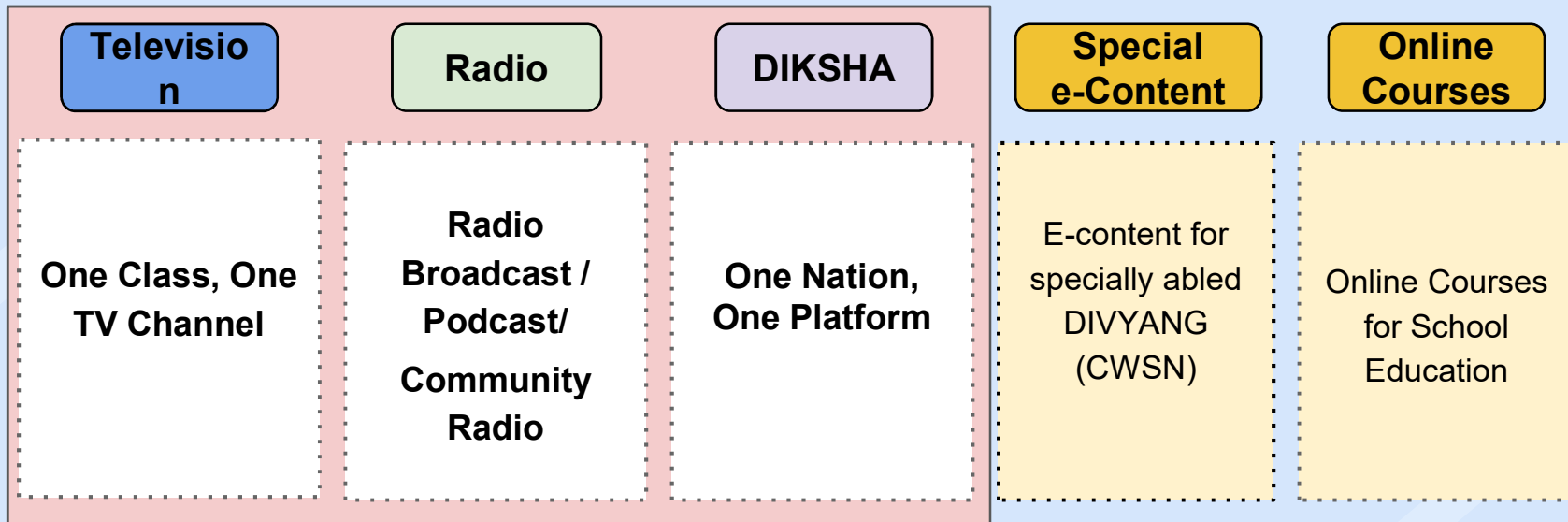
ICT Curriculum



PM e-VIDYA

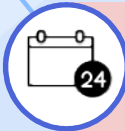
PM e-VIDYA focuses on unification of efforts, enabling multi-mode access to education

PM e-Vidya focuses on developing multi channel learning continuum



DIKSHA, Television and Radio are the focus of discussion for resilient and coherent access

Television



12 DTH TV Channels on 24×7 basis daily and simulcast on Jio TV App, Private cable operators, YouTube channel etc.



6,300 curriculum based videos developed for school education in English, Hindi including Indian Sign Languages (ISL) including vocational education



One hour live session for each class for clarification of doubts



IVRS support for addressing queries of students

Radio



3,688 pieces of curriculum-based radio programmes (Classes 1 -12)



Broadcast on 398 Radio Stations (11 GyanVani FM Radio Stations, 255 Community Radio Stations, 132 All India Radio stations), iRadio and JioSaavn Mobile apps



1,881 live programs podcast on iRadio

DIKSHA



5900 + ETBs by States / UTs



2,80,000 eContent



7000 + eCourses



50 million page hits on daily basis



Supports 32+ languages
Including 22 scheduled
languages and indian sign
languages (ISL).

Dedicated Verticals for



Foundational
Literacy and
Numeracy (FLN)



Adult Education



Vocational Education



Virtual Lab



Children with special
needs (CWSN)

<https://diksha.gov.in/>

Virtual Labs

200+ Virtual Labs

The screenshot displays a virtual lab interface. At the top, there is a search bar with the text "Search or enter QR code" and a "Search" button. To the right, there is a language dropdown menu set to "English" and a user profile icon. Below the search bar, a yellow header bar contains a back arrow, the text "Physics Lab Manual", "English", "Class 11", and a "Share" button. The main content area features a large 3D model of a Vernier Calliper with a play button in the center. To the right of the model, there are filter buttons for "All", "Video", "Interactive", and "Docs". Below these, a list of lab topics is shown, including "1. Use of Vernier Callipers" and "2. Use of screw gauge". A "Ask Tara" button is visible at the bottom right of the interface.

<https://diksha.gov.in/>

FLN Vertical

The screenshot shows a web browser window with the URL diksha.gov.in/fln.html. The page features the Ministry of Education logo and the NIPUN BHARAT MISSION banner. The banner includes the text: "National Initiatives for Proficiency in Reading with Understanding and Numeracy (NIPUN Bharat), A National Mission on Foundation Literacy and Numeracy (FLN)". Below the banner, there are five navigation buttons: "Click here to read FLN Mission Document", "Click here to read NIPUN Bharat", "Click here to read Vidya Pravesh document", "Click here to view FLN Launch Video", and "Click here to view NIPUN Mission- Anthem". The page also includes a "Reading list" button in the top right corner and an "Activate Windows" watermark in the bottom right corner.

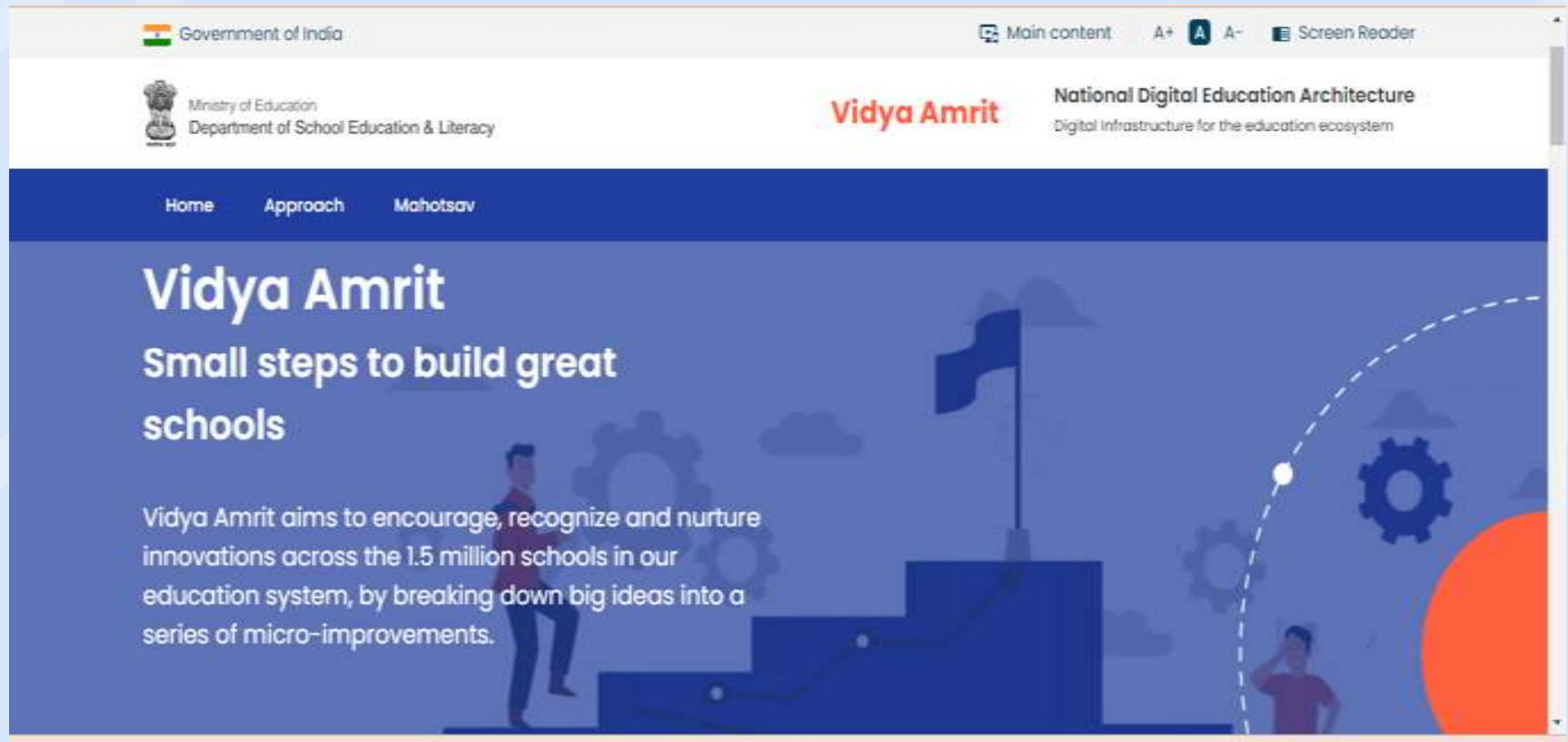
<https://diksha.gov.in/>

Education for All



<https://diksha.gov.in/>

Micro Improvement project



The screenshot shows the homepage of the Vidya Amrit website. At the top, there is a header with the Government of India logo and the Ministry of Education, Department of School Education & Literacy. The main navigation bar includes links for Home, Approach, and Mahotsav. The main content area features a large blue banner with the title "Vidya Amrit" and the subtitle "Small steps to build great schools". Below this, a paragraph explains the project's goal: "Vidya Amrit aims to encourage, recognize and nurture innovations across the 1.5 million schools in our education system, by breaking down big ideas into a series of micro-improvements." The banner also includes an illustration of a person climbing a staircase towards a flag, symbolizing progress and achievement.

Government of India

Ministry of Education
Department of School Education & Literacy

Vidya Amrit National Digital Education Architecture
Digital Infrastructure for the education ecosystem

Home Approach Mahotsav

Vidya Amrit

Small steps to build great schools

Vidya Amrit aims to encourage, recognize and nurture innovations across the 1.5 million schools in our education system, by breaking down big ideas into a series of micro-improvements.

<https://diksha.gov.in/>

DIKSHA

DIKSHA's building blocks were used for multiple use cases



Energised Textbooks



Teacher Professional Development



Question Bank



Digital Credentials



Collaboration



Phygital



Content Sourcing



Content Authoring



Quizzes



cQube



Surveys



Language Translations



Content Consumption



Data Tools & Dashboards



Chatbot

Vidya Samiksha Kendra - CCC
System to monitor, mentor, manage the whole ecosystem



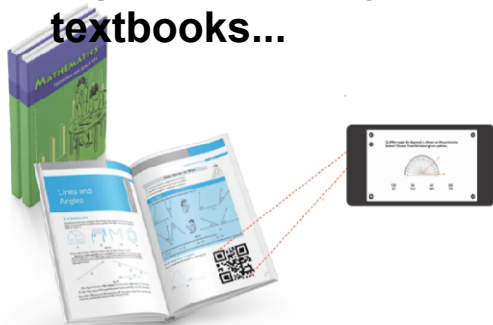
Mentoring



Sunbird Registry and Credentials

Phygital

Bridging of physical and digital worlds by 'energizing' textbooks...



State board,
Grade 5th
Textbook

ಗಣಿತ

ಗಣಿತ

ನಿಮ್ಮ ಈ ಅಧ್ಯಯನ ಅಭ್ಯಾಸದ ಸಂದರ್ಭದಲ್ಲಿ ಸಾಮಾನ್ಯವಾಗಿ ಗಣಿತ :
 • 3-ಅಂಕದ ಎರಡು ಸಂಖ್ಯೆಗಳ ಗುಣಿಸುವುದನ್ನು ಕಲಿಯುತ್ತೀರಿ.
 • 4-ಅಂಕದ ಸಂಖ್ಯೆಯನ್ನು 1 ಅಥವಾ 2 ಅಂಕದ ಸಂಖ್ಯೆಯಿಂದ ಗುಣಿಸುವುದು.
 • 5-ಅಂಕದ ಸಂಖ್ಯೆಯನ್ನು 1 ಅಂಕದ ಸಂಖ್ಯೆಯಿಂದ ಗುಣಿಸುವುದು.
 • ಗುಣಿಸುವ ಕ್ರಮವನ್ನು ಅರ್ಥಮಾಡಿಕೊಳ್ಳುವುದು.

ಗುಣಿಸುವ ಗಣಿತದ ಮೂಲ ಕ್ರಮಗಳಲ್ಲಿ ಒಂದು ಎಂದರೆ ಸಮಗತಿ. ಇದರಲ್ಲಿ ಗುಣಿಸುವ ಮಾತುಗಳನ್ನು ಗುಣಿಸುವುದು. ಗುಣಿಸುವುದು ಸಂಖ್ಯೆಯನ್ನು ಗುಣಿಸುವುದು ಮತ್ತು ಗುಣಿಸುವ ಸಂಖ್ಯೆಯನ್ನು ಗುಣಿಸುವುದು. ಗುಣಿಸುವುದು ಈ ವಿಧದ ಸಂಖ್ಯೆಗಳ ಗುಣಿಸುವುದು. ಗುಣಿಸುವುದು ಗುಣಿಸುವುದು.

$ಗುಣಿಸು \times ಗುಣಿಸು = ಗುಣಿಸು$

ಗುಣಿಸುವ ಗುಣಿಸುವುದು
 1) ಯಾವುದಾದರೂ ಒಂದು ಸಂಖ್ಯೆ ಮತ್ತು ಸೀದೆಯ ಗುಣಿಸುವುದು ಯಾವಾಗಲೂ ಸೀದೆಯಾಗುತ್ತದೆ. ಉದಾ: $12 \times 0 = 0$, $8 \times 0 = 0$
 2) 1 ಮತ್ತು ಯಾವುದಾದರೂ ಒಂದು ಸಂಖ್ಯೆಯ ಗುಣಿಸುವುದು ಯಾವಾಗಲೂ ಅದೇ ಸಂಖ್ಯೆಯಾಗುತ್ತದೆ. ಉದಾ: $9 \times 1 = 9$, $6 \times 1 = 6$
 3) ಗುಣಿಸುವ ಗುಣಿಸುವ ಗುಣಿಸುವುದು ಯಾವುದಾದರೂ ಅಥವಾ ಗುಣಿಸುವುದು ಒಂದೇಯಾಗುತ್ತದೆ. ಉದಾ: $4 \times 7 = 28$, $7 \times 4 = 28$.

ಗುಣಿಸುವುದು ಅಥವಾ
 1 ಗುಣಿಸುವುದು ಕಲಿಯುವುದು.
 1) 35×0 4) 1×235
 2) 164×1 5) $0 \times 1,001$
 3) 100×0 6) 1×55

NCERT, Grade 8th
textbook

Land, Soil, Water, Natural Vegetation and Wildlife Resources

In a small village in Tanzania, Africa, Mamba gets up very early in the morning to fetch water. She has to walk a long way and returns after a few hours. She then helps her mother in the house and joins her brothers in taking care of their goats. All her family owns a piece of rocky land around their small hut. Mamba's father can barely grow some maize and beans on it after toiling hard. This is not enough to feed their family for the whole year.

Peter lives in the heart of the sheep rearing region in New Zealand where his family runs a wool processing factory. Everyday when he returns from school, Peter watches his uncle taking care of their sheep. Their sheep yard is situated on a wide grassy plain with hills in the far distance. It is managed in a scientific way using the latest technology. Peter's family also grows vegetables through organic farming.

Mamba and Peter stay in two different parts of the world and lead very different lives. This difference is because of the differences in the quality of land, soil, water, natural vegetation, animals and the usage of technology. The availability of such resources is the main reason places differ from each other.

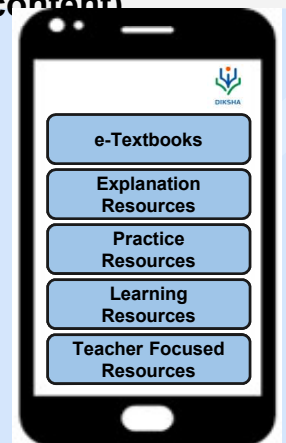
LAND
 Land is among the most important natural resources. It covers only about thirty per cent of the total area of the earth's surface and all parts of this small percentage are not habitable. The uneven distribution of population in different parts of the world is mainly due to varied characteristics

Let's do
 Observe the land, type of soil and water availability in the region you live. Discuss in your class, how it has influenced the lifestyle of people there.

Do you know?
 Ninety per cent of the world population occupies only thirty per cent of land area. The remaining seventy per cent of the land is either sparsely populated or uninhabited.

...which lead to ease of access to relevant digital content across the nation and enable continuity of learning

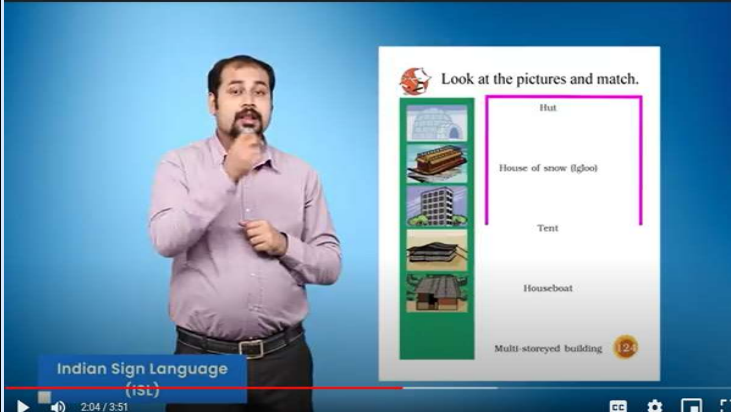
QR Code linking to relevant e-content (student and teacher facing content)



eContents based on UDL



स्पर्शी, DAISY और ध्वनि रूप से

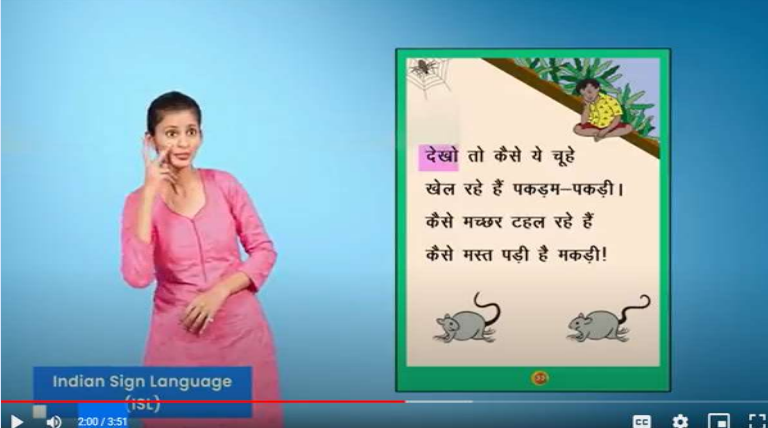


Look at the pictures and match.

	Hut
	House of snow (igloo)
	Tent
	Houseboat
	Multi storeyed building

Indian Sign Language (ISL)

2:04 / 3:51



देखो तो कैसे ये चूहे
खेल रहे हैं पकड़म-पकड़ी।
कैसे मच्छर टहल रहे हैं
कैसे मस्त पड़ी है मकड़ी!

Indian Sign Language (ISL)

2:00 / 3:51



स्पर्शी, DAISY और ध्वनि रूप से

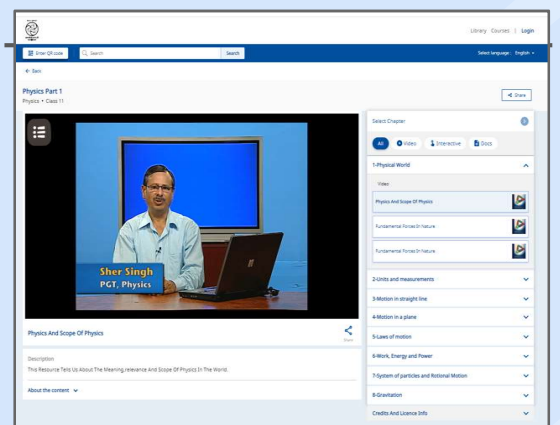
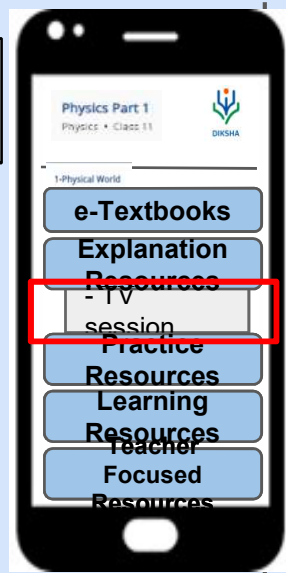
DAISY
(Digital Accessible Information System)

NCERT has leveraged DIKSHA to enable Coherent Access

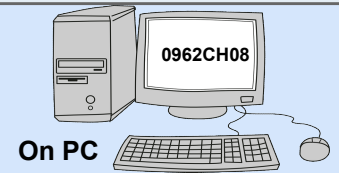


I have missed the first half of this session, what should I do?

Don't worry! Just scan the QR code on screen using DIKSHA app on your phone



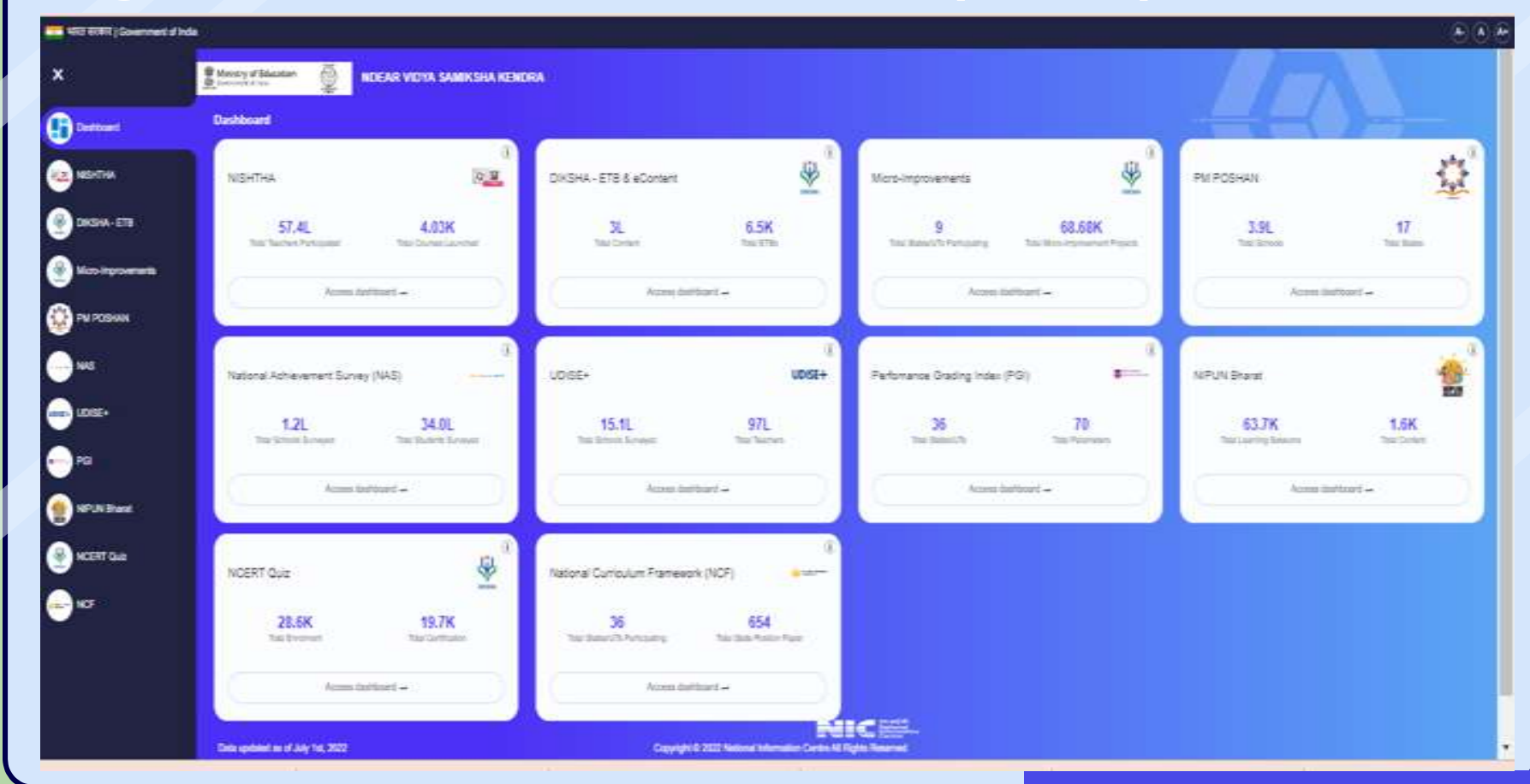
On phone



On PC

Easy access of content for Chapter wise across grades and subjects through DIKSHA, TV, Radio

Vidya Samiksha Kendra (VSK)



<https://diksha.gov.in/>

Experiential Lab



<https://diksha.gov.in/>

Continuous Professional Development (CPD)

01

NISHTHA

National Initiative for School Heads and Teachers Holistic Advancement

02

CPD Courses

Online courses for continuous Professional Development (CPD)

03

MOOCs for School Education

Online courses for students for learning enrichment

04

Online Capacity Building on ET/ ICT

Webinar/ live interaction and online training on ET/ ICT

Platforms: MOODLE, SUNBIRD, OPEN EDX, Google Course Builder

NISHTHA



NISHTHA 1.0 (Elementary Level)

- 18 Courses
- 30 States/ UTs and 7 autonomous organizations under MoE and MoD
- 11 languages - Assamese, Bengali, Bodo, English, Kannada, Hindi, Telugu, Odia, Gujarati, Punjabi, Urdu



NISHTHA 2.0 (Secondary Level)

- 12 Courses
- 33 States/ UTs and 8 autonomous organizations under MoE, MoD and MoTAD
- 10 languages - Hindi, English, Urdu, Gujarati, Punjabi, Telugu, Kannada, Bengali, Marathi and Odia.



NISHTHA 4.0 (NIPUN Bharat)

- Launched on July, 2022

3/8/2022, 10:27:16 AM A+ A+ English (en) हिंदी (hi) Log In

NISHTHA ONLINE INTEGRATED TEACHER TRAINING FOR CHANGE SAMAGRA SHIKSHA

HOME ABOUT FORUM ANALYTICS FAQs ARCHIVE CONTACT US

National Initiative for School Heads' and Teachers' Holistic Advancement

Integrated Teacher Training Programme for Improving Quality of School Education

Capacity building of 4.2 million teachers

Integrated training of principals/ heads as key academic support

Focus on competency and higher order thinking skills based teaching learning

NISHTHA (Elementary Level) - Face to Face NISHTHA 1.0 (Elementary Level) - Online NISHTHA 2.0 (Secondary Level) - Online NISHTHA 3.0 (FLN) For NIPUN Bharat - Online



NISHTHA 3.0 (NIPUN Bharat)

- 12 Courses
- 33 States/ UTs and 5 autonomous organizations under MoE
- 11 languages - Hindi, English, Urdu, Gujarati, Punjabi, Telugu, Kannada, Odia, Assamese, Marathi and Mizo

<https://nishtha.nic.in/>

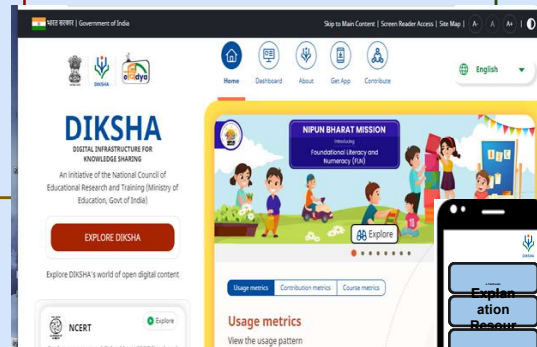
CPD on DIKSHA

CPD on DIKSHA

Cyber Hygiene
Practices: Personal
Digital Devices

Environmental
Hazards of
Electronic Waste (e-
waste)

COVID 19 -
Responsive
Behaviour (UNICEF)



3,50,000
Beneficiaries

Action Research

Urdu Language
Script Writing

Catch the Rain
(UNICEF)

MODELS FOR SCHOOL Education ON SWAYAM

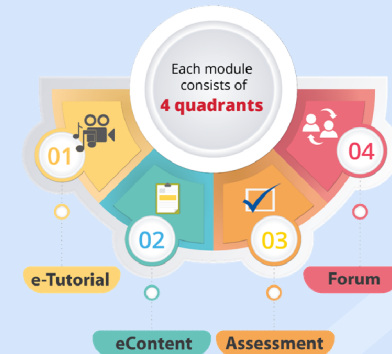
SWAYAM focuses on the three cardinal principles of educational policy viz. Access, Equity, and Quality.

3,00,000 Beneficiaries

28 Online courses

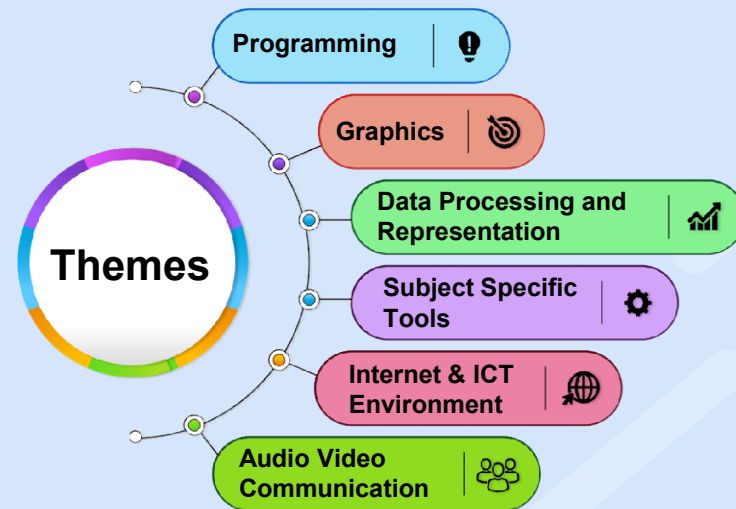
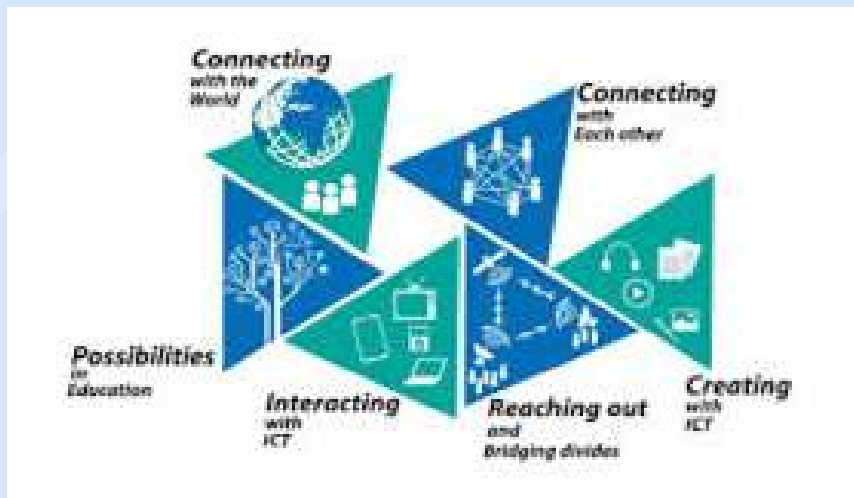
11 Subjects of Class XI and XII

10 Cycles



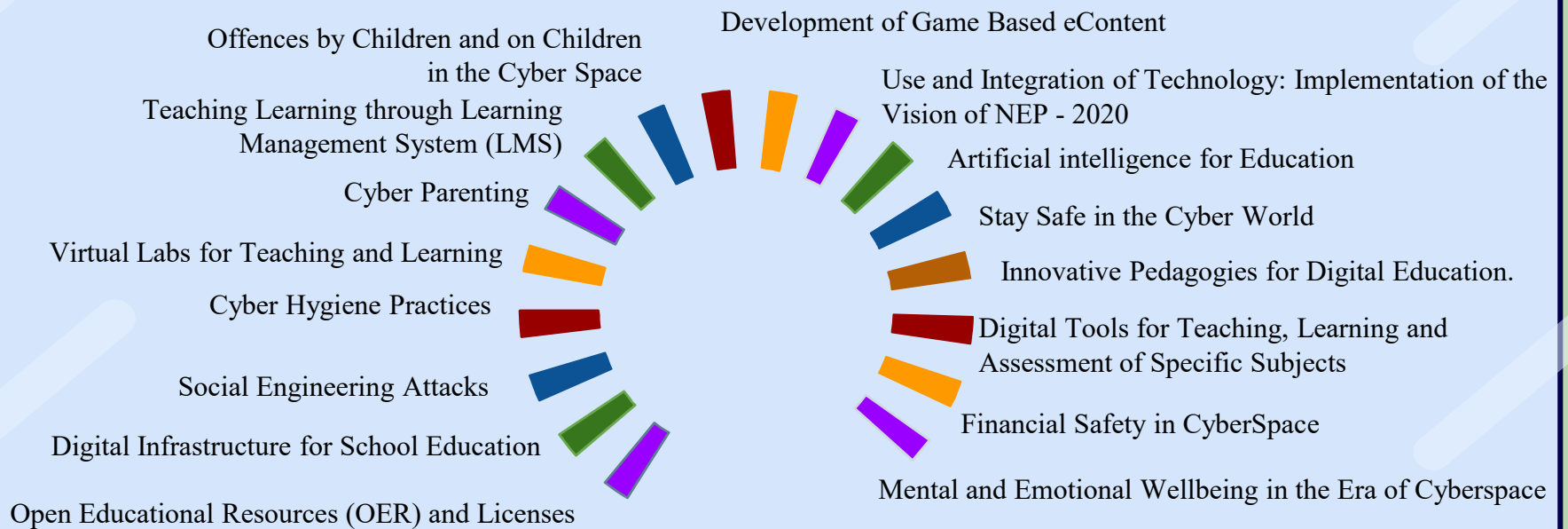
<https://swayam.gov.in/>

ICT Curriculum



<https://ictcurriculum.gov.in/>

Online Capacity Building on ET/ ICT



**16 online
Trainings**

**650 +
Webinars**

**1,50,000
Beneficiaries**

ePathshala



10,90,98,666 visitors on Portal
30 M users in UMANG

App Rating

- 4.2 on Google play store
- 3 on Apple Store
- 4.3 on Windows Store

App downloads/Users

- 41,48,346 on Google
- 138,550 on Apple
- 88,010 Windows

Total Books as ePub: 696

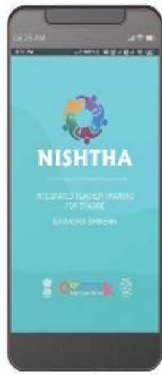
Total no of Flipbook: 504

<https://https://epathshala.nic.in/>

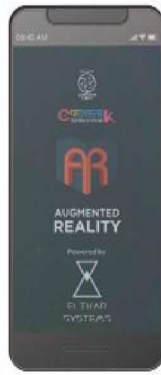
Branding of ePathshala



ePathshala



NISHTHA



Augmented Reality



PARAKH



NAS



SSP Mauritius



ePathshala Scanner

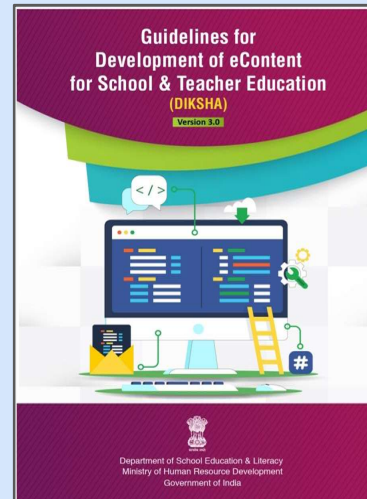
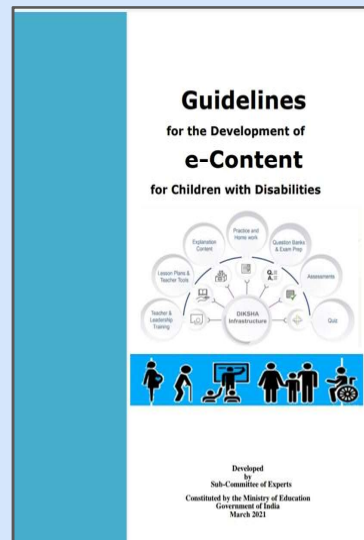
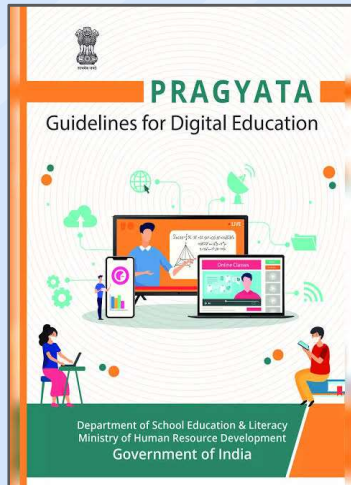


NCF



PRASHAST

Standards & Guidelines for Digital Education



Cyber Safety Guidelines

English



Hindi



<https://ciet.nic.in/pages.php?id=booklet-on-cyber->

International Collaboration



Trained master trainers of Mauritius on developing and disseminating OER, Developed a portal and mobile app



School Online Programme - Collaboration between Indian and Israel Schools



Trained master trainers of Nepal on developing and disseminating eContents and OER



School Online Programme - Collaboration between Indian and Korean Schools



Shared eContents developed by NCERT

Other Initiatives

SAHYOG DTH TV Support for Tele-Counselling Services

**Manodarpan-IVRS
based 24x7
Counselling Support**

**Talk to NCERT
(Voice Assistant)**



**ICT Award for teachers and
educators**

**eContent Development
Competition and ICT fair**

Online quizzes and competitions

(Constitution Quiz, Online Quiz on NEP, Yoga Quiz, Discover Gandhi Quiz, Online Photography competition, Communication material on NEP for teachers, Essay competition etc for School students).



ICT Initiatives: Summary



1. Television

- 12 DTH TV Channels on 24*7 basis daily and simulcast on Jio TV App Private cable operators, YouTube channel
- 6,300 curriculum based videos developed and telecast
 - 2.5 hours fresh slot for Classes I to IX (9 repeats)
 - 3 hour fresh slot for classes X-XII (7 repeats)
- One hour live session for each class for clarification of doubts

IVRS Helpline

- Manodarpan 20,000+ calls
- PM eVIDYA - 29,000+ calls

4. SWAYAM School MOOCs

- 30 MOOCs at Sr. Secondary level
- 29723 enrollment in 8th cycle
- 6030 enrollment in 9th cycle



2. Radio/Podcast

- 397 Radio stations
- 3,429 audio books
- 3,485 audio programmes
- 36 DAISY audio books
- 1257 live programme on iRadio/podcast

5. Indian Sign Language (ISL)

- 10,000 word dictionary
- 3117 ISL videos for Classes I to VI
- 300 Live videos interactions

3. DIKSHA

- 35 states/ UTs on board
- 6430+ ETBs
- 2,81000+ eContents
- 7300+ eCourses
- 494+ Crores learning sessions
- 06 CPD courses for teachers and teacher Educators by NCERT
- 1750+ Crores page hits
- 3.52 Crore app downloads
- 15+ online events like quizzes, essay writing etc.
- Verticals created: FLN, Vocational Education, Adult Education & Lifelong Learning and

You Tube

- Subscriber: 976K
- econtents: 6,991
- Views: 83,795, 398

ICT In Education Curriculum

Digital Literacy

- 601 live sessions
- Monthly online training series - 4 trainings
- 03 Online quizzes
- implementation of ICT curriculum for teachers in Karnataka and for students in Delhi

Cyber Safety & Security

- Guidelines for students, teachers, schools and parents
- webinar, live telecast under cyber Jagrukata Diwas
- 03 online Quizzes

AR/VR/OLAB

- 80 AR based contents for classes IX-X Science developed and app launched
- 245 OLAB videos

NISHTHA

- **1.0 (Elementary)** with a coverage of 24 lakh teachers, across 30 States/UTs and 8 Autonomous bodies under MoE, MoD, MoTA
- **2.0 (Secondary)** with a target of 10 lakh teachers covering 33 States/UTs and 8 Autonomous bodies under MoE, MoD, MoTA
- **3.0 (FLN)** with a Target of 25 lakh teachers covering 33 States/UTs, and 5 Autonomous bodies under MoE

ePathshala

- 511 Flipbook
- 696 ePubs/Talking book
- 377 Textbooks
- 6,964 Audios/Videos
- 51,25466 User App download
- 171203433 Page hits
- 80 AR Contents

Social Media

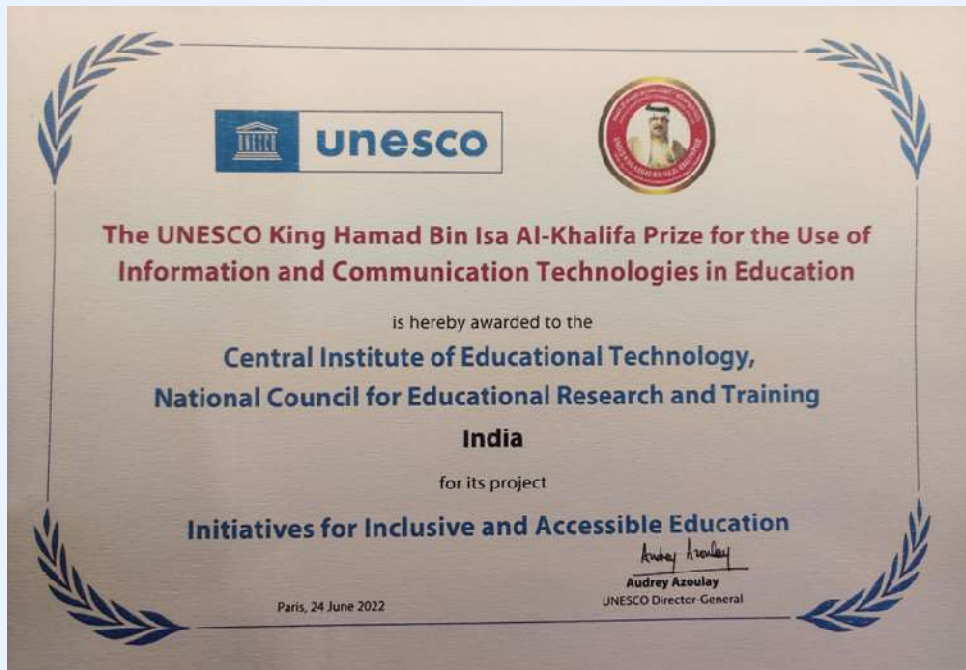
265K followers

50,283 Likes

2051 followers

For Further Information Contact: jdclct.ncert@nic.in, PM eVidya IVRS - 8800440559, Manodarpan IVRS - 8448440632

The UNESCO King Hamad Bin Isa Al-Khalifa Prize received by CIET, NCERT for the use of ICT in Education





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