



**NDEAR**



# NDEAR - DIKSHA



# India K-12 Education System is big, diverse & complex

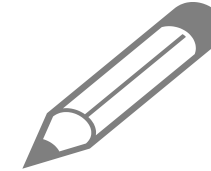


**1.48 Million +**  
**# of Schools**



**20+**

**Regional language  
as a medium of  
instruction**



**60+**

**Educational boards of  
instruction across  
country (central &  
states)**



**265 Million +**  
**# of Students in  
schools**



**170 Million +**  
**# of students in Govt  
and aided schools**



**~95 Million**  
**# of students in  
private and other  
schools**



**9.5 Million +**  
**# of Teachers**



# NEP, 2020 has multiple provisions for inculcating and promoting digital innovations ...



*Content creation, digital repository, and dissemination*



*Addressing the digital divide and equity*



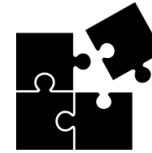
*Training of teachers*



*Promoting digital learning*



*Laying down standards*



*Mathematical and computational thinking*



*Other special areas for online learning*

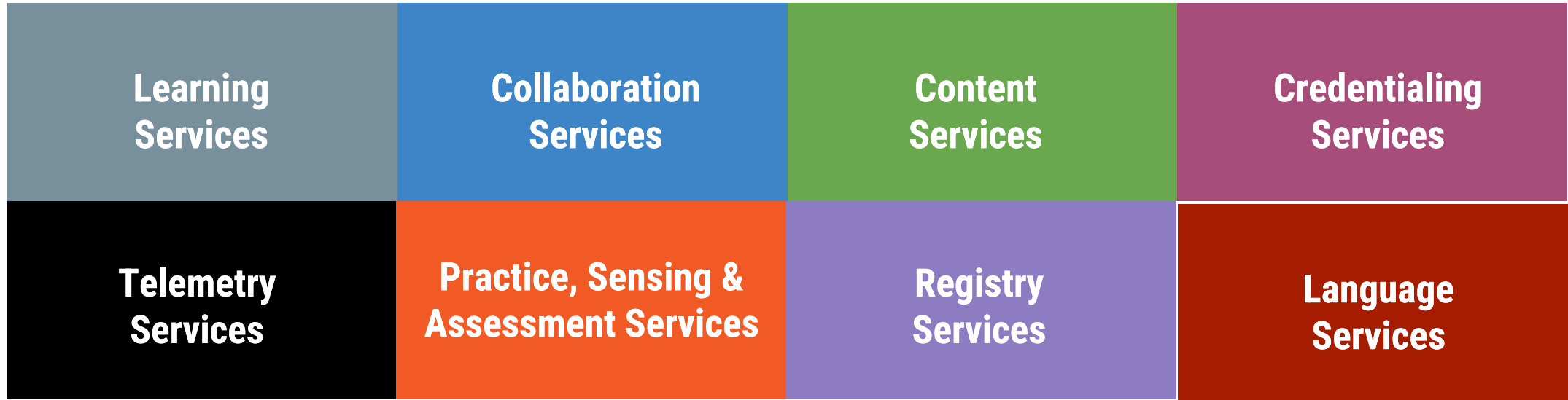


# To implement these policies, we wanted digital innovations that can work at our scale, diversity & complexity





**We wanted a plug and play digital infrastructure that could work for all of India, and not just a specific solution**





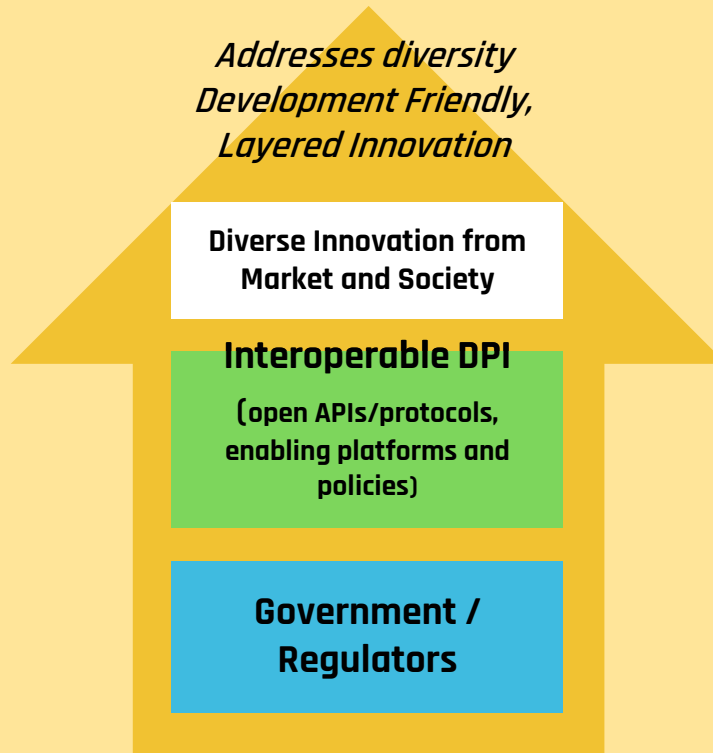
## All Govt Approach

*Single Provider,  
Slow Innovation*



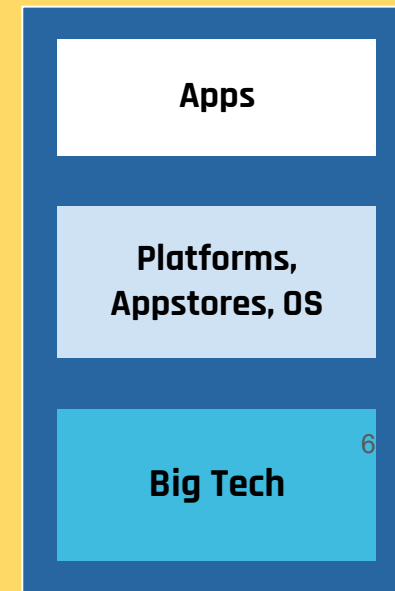
## India Approach

*Addresses diversity  
Development Friendly,  
Layered Innovation*



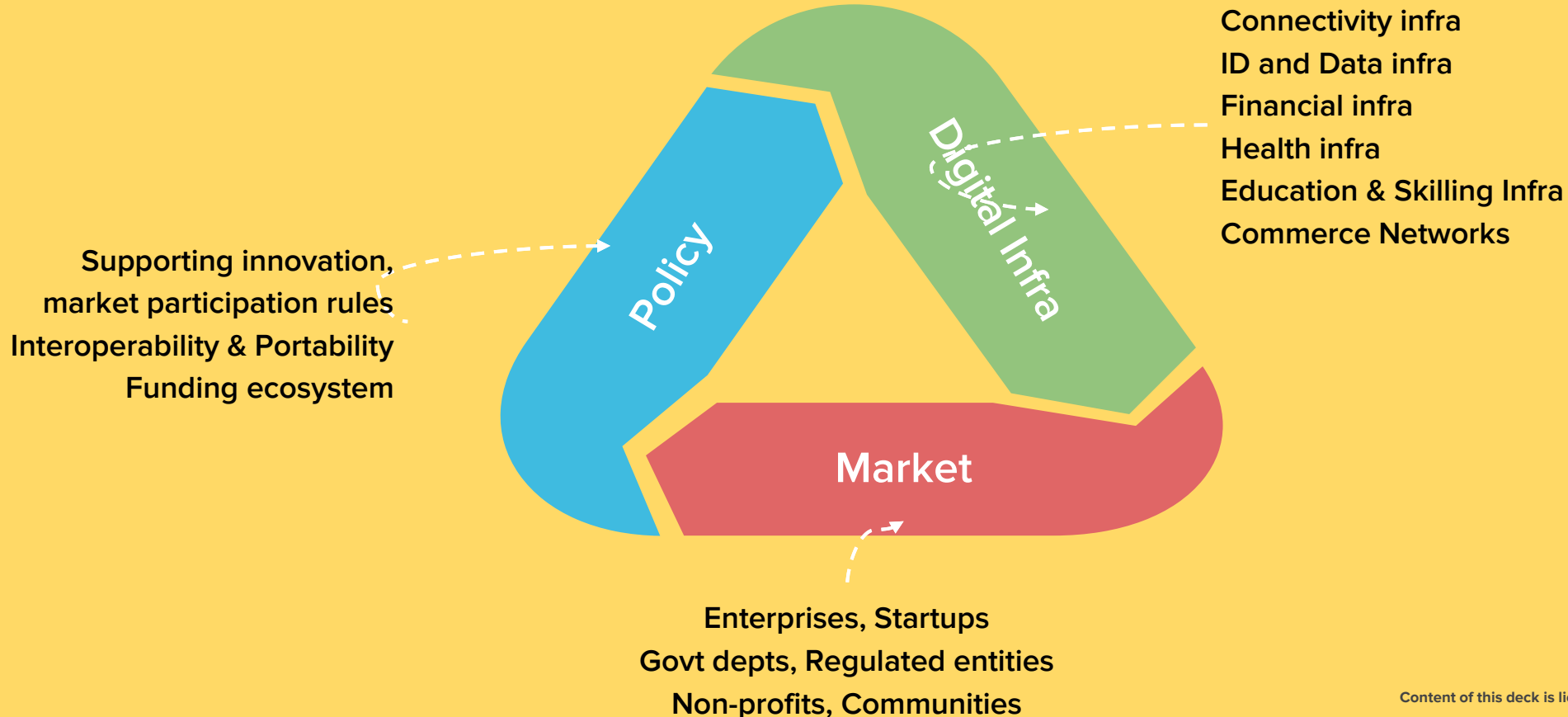
## Big Tech Approach

*Walled Garden,  
Winner takes all*





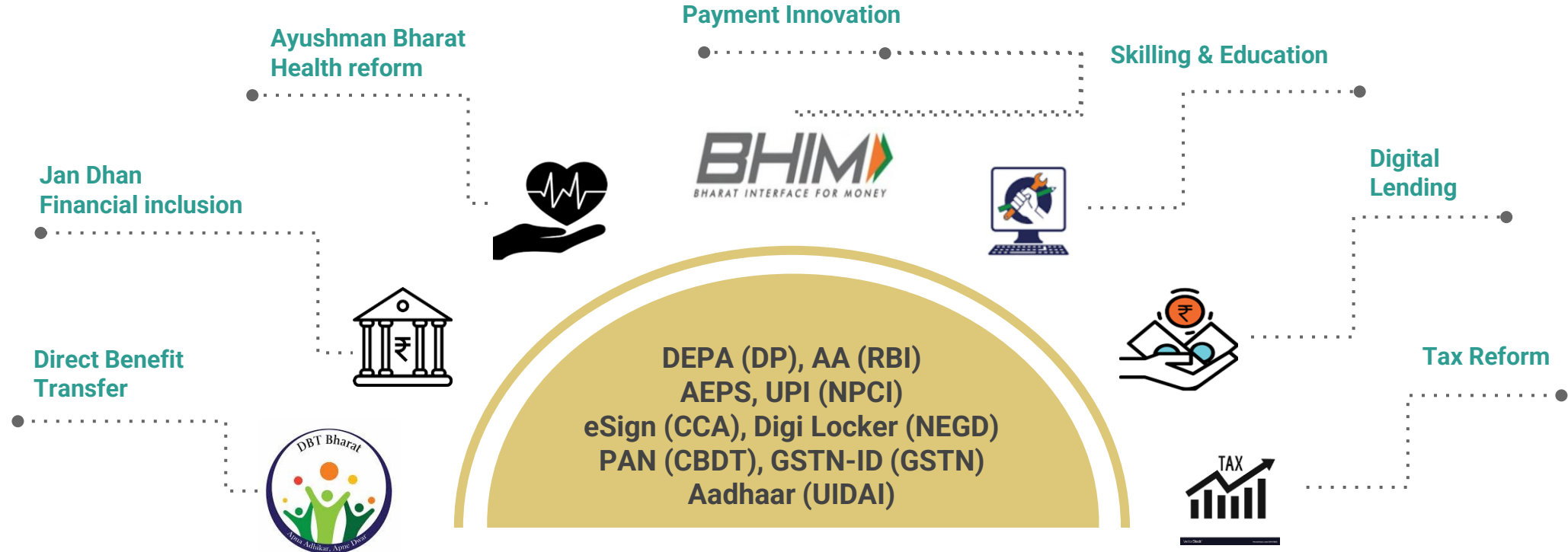
# India harnessed these 3 successfully





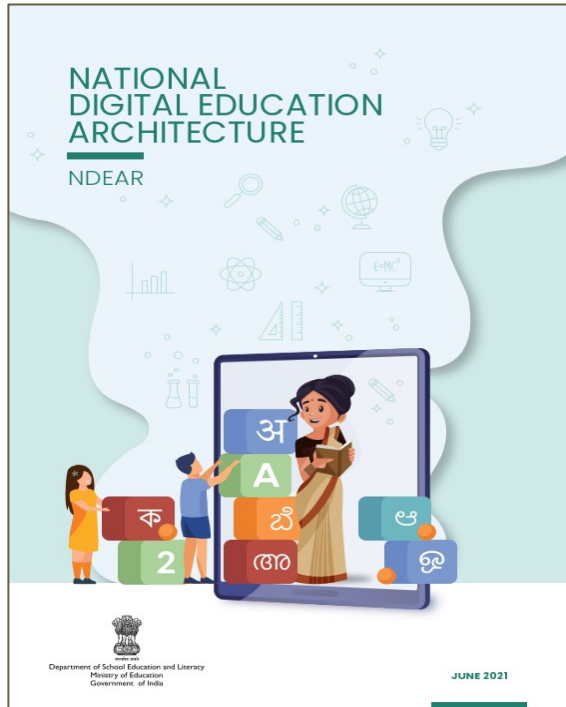
# Like Digital Infra with federated building blocks helped India leapfrog

## INDIA STACK





**National Digital Education Architecture (NDEAR) was launched by Hon. Prime Minister of India on 29th July 2021, with a vision to create a Unifying national digital infrastructure to energise and catalyse the education ecosystem.**



**Visit :**

<https://www.ndear.gov.in/>



**UPI is an ecosystem connector that revolutionised the finance sector. Similarly NDEAR is a key enabler of National Education Policy (NEP 2020) and acts as a super connector to cross leverage ecosystem capabilities and catalyse innovation in skilling & education.**

Shri Narendra Modi  
Hon'ble Prime Minister of India

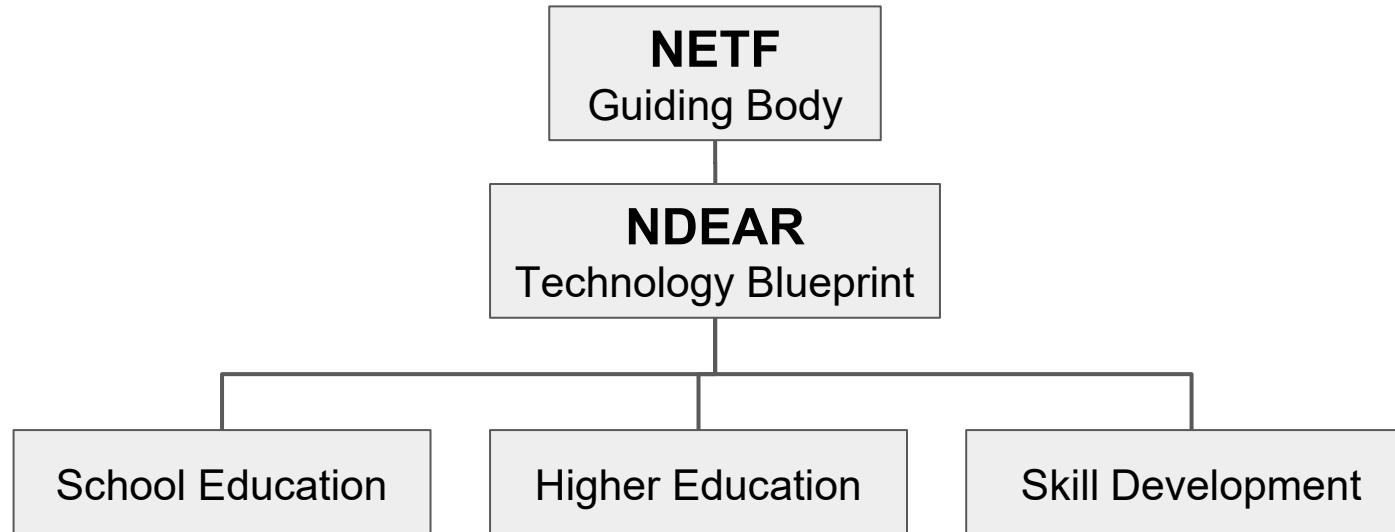


# National Education Task Force (NETF) has been established



Reference NEP 2020, Section 23.3

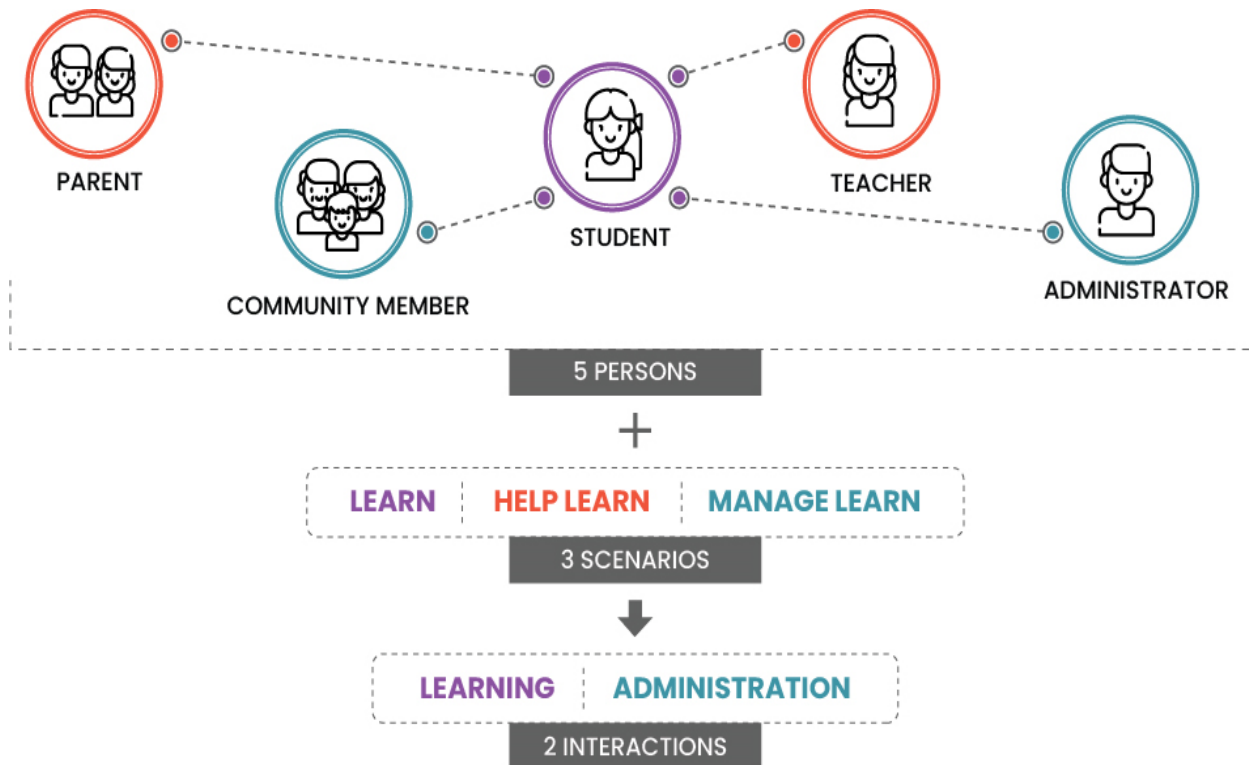
**.... the National Educational Technology Forum (NETF), will be created to provide for the free exchange of ideas on the use of technology to enhance learning, assessment, planning, administration, and so on, both for school and higher education.**



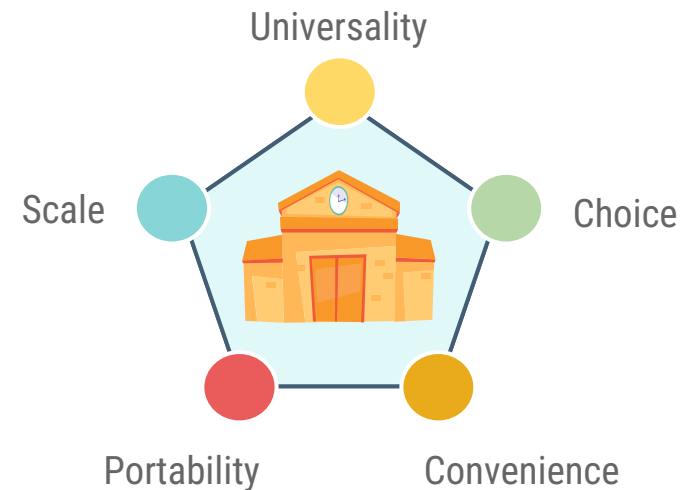


# NDEAR enables digital in education across different actors & scenarios

## NDEAR caters to...

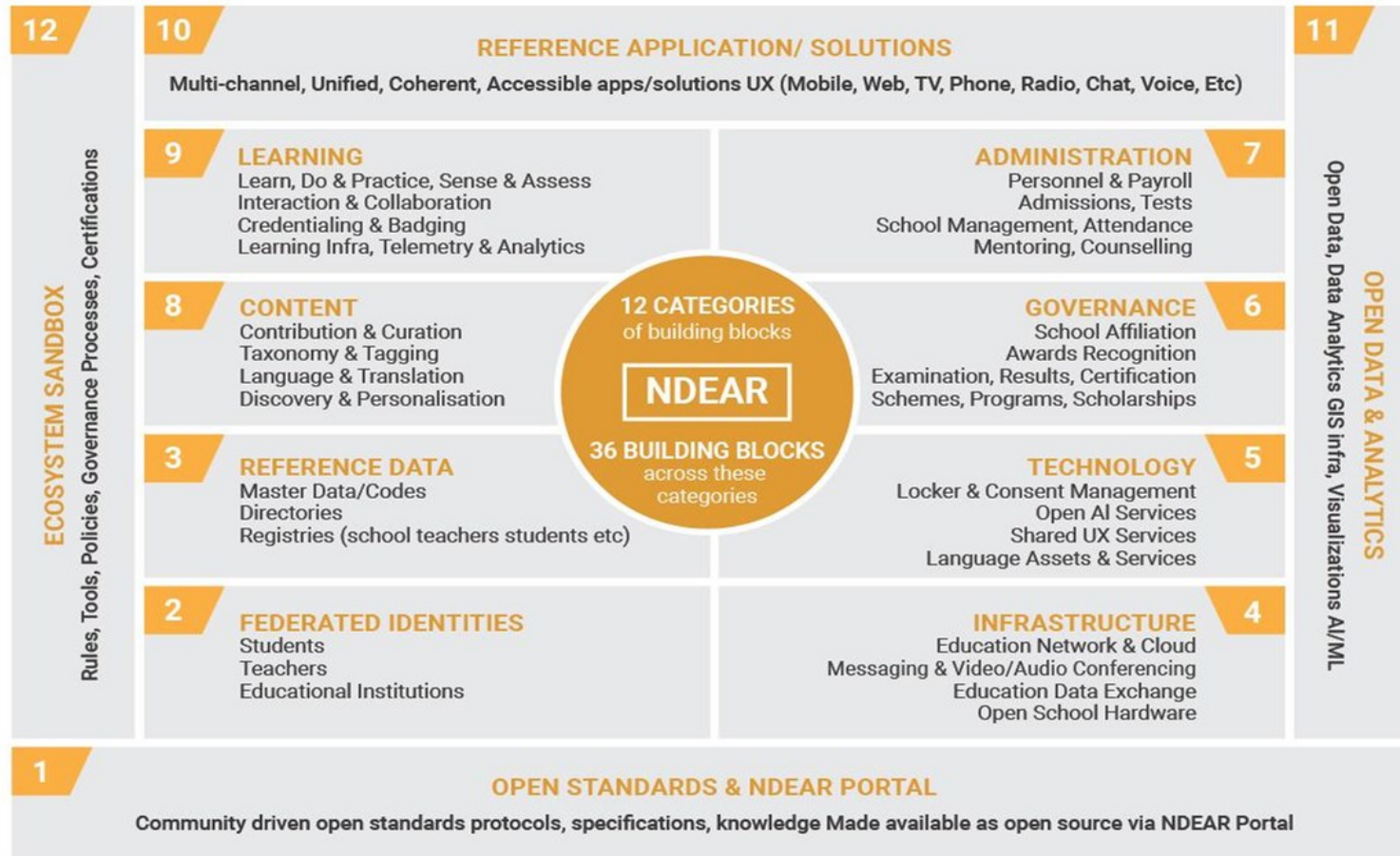


## ... and ensures

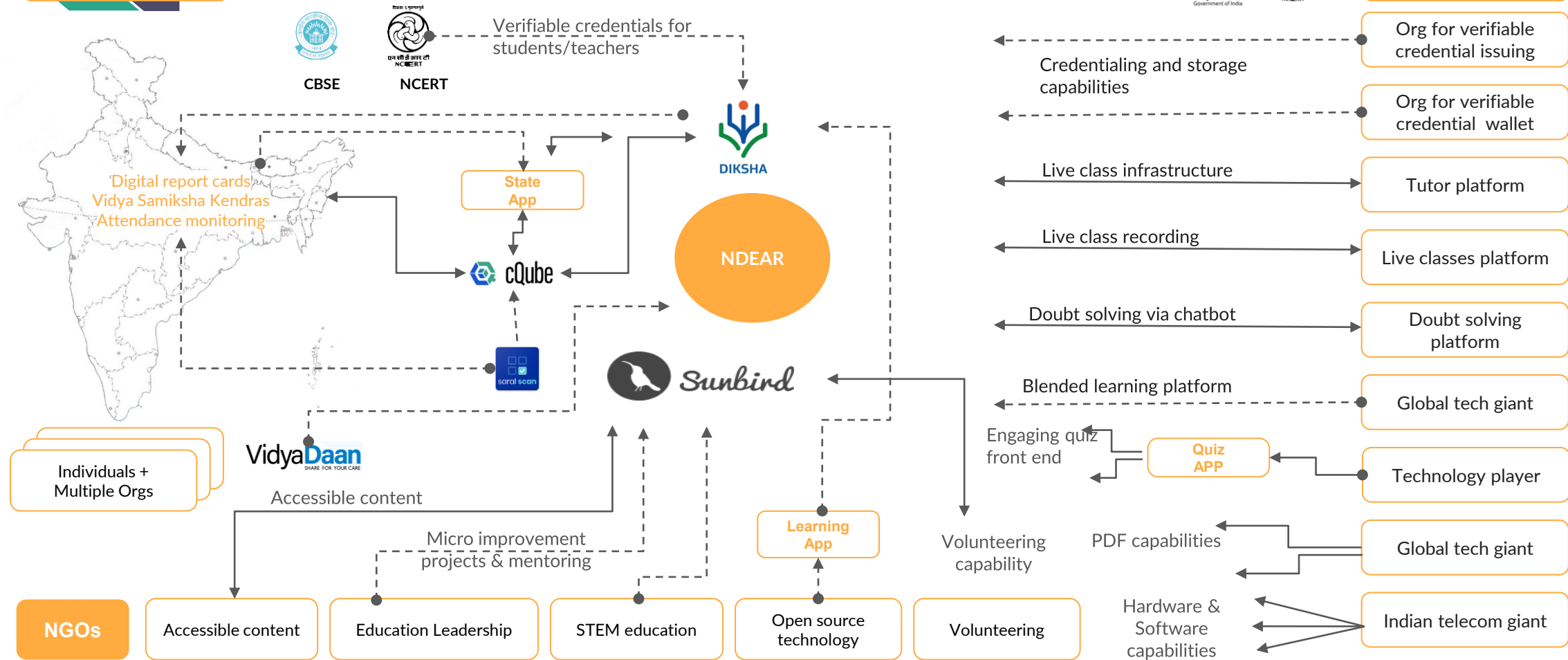




# NDEAR has 36 building blocks across 12 categories to enable diverse programs/schemes & applications







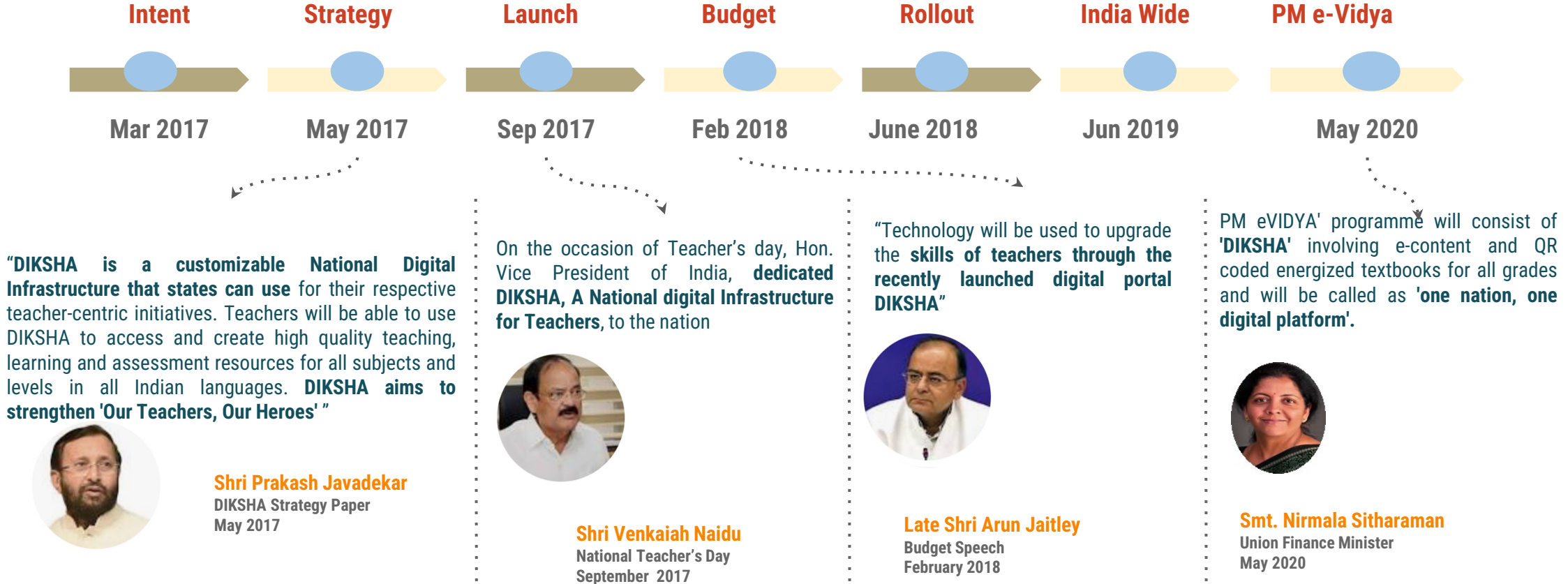




***DIKSHA was launched in 2017 by then  
Hon. Vice President of India,  
Shri M. Venkaiah Naidu***



# DIKSHA - Journey so far (1/2)

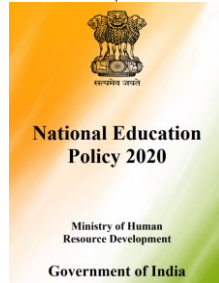




# DIKSHA - Journey so far (2/2)

NEP Rollout

July 2020



Extending horizons of DIKSHA in alignment with NEP 2020

NISHTHA on DIKSHA

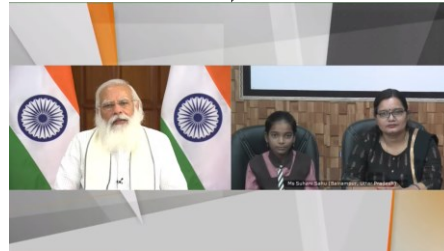
October 2020



In collaboration with MoE and MeitY, the World Bank conducted the webinar to enable remote learning through state-of-the-art digital education platform - DIKSHA, in post-COVID world.

India-Africa Knowledge-sharing Webinar

December 2020

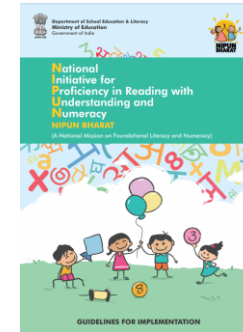


Hon'ble PM interacted with the beneficiaries of DIKSHA during 'Digital India' event and heard about the experiences with DIKSHA App and how it was useful for education during lockdown.

6th Digital India anniversary

1st July 2021

DIKSHA shall be integrated with the new Curriculum Framework by the States/UTs.

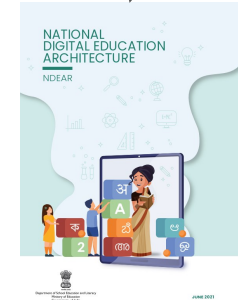


NIPUN Bharat Launch

5th July 2021

NDEAR Blueprint Launch

29th July 2021



DIKSHA contains several building blocks that enable and support various use-cases, multiple languages and solutions for teaching and learning



# DIKSHA & its capabilities referred in various aspects in NEP 2020...

**Section 2.6** *“A national repository of high-quality resources on foundational literacy and numeracy will be made available on the Digital Infrastructure for Knowledge Sharing (DIKSHA).”*

**Section 15.10** *“The use of technology platforms such as SWAYAM/DIKSHA for online training of teachers will be encouraged, so that standardized training programmes can be administered to large numbers of teachers within a short span of time.”*

**Section 23.6** *“Teaching-learning e-content will continue to be developed by all States in all regional languages, as well as by the NCERT, CIET, CBSE, NIOS, and other bodies/institutions, and will be uploaded onto the DIKSHA platform. ”*

**Section 24.4 ( c ) :** *“Online teaching platform & tools: Appropriate existing e-learning platforms such as SWAYAM, DIKSHA, will be extended to provide teachers with a structured, user-friendly, rich set of assistive tools for monitoring progress of learners.”*



# DIKSHA Infrastructure is based on NDEAR principles and covers 7 NDEAR building block categories enabling diverse programs/schemes



1. Open Standards & NDEAR portal



5. Technology



9. Learning

2. Federated Identities

6. Governance



10. Reference Applications/Solutions

3. Reference Data

7. Administration



11. Open Data & Analytics

4. Infrastructure



8. Content



12. Ecosystem Sandbox



# DIKSHA's building blocks were used for multiple use cases with complete sovereign control



1. Energised Textbooks



2. Teacher Professional Development



3. Question Bank



4. Content Sourcing



5. Content Authoring



6. Quizzes



10. Digital Credentials



11. Collaboration



12. Phygital



13. cQube



14. Surveys



15. Language Translations



7. Content Consumption



8. Data Tools & Dashboards



9. Chatbot



16. Mentoring



17. Sunbird Registry and Credentials



# Overview of key programs leveraging DIKSHA



**Energised Textbooks** : Physical Textbooks to 'Phygital' Textbooks

**PM eVidya** : Aims to unify all efforts related to digital / online / on-air education to enable equitable multi-mode access to education



**VidyaDaan** : Sourcing high quality content in a controlled manner

**NISHTHA** : A nationwide capacity building programme for "Improving Quality of School Education through Integrated Teacher Training"



**National Quizzes** : Interactive & competitive learning

**Micro Improvements** : Small steps to build great schools.  
Encourage, recognise & nurture innovations across all schools

**Vidya Amrit**

**Micro Learning Packages** : Enables setting up your own asset taxonomies and categorization

**NIPUN Bharat** : Attaining Foundational Numeracy & Literacy



**Adult Education**

**CWSN**

**Vocational Education**

**Virtual Labs**

**... and other priorities as per NEP 2020**



# How we achieved success as national scale



Orientation and  
Capacity building



Implementation /  
Creation Workshops



Field visits and  
engagements with end user

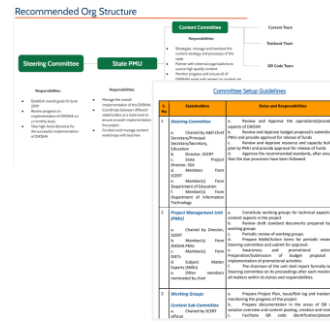
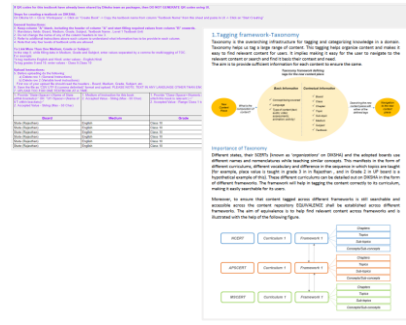
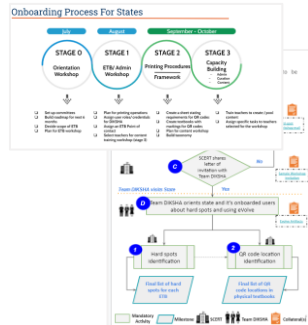
Well Defined SOPs

Templates for taxonomy,  
outreach etc

Guidelines for  
Institutional Framework

Guidance and handholding  
for program adoption

Data availability  
through emit mode



Onboarding stages,  
Process packages, etc.

Framework format template,  
Taxonomy guidelines, etc.

Org structure, Committee  
setup guidelines, etc.

Program Toolkits, Outreach,  
etc.

Creation & Consumption  
Dashboards, Sentiment analysis

... and many more



# Leading to unparalleled usage of the world's largest, most diverse school education platform

## 5.11 Billion +

Learning Sessions



## 39 Billion +

Page Hits

## 60 Billion +

Learning Minutes

## 33+

Languages

Data as on 14th November 2022

Source: [diksha.gov.in](https://diksha.gov.in)



**DIKSHA is built on free & open source platform “SUNBIRD”**  
**‘Made in India’, ‘Made for the World’**



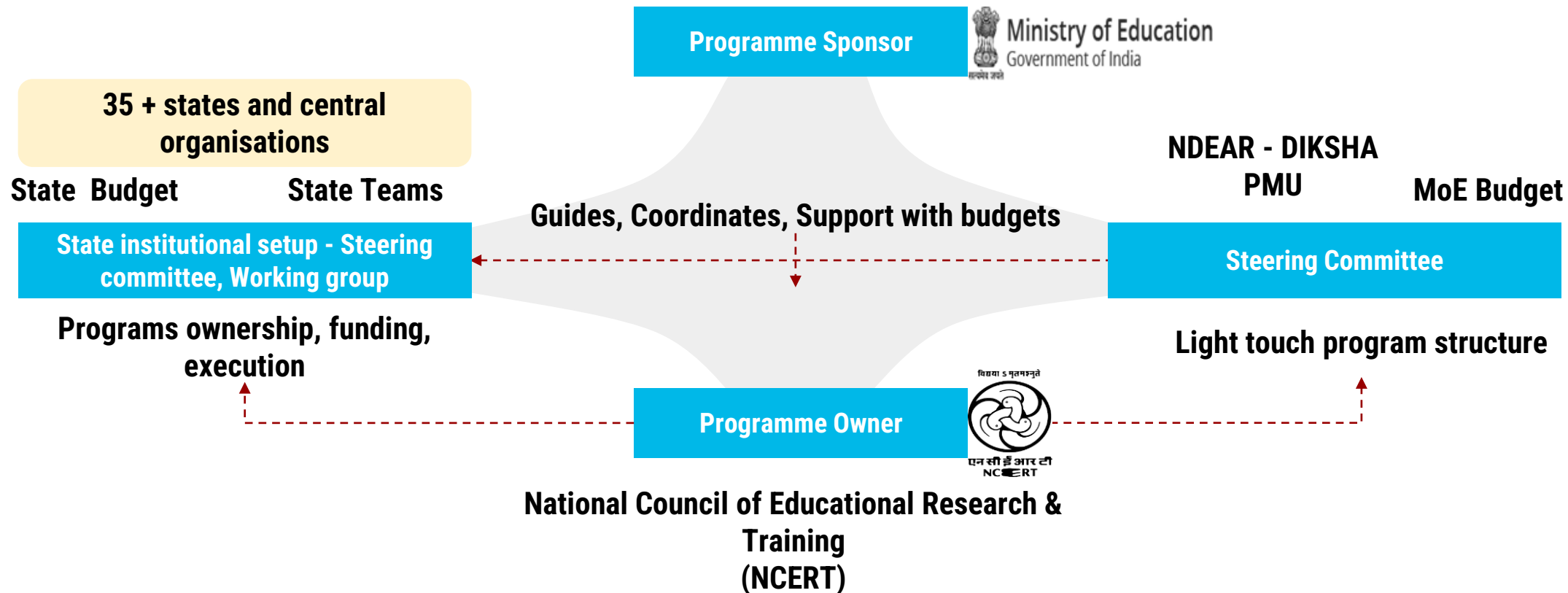
[sunbird.org](https://sunbird.org)

[github.com/project-sunbird](https://github.com/project-sunbird)

[docs.sunbird.org](https://docs.sunbird.org)



# Implemented through existing federated & decentralised structure



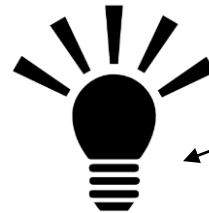
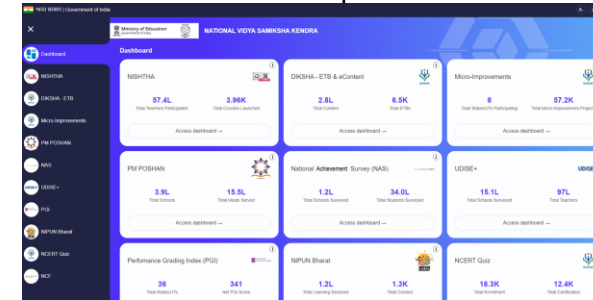


# Vidya Samiksha Kendra : helping us see & monitor policy implementation and drive reforms

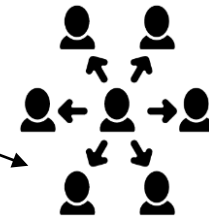


DATA FROM DIKSHA PROVIDES THE ABILITY TO SEE AND EMPOWER RELEVANT STAKEHOLDERS

  
**Visibility: 'Ability to See' in real time**



**Insights: 'Ability to Make Sense' of data**



**Actionability: 'Ability to Amplify Actions' through coordinated efforts**



# The UNESCO King Hamad Bin Isa Al-Khalifa Prize for the Use of Information and Communication Technologies in Education



Awarded to CIET-NCERT  
for “*Initiatives for Inclusive  
and Accessible Education*”  
through PM-eVidya &  
DIKSHA





# DIKSHA Infrastructure has been identified as a Digital Global Good by the Govt. of India



<https://www.indiastack.global/diksha/>



Nirmala Sitharaman

@nsitharaman

“India's digital platform... DIKSHA...one of the 12 Digital Global Goods...is now in public domain...India became the first country in the world to provide QR coded textbooks to elementary school children through this platform.”

@WorldBank  
[pib.gov.in/PressReleasePa...](https://pib.gov.in/PressReleasePa...)

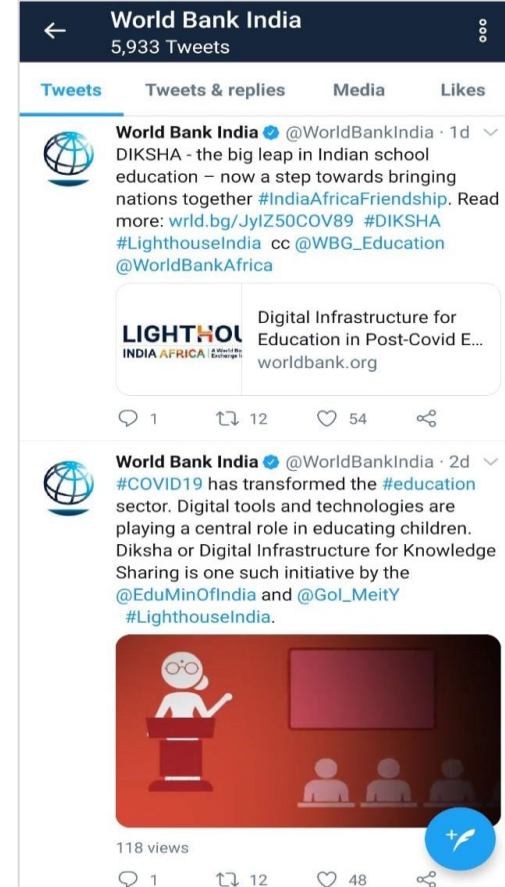
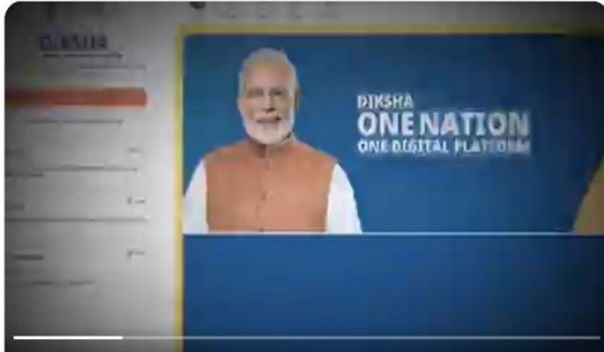
5:40 pm · 15 Oct 2022 · Twitter for iPhone



# World Bank Group has been propagating the 'DIKSHA model' internationally as well...



#DIKSHA is a unified digital platform for education 🧑🎓 is bringing together countries across continents.  
cc @EduMinOfIndia @Gol\_MeitY @WBG\_Education @WorldBank @WorldBankAfrica @NandanNilekani @JUNAIDWBG  
Watch to learn more about India-Africa knowledge exchange.





# Hon'ble Finance Minister offered DIKSHA to all interested countries : Meeting held at World Bank, Washington DC office on 14th October, 2022



“

The Finance Minister states further that India's digital platform, DIKSHA, which has been identified as one of the 12 Digital Global Goods by India, is now in public domain. Last year, Smt. Sitharaman said, India became the first country in the world to provide QR coded textbooks to elementary school children through this platform. The Finance Minister also offered DIKSHA to all interested countries and stated the world Bank can consider this opportunity to scale up digital education globally.

”



**Smt. Nirmala Sitharaman**  
Union Finance Minister  
October 2022



# DIKSHA as Digital Public Good



**DIKSHA software code can be easily offered as Digital Public Good to the world.**  
(<https://diksha.gov.in/help/diksha-oss/> )



**DIKSHA programs' open data can be offered as Digital Public Good to the world.**



**DIKSHA Content can be offered as Digital Public Good to the world.**



**NDEAR policy framework document, which maps and explains every building block, is available on the website can be offered as Digital Public Good to the world.**





# Several Ministries / Departments in India are leveraging DIKSHA infrastructure



National Urban Learning Platform

*Ministry of Housing & Urban Affairs*



*Department of Personnel & Training*



सत्यमेव जयते

कृषि एवं किसान कल्याण विभाग

DEPARTMENT OF

**AGRICULTURE & FARMERS WELFARE**

*Department of Agriculture - Agri Digital Learning Platform*

*... And interest expressed by many more Ministries / departments*



# What it takes to adopt & implement DIKSHA like national scale education infrastructure

## *Take & Tweak*



Technology

Content



Know How

## *Enabled by*



Funds

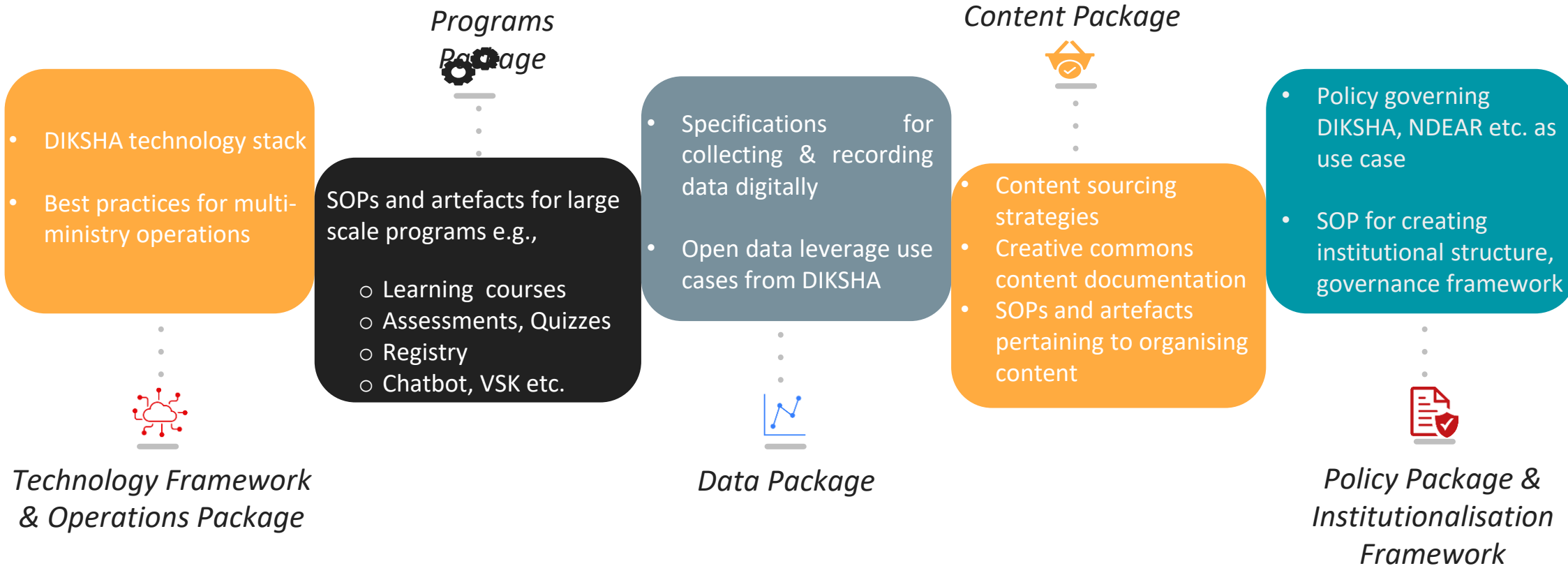
Technology &  
PMU Partners



***The DIKSHA starter package eases the adoption and implementation***

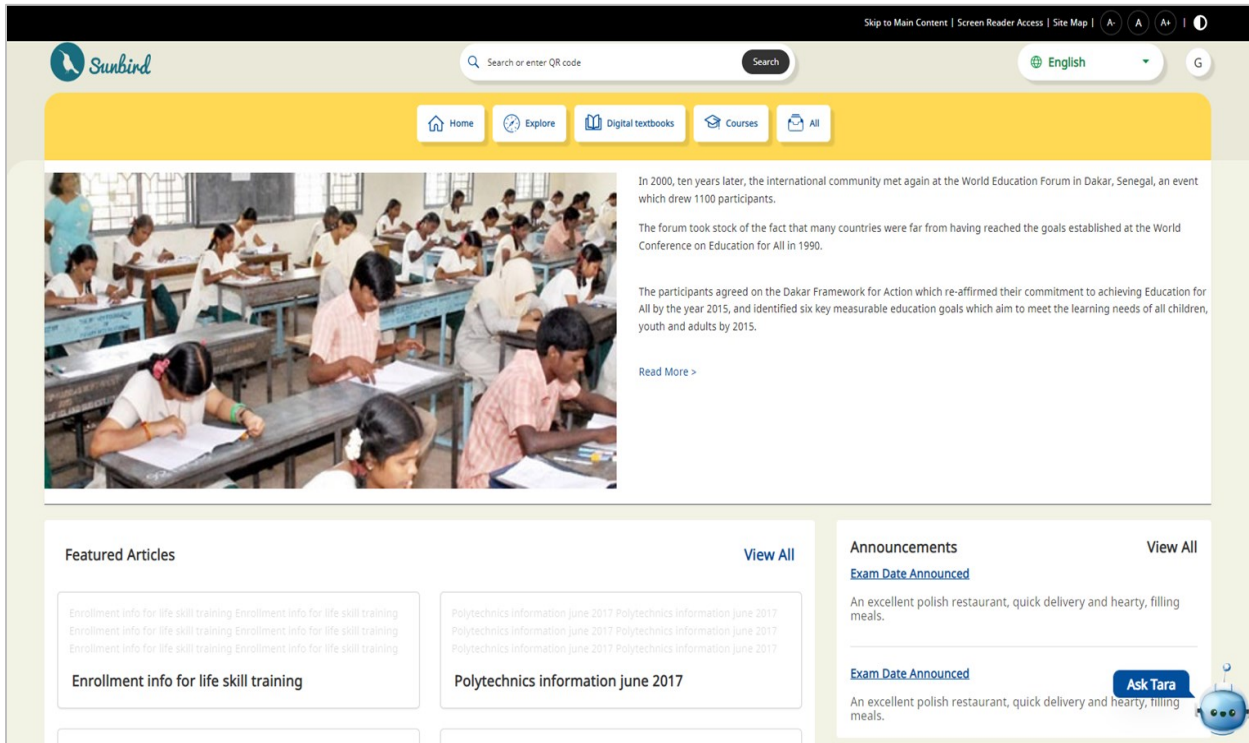


# DIKSHA Starter package comprises of the following





# Some of the components of the starter package



Sunbird

Skip to Main Content | Screen Reader Access | Site Map | A- A+ I O

Search or enter QR code

English

Home Explore Digital textbooks Courses All

In 2000, ten years later, the international community met again at the World Education Forum in Dakar, Senegal, an event which drew 1100 participants.

The forum took stock of the fact that many countries were far from having reached the goals established at the World Conference on Education for All in 1990.

The participants agreed on the Dakar Framework for Action which re-affirmed their commitment to achieving Education for All by the year 2015, and identified six key measurable education goals which aim to meet the learning needs of all children, youth and adults by 2015.

Read More >

Featured Articles

Enrollment info for life skill training

Polytechnics information June 2017

Announcements

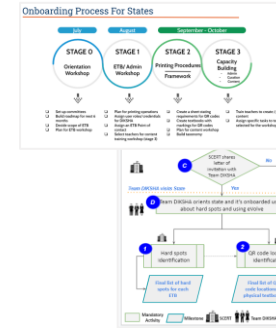
Exam Date Announced

An excellent polish restaurant, quick delivery and hearty, filling meals.

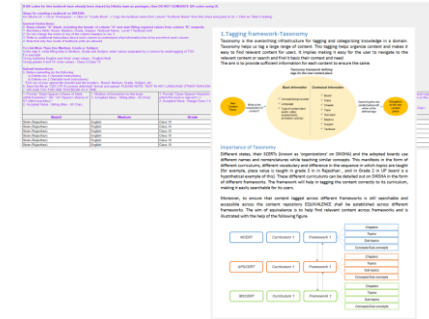
Exam Date Announced

Ask Tara

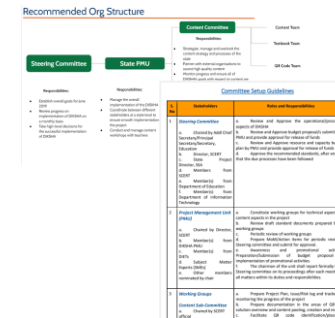
[Demo instance for Mauritius](#)



[Onboarding stages, Process packages, etc.](#)



[Framework format template, Taxonomy guidelines, etc.](#)



Org structure, Committee setup guidelines, etc.



Program Toolkits, [Outreach](#), etc.



# Engagement Models

The envisioned Models for countries to leverage the DPGs and establish their Digital Education initiatives



The interested country can implement their digital education initiatives by themselves leveraging the starter pack shared by the Government of India

## DIY



Interested countries can sign MoU with GOI for taking advisory support on:

1. Adopting Starter package
2. Leveraging Best practices
3. Budget allocation

## Advisory



GOI partners with organisations like World Bank, ADB, UN etc. to set up projects in interested countries by

1. leveraging starter pack
2. Allocating funds

IFIs can support implementation, maintenance and support

## Partner led





# Thank you