

## National Digital Education Architecture (NDEAR)

The National Digital Education Architecture (NDEAR) was announced by the Prime Minister in February 2021 to boost the digital architecture for education in India. What exactly is NDEAR? What are its propounded benefits? Get all the answers in this article on NDEAR, which is an important topic for the [UPSC syllabus](#) education segment.

### What is NDEAR?

NDEAR is an architectural blueprint for the educational ecosystem in the country that defines a set of principles, standards and specifications, guidelines and policies to strengthen the digital infrastructure for education.

- It is under the Ministry of Education in collaboration with the Ministry of Electronics and Information Technology.
- Under this, the government will not be building technology solutions for the education sector but will act as an enabler, offering a framework wherein technology can be developed and built by anyone.
- It promotes a 'digital first' approach, supporting teaching and learning activities, and facilitating educational planning as well as governance and administrative activities.
- It aims at creating a digital foundation driving towards autonomy and self-governance of all parties involved, particularly states and the Centre.
- NDEAR's institutional structure, date, governance framework and technology will benefit both the student and the teacher community alike.
- Solutions that adhere to NDEAR frameworks and standards would be considered NDEAR-compliant. NDEAR-compliant solutions would be able to connect with one another.
- The framework implies that systems and solutions that worked in one state can be shared across the country and adapted in other parts.
- Systems that are not NDEAR-compliant would work in silos not being able to be leveraged by others.
- NDEAR can ensure that best practices are replicated across the board.
- NDEAR is not a centrally-controlled framework and it is inherently federated to ensure the autonomy of all stakeholders including the states.
- It is to be noted that NDEAR is not a platform, technology software or solution, application or portal, but an architectural blueprint.

Read a comprehensive note on [digital education in India](#).

### NDEAR Vision

The stated vision of NDEAR is 'to create and deliver diverse, relevant, contextual innovative solutions that benefit students, teachers, parents, communities, administrators, resulting in timely implementation of policy goals'.

The following image details the objectives of NDEAR:

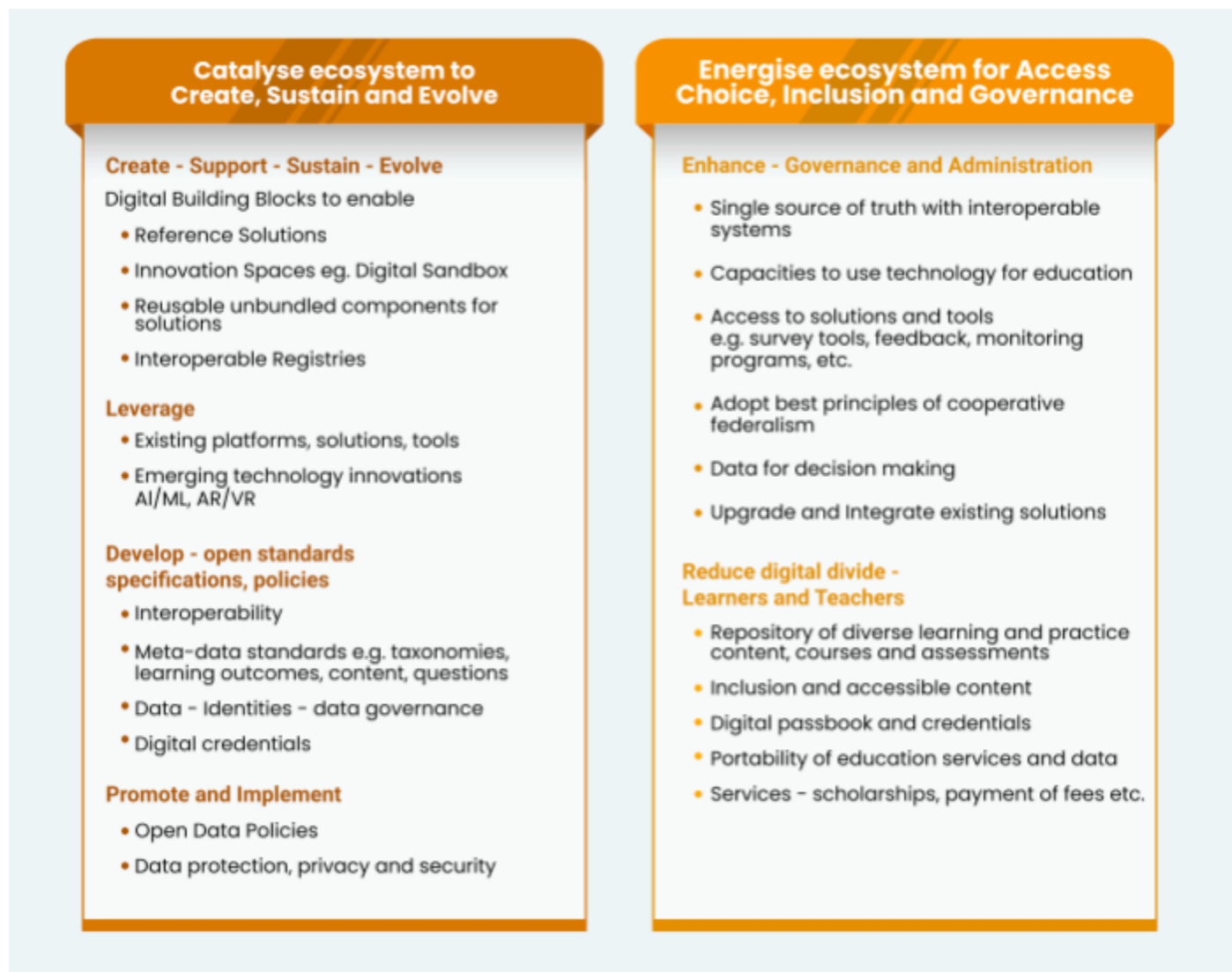


Image source: <https://www.ndear.gov.in/>

In July 2020, the government released the [Pragyata guidelines on digital education](#). Read more on the guidelines in the link.

### ***What are the Design and Architecture Principles governing NDEAR?***

The following are the principles that would govern both technology and institutional design.

1. Unifying and not uniform
2. Ecosystem driven (not system)
3. Unbundled and combinable
4. Federated but interoperable
5. Open access (open license and open source policies)
6. Address diversity, inclusion and special needs

7. Evolvable
8. Provide design by choice
9. Privacy, security and trust by design
10. Leverage investments

### ***NDEAR Implementation***

A Programme Management Unit (PMU) would be set up to start working on NDEAR. The PMU would be manned by specialised consultants who would develop a roadmap for the implementation of NDEAR including identification and prioritization of work, budgetary estimation, design, monitoring and follow-up of the progress.

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