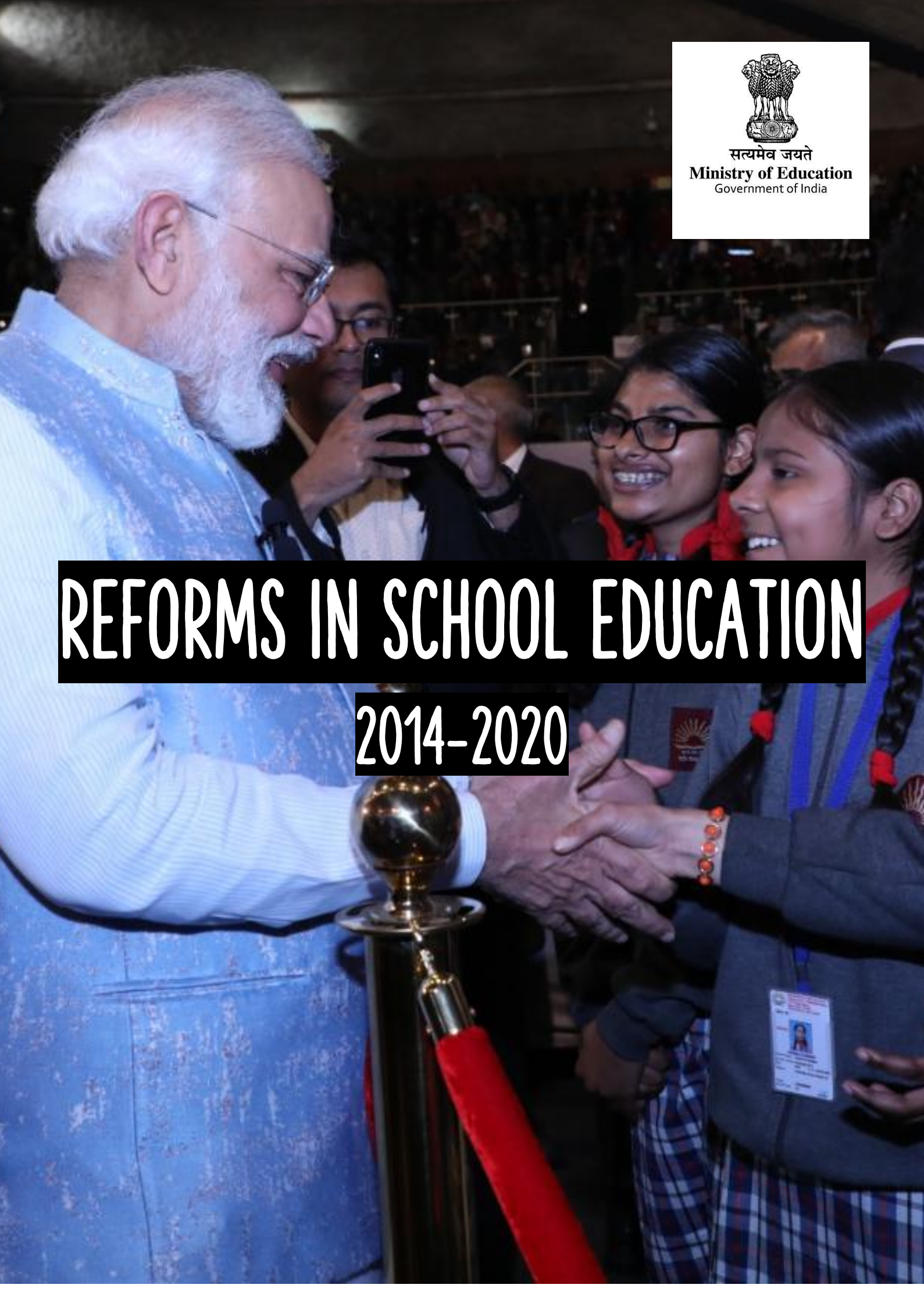




सत्यमेव जयते  
**Ministry of Education**  
Government of India

# REFORMS IN SCHOOL EDUCATION

2014-2020



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# The context of reforms

## Need for Reforms towards "New Age Learning"

In the past, India was called "Sone ki Chidiya", a nation of "The Learned" with universities like Nalanda & Takshila where the world would come to study. We did not have a brain drain problem then. Rather, our education systems were so evolved that India & its citizens could use them well in their day-to-day life and lead a happy & prosperous life. But, over the last few centuries we lost that capability as our education systems shifted towards methods that may help individuals acquire knowledge but may not equip them with life skills that would help them excel in their endeavours. As a result, we have become a nation of job seekers not a nation of job creators. We have many day-to-day problems but very few problem solvers.

As we look at our future, we need not let that continue. India as a nation can shift towards "New Age Learning" to be a "Leading Nation of the World", to become a 'Global Knowledge Superpower'. to equip its youth to be the leaders of the world in the 21st century and help them engage, explore, experience, express & excel.

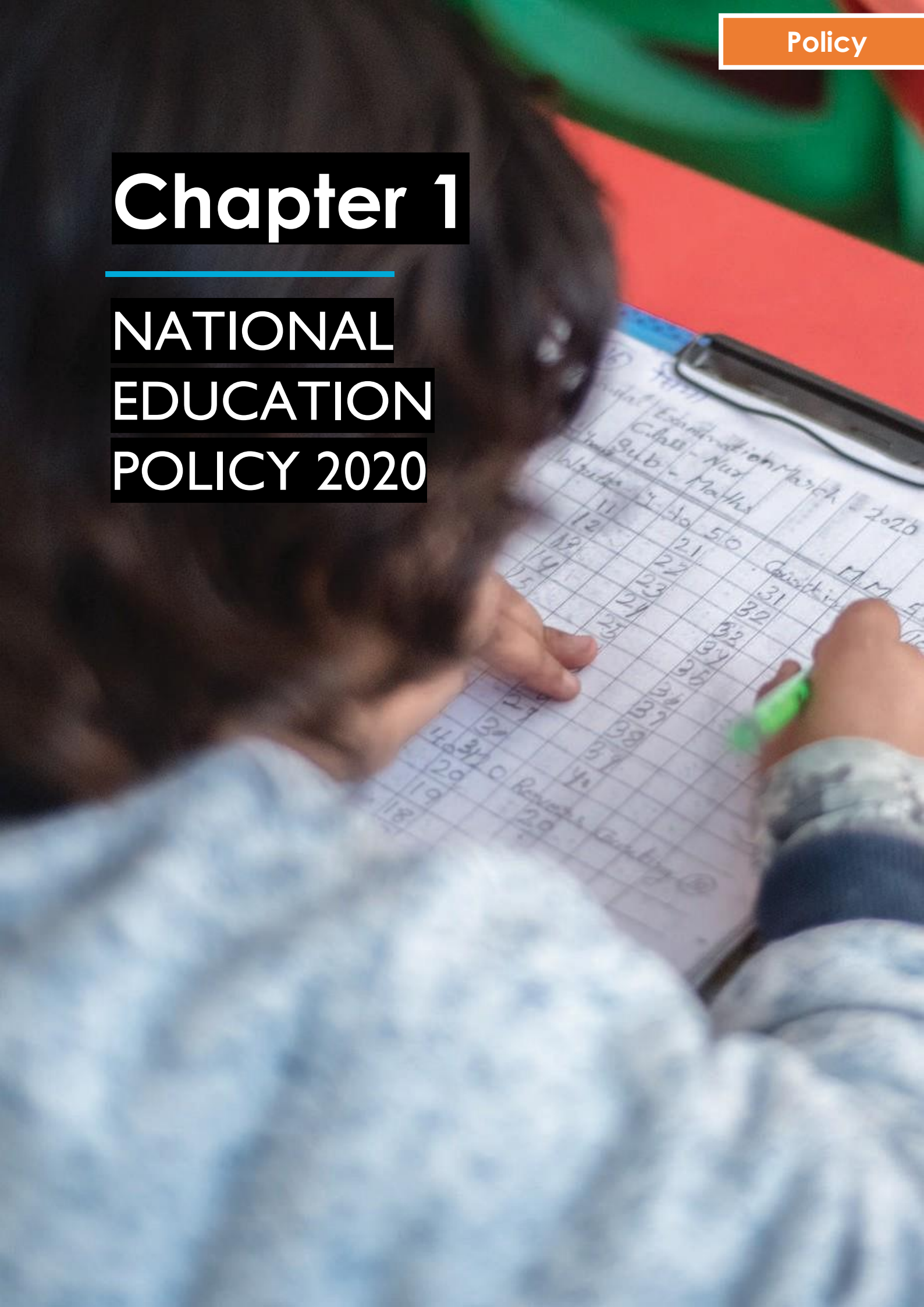
A superpower is that which is not just powerful but influential. In the past, our knowledge, and discoveries in areas like maths, astronomy, science, philosophy not only improved our lives and made India prosperous, but these, when they reach the West, helped in the scientific revolution and the globalisation of the past few hundred years. We built, we created knowledge, we used knowledge, we shared knowledge - that is what a superpower does. We have a long way to go, to be a superpower. First, we must catch up, in terms of access, equity, quality, learning outcomes. However, we cannot follow a linear process, we must leapfrog, and this is where we can use the transformational impact of technology. In India, we have shown through the work of the last few years on how to think of and create digital infrastructure in technology. With digital identity, with digital payments, to transform the lives of the poor. Similarly, the power to learn at the click of a button.

Our current education system follows methods of the last two centuries to impart learning to students and train our teachers. This approach towards education is unable to accommodate the different learning needs of our students, to equip them to develop life skills and cater to the professional development requirements of our teachers. A day-to-day life of a teacher who tries to teach the material laid out in the textbooks involves a lot of struggles. They range from managing a diverse class while struggling to complete the curriculum in time to ensuring that every child in the class has understood each lesson. At the same time, the students restricted to the in-classroom resources are unable to achieve the diversity in outcomes due to lack of access to a variety of diverse resources that are not just textual, but also audio-visual and experiential in nature.

Investing in the human capital is the best investment any nation can make, especially a country of 1.3 billion people like ours. It is the equivalent to an investment in productivity and prosperity of the nation. The present pandemic situation has presented new challenges and several opportunities for our education system. The education sector has undertaken several reforms in the last 5+ years, particularly around adopting innovative curriculum and pedagogies, concentrating energies on the gap areas, being more inclusive and integrating technology at every stage, to usher in a new era of focussed investment in the human capital.

# Chapter 1

## NATIONAL EDUCATION POLICY 2020





**“** *This is our collective responsibility that when we complete 75 years of independence in 2022, every student of India shall study as per the guidelines laid down under National Education Policy. I call upon all the teachers, administrators, voluntary organizations and parents to cooperate in this national mission.*

## Need for the Reform

- The education system of the country aims to ensure that all children have access to quality education within an equitable and inclusive classroom environment that takes care of their diverse background, multilingual needs, different academic abilities and makes them active participants in the learning process.
- It is envisaged that education development will focus less on content retention and more on building critical thinking and problem-solving abilities.
- It is critical that learning becomes more experiential, holistic, integrated, inquiry-driven, discovery-oriented, learner-centred, discussion-based, flexible, and most important that it is enjoyable.
- In recent years, initiatives such as the Samagra Shiksha (previously Sarva Shiksha Abhiyan) and the Right to Education Act, have played a significant role in attaining near-universal enrolment, however, student retention has been a major challenge.
- As per UDISE+ 2018-19 (provisional), the Gross Enrolment Ratio (GER) is 93% in Primary, 90% in upper primary, 80% in Secondary, and 59% in Senior Secondary respectively. As per the 75th round household survey by NSSO in 2017-18, the number of out of school children in the age group of 6 to 17 years is 3.22 crore.
- Some of the key challenges faced by the education sector are as follows:



- More focus on access, less on quality
- Rote learning with less focus on critical thinking
- No focus on creativity, innovation, art, music, literature, language etc.
- Lack of focus on quality Early Childhood Education and Care
- Over 5 crore students in Class 3 to 8 have not attained Foundational Literacy and Numeracy
- Lack of curriculum and pedagogical reforms
- Little diversity in teaching learning material
- High Stake Board Exams
- Dire need to improve the quality of teacher education
- Lack of standards in school education sector
- Non-integration of Vocational education into mainstream education
- Language a barrier in accessing quality education
- System of tracking achievement of learning outcomes is not robust

- Over the past two decades, India has achieved near-universal access to schooling. However, learning levels have continued to remain low.

The new education policy aims to fill some of these systemic gaps in the sector and to undertake reforms that bring the highest quality, equity, and integrity into the system - from early childhood care and education through higher education and beyond.

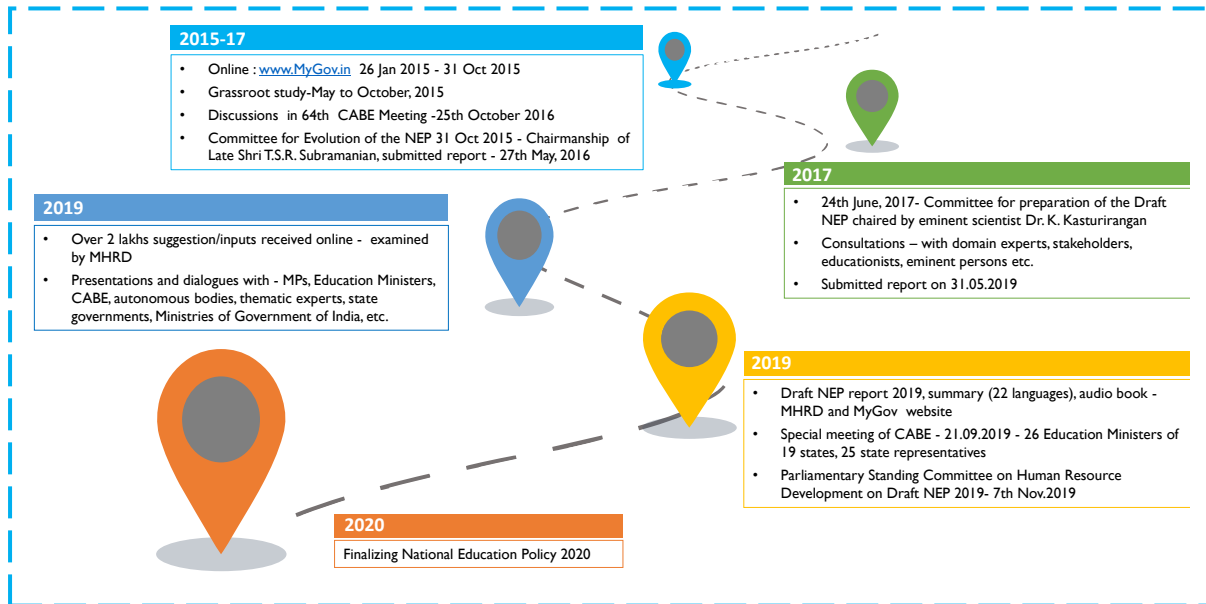
## Approach and Present Impact

New and comprehensive National Curricular Frameworks for School Education, ECCE, Teacher Education, and Adult Education are being formulated based on the vision of NEP 2020.



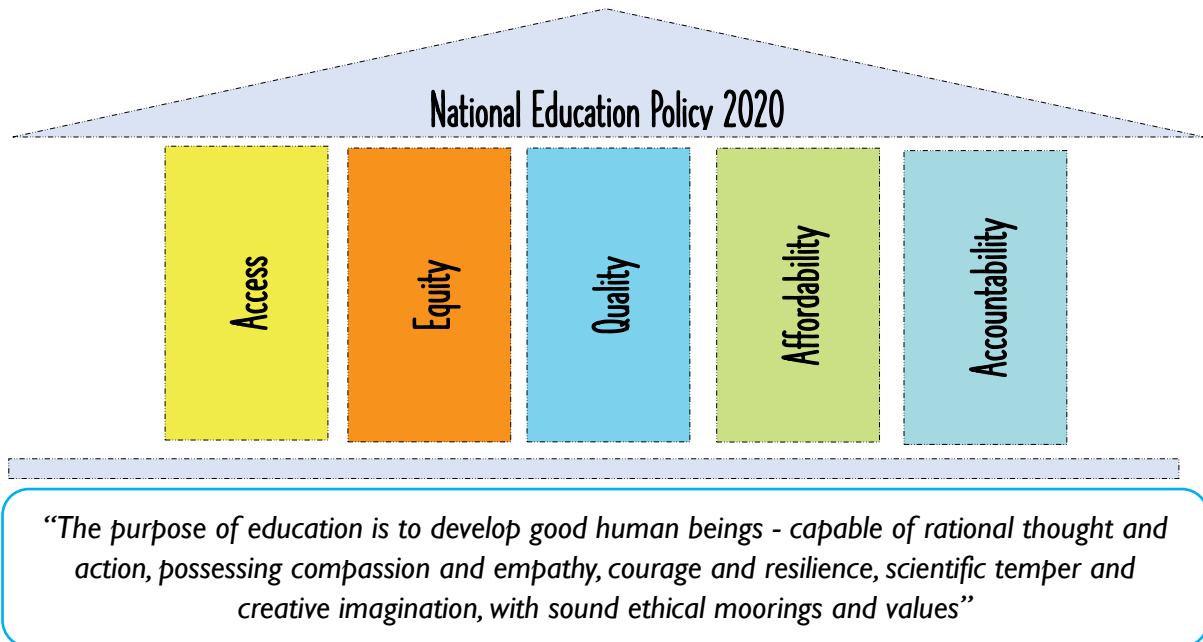
- The process to prepare a new education policy started in 2016 with the constitution of the TSR Subramaniam Committee. This committee submitted its draft report to the Ministry of Education and thereafter, Dr. K.R. Kasturirangan Committee was constituted which built on the previous draft and submitted their draft report in 2019.
- The process to prepare a new education policy was highly inclusive wherein there were multiple consultative rounds conducted Hon'ble MPs, Education Ministers of States, Secretaries of States and UTs, urban and rural local bodies, educationists and educational organisations, and multiple other stakeholders. The National Education Policy 2020 was finalized and was approved by the Union Cabinet on 29<sup>th</sup> July 2020.

## Consultation process for NEP



•

- The National Education Policy 2020 encompasses expectations of all stakeholders and is founded on the **five guiding pillars of Access, Equity, Quality, Affordability, and Accountability.**



- It envisages an education system that will prepare learners to meet the diverse national and global challenges of the present and the future.
- It proposes to revise and revamp all aspects of the education structure, including its regulation and governance, to create a new system that looks at school and higher education as a single organic continuum.

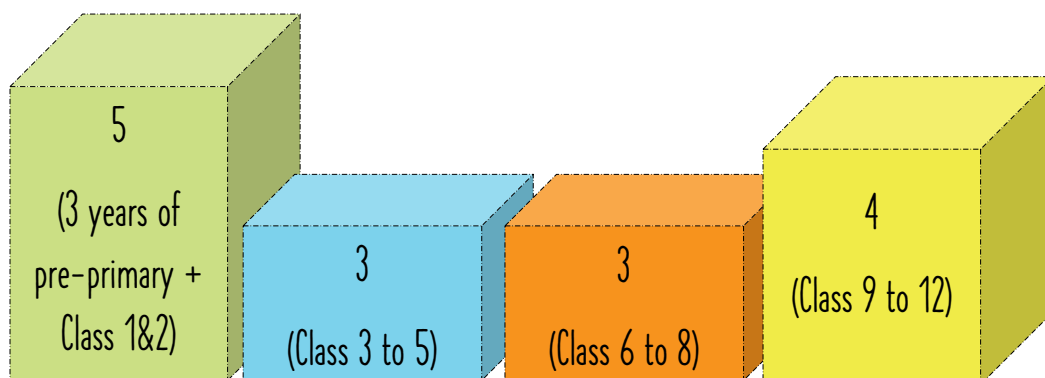


- The policy is rooted in the Indian ethos and constitutional values with simultaneous emphasis on the imbibing of 21<sup>st</sup>-century skills.
- NEP 2020 envisages School Development Plan, Pedagogical Plan, an Implementation Plan for attaining universal foundational literacy and numeracy, lesson plans keeping with real-life situations for the student to be able to attain competency in each area.
- It also gives priority to the children with special needs and gifted children and proposes a Plan for tracking each child's holistic progress, a new pattern of exams, and new pedagogies.
- The Policy aims and aspires to universalize pre-primary education and provides a special emphasis on the **attainment of foundational literacy and numeracy** for all students in Grade III by 2025.



“ Under the National Education Policy, the development of Foundational Literacy and Numeracy will be taken up as a national mission. Knowledge of elementary language, knowledge of numbers, development of the ability to read and understand general articles in children, this is very essential.

- It recommends reforms that ensure the quality of schools, transform curriculum, introduces a new 5+3+3+4 pedagogical design, reforms the current exams and assessment system, strengthens teacher training, and restructure the education regulatory framework.



### Qualitative & Quantitative benefits of NEP

- The policy targets a 100% Gross Enrolment Ratio by 2030
- The goal is to ensure that no school remains deficient in infrastructure support from pre-primary school to Grade 12.

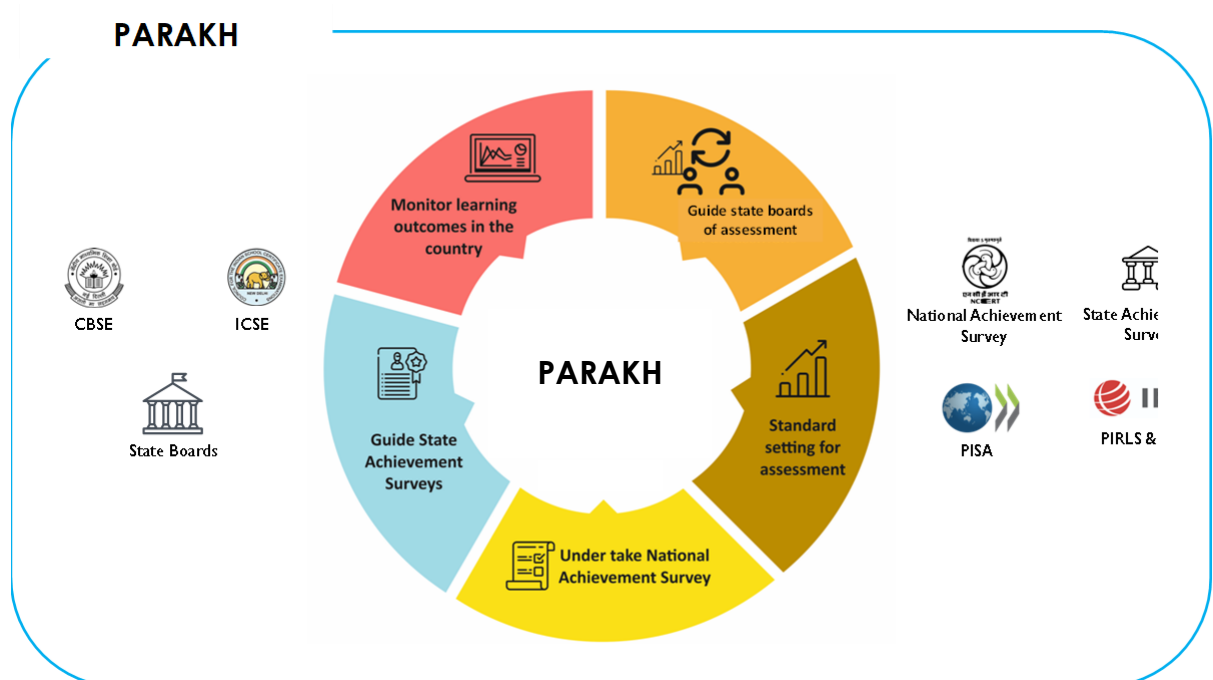
- This will be accompanied by careful tracking of the progress of students as well as their learning levels, to achieve universal participation in schools.
- Multiple pathways to learning involving both formal and non-formal education modes shall also be established.
- New and comprehensive National Curricular Frameworks for School Education, ECCE, Teacher Education, and Adult Education are being formulated based on the vision of NEP 2020.
- These National Curricular Frameworks will ensure that there is no rigid separation among 'curricular', 'extracurricular', or 'co-curricular' activities and bring more fluidity among 'arts', 'humanities', and 'sciences', or between 'vocational' or 'academic' streams.
- Curriculum content will be reduced in each subject to its core essentials.
- A technology-based comprehensive teacher-requirement planning forecasting exercise will be conducted to assess vacancies.

### National Curricular Framework

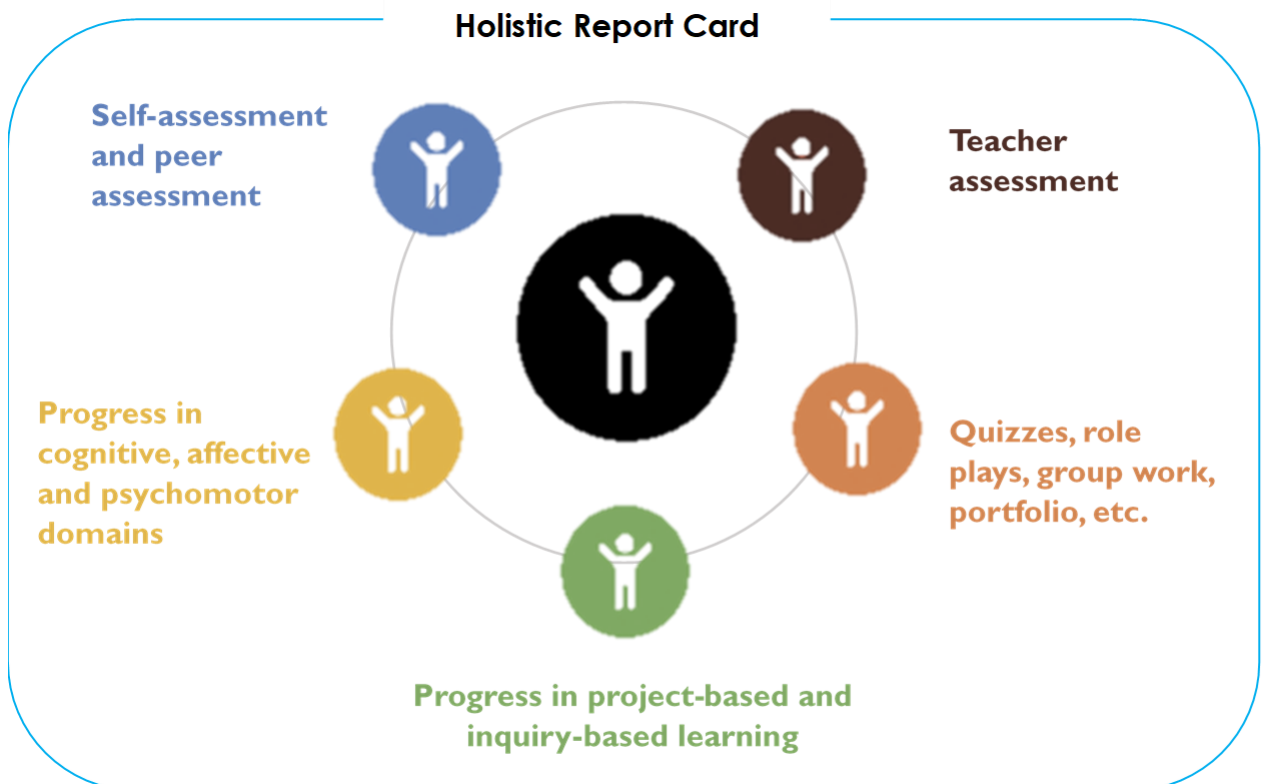
will ensure that there is no rigid separation among 'curricular', 'extracurricular', or 'co-curricular' activities and bring more fluidity among 'arts', 'humanities', and 'sciences', or between 'vocational' or 'academic' streams.

- Teacher Eligibility Tests (TETs) will be extended to cover teachers across all stages of school education.
- National Professional Standards for Teachers (NPST) cover the role, expectations, and expected competency of the teacher at different levels of expertise/stage.
- Each teacher will be expected to participate in at least 50 hours of Continuous Professional Development (CPD) activities every year.

- To ensure the equivalence of academic standards among learners across all schools, PARAKH an autonomous body of the Ministry of Education will prepare national guidelines on assessment standards.



- High quality and diversified Student and Teacher Resources/Learning Materials, including e-learning resources (DIKSHA), will be developed.
- States/UTs will set up an independent, State-wide body called the State School Standards Authority (SSSA) that will establish a minimal set of standards for all schools.
- The aim of assessment will shift towards more competency-based, and testing higher-order skills, such as analysis, critical thinking, and conceptual clarity.
- The progress card will be a holistic, 360-degree, multidimensional report card.



- NEP 2020 would benefit all stakeholders including 25 crore students, 15 lakh schools, 92 lakh teachers, Educational Administrators, Parents, and the community as education, particularly quality education, is the backbone of an equitable and just society.

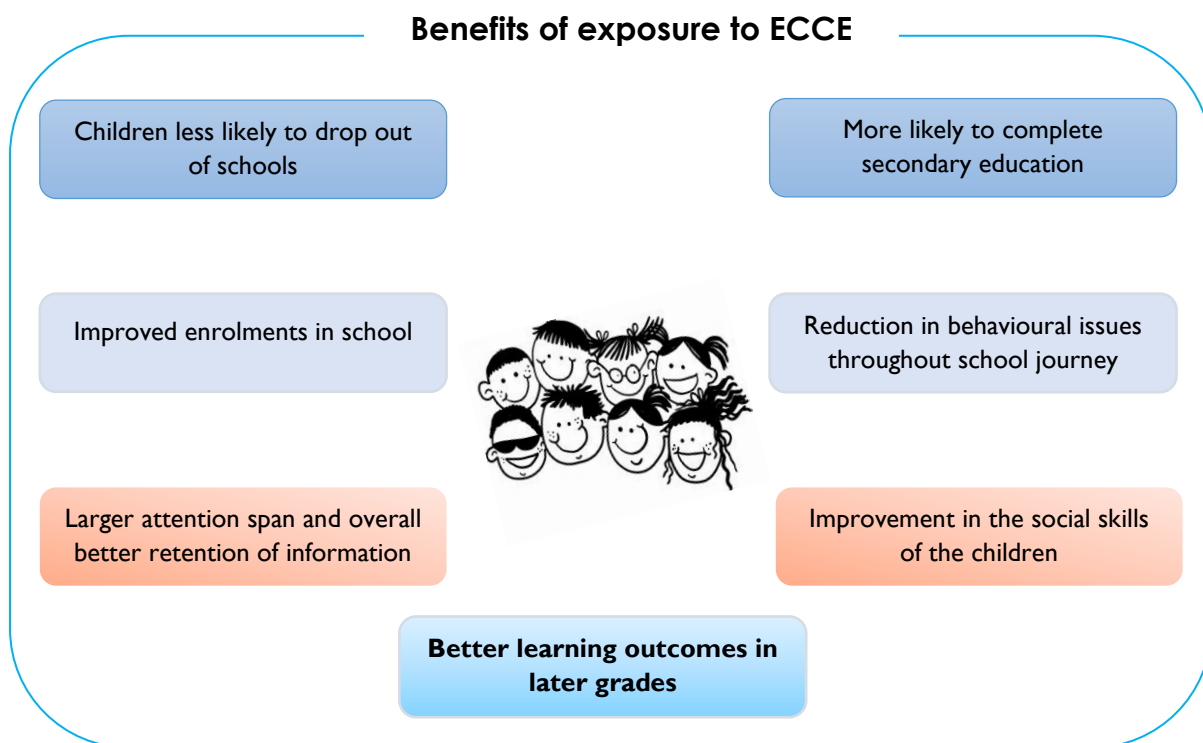
**25 crore** students

**15 lakh** schools

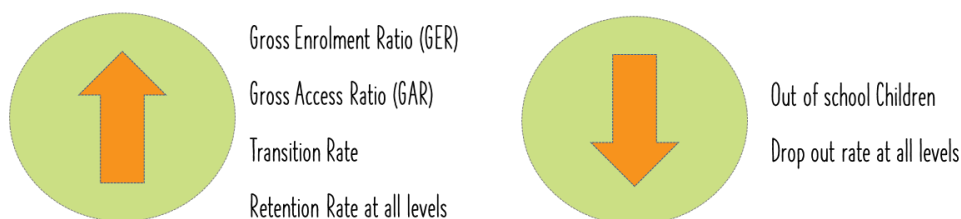
**92 lakh** teachers

## Future Impact

- New National Curriculum Frameworks for School Education, Early Childhood Care and Education, Teacher Education, and Adult Education will be developed encompassing the spirit of NEP and will pave way for curriculum reforms.
- Achievement of Foundational Literacy and Numeracy by Grade 3.
- Improvement in Learning Outcomes at all stages.
- Universal Access to quality ECCE.



- Increase in Gross Enrolment Ratio (GER), Net Enrolment Ratio (NER), transition rate and retention rate at all levels, and reduction in dropouts and out of school children.



- Introduction of Experiential learning at all stages and adoption of innovative pedagogies by teachers in classroom transaction.
- Reforms in Board exams and various entrance tests.
- Development of high quality and diversified teaching-learning material.
- Availability of textbooks in Regional/local/home language.
- Improvement in quality of Teacher Education Programmes.

- Improvement in quality of newly recruited teachers and capacity building through Continuous Professional Development.
- Safe, Secure, inclusive, and conducive learning environment for students and teachers.
- Improvement in infrastructure facilities including barrier-free access and sharing of resources among schools.
- Online, transparent public disclosure system for public and private schools.
- Integration of technology in educational planning and governance and availability of ICT facilities and quality e-content in classrooms.

NEP 2020 will play a momentous role in transforming India into an equitable and vibrant knowledge society, by providing high-quality education to all, and thereby making India a global knowledge superpower.

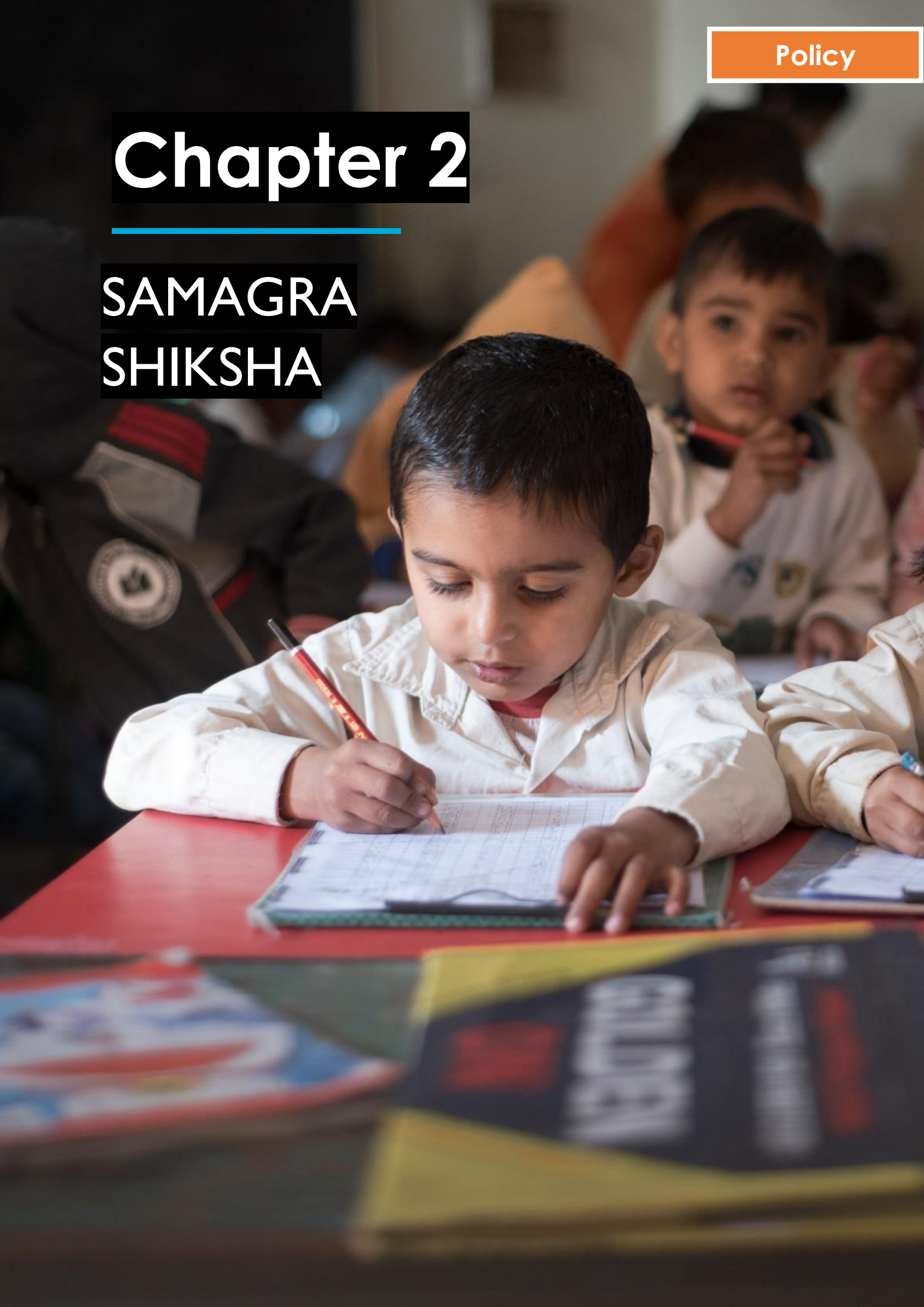


“ India bears the capability of providing Talent and Technology to the world. The National Education Policy addresses this responsibility that we bear towards the world. The solutions suggested by the National Education Policy aim to develop the mindset towards futuristic technology. Technology has given us a medium to reach the students of far-flung areas at minimal expenditure, effectively and with a great amount of speed. We must make the most out of the Technology.

# Chapter 2

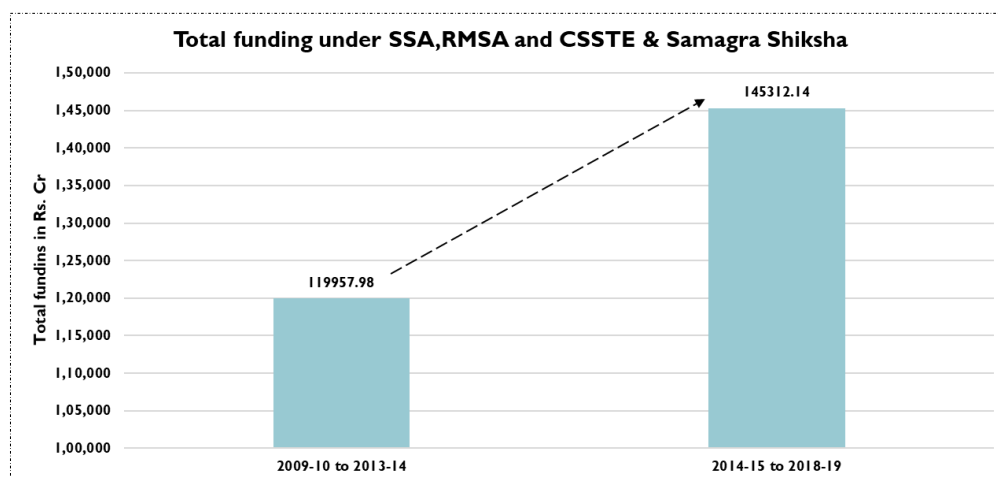
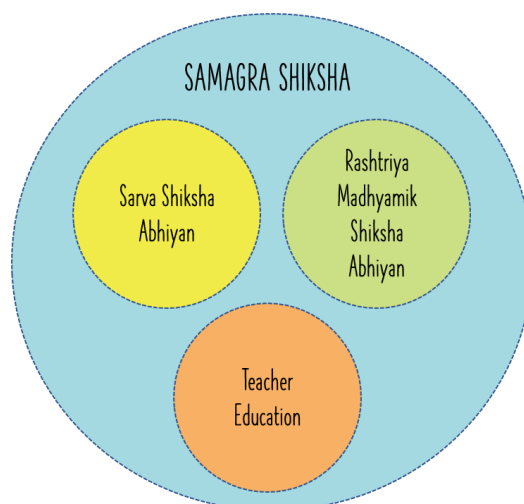
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## SAMAGRA SHIKSHA



## Need for the Reform

- Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA), and Teacher Education (TE) were the three major flagship school education development programs of the Ministry of Education (MoE), Government of India and were implemented in partnership with State/UTs till 2017-18.
- Although they significantly contributed towards an equitable quality school education system in the country, their scope and coverage remained segmented.
- Independent evaluations had suggested increased convergence and integration between the Schemes through a single school education development program covering grades I-X/XII.
- This would help instil allocative efficiency and optimal utilization of budgetary and human resources.
- Further, ECCE and Higher Secondary classes were not covered in erstwhile schemes and remained neglected in past decades.
- Therefore, an integrated flagship program in school education i.e., Samagra Shiksha, was conceptualized with the overall developmental goal of raising the performance of the school education sector following a strategy of supporting interventions for school effectiveness and sustainable institutional capacity.



## Approach and present impact

- In the budget speech of 2018-19, it was announced that



“We now propose to treat education holistically without segmentation from pre-nursery to Class 12.”

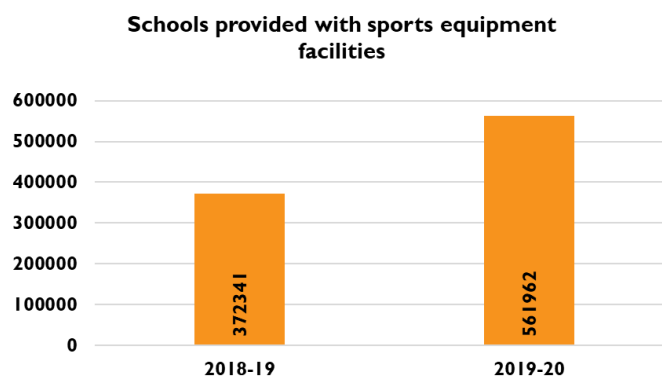
- ‘Samagra Shiksha’ was launched in 2018-19 for universalization of quality education throughout the country in coordination and consultation with the States and UTs.
- It is an overarching program for the school education sector extending from pre-school to class XII and aims to ensure inclusive and equitable quality education at all levels of school education.

### The major objectives of the scheme include:

- ✓ Provisioning of quality education.
- ✓ Enhancing the learning outcomes of students.
- ✓ Bridging social and gender gaps in school education.
- ✓ Ensuring equity and inclusion at all levels of school education.
- ✓ Ensuring minimum standards in schooling.
- ✓ Promoting vocationalisation of education.
- ✓ Strengthening and up-gradation of SCERT/State Institutes of Education and DIETs.

- Under Samagra Shiksha, States and UTs are supported in:

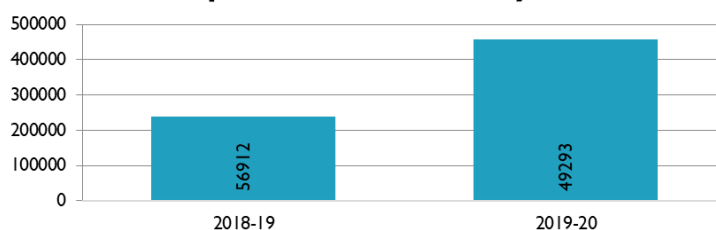
- Implementation of the Right of Children to Free and Compulsory Education (RTE) Act, 2009
- **For the first time**, schools are being provided grants for the procurement of sports equipment for indoor & outdoor games.



- Provision of library grants for Government schools to complement activities under ‘Padhe Bharat Badhe Bharat’ and to inculcate reading habits among students of all ages.



### Schools provided with library facilities



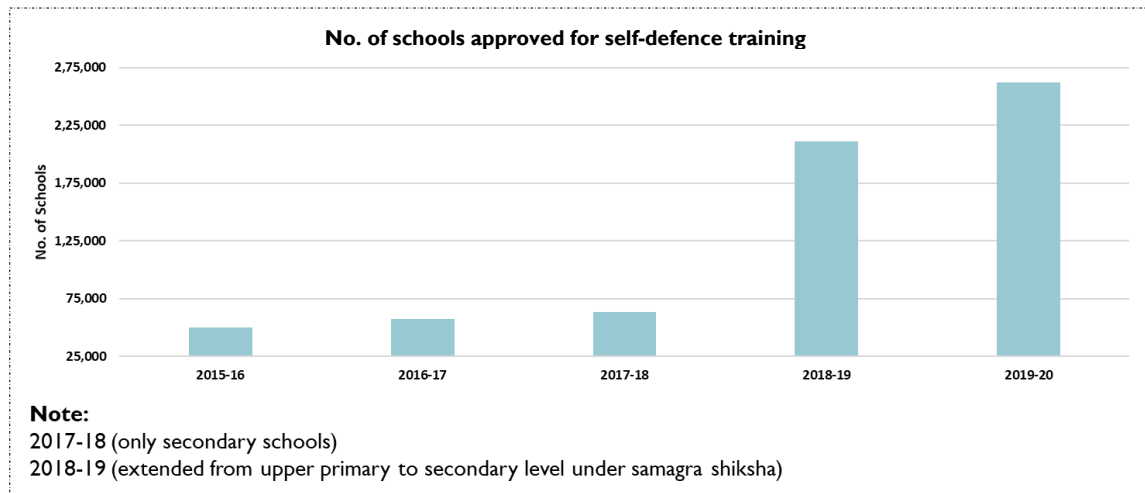
- Learning Enhancement Programmes for equipping students with the core learning pre-requisites appropriate for a particular grade.
- Providing free textbooks to all children in Government. and Government-aided schools and free uniforms to all girls, SC, ST, and BPL boys in Government schools at the elementary level.
- Developing Primers/textbooks in tribal languages.
- Developing bridge materials to help students transition into the State language of instruction and English.
- Developing Energized textbooks with QR codes tagged with e-content for any time, anywhere access to digital learning and diverse resources.



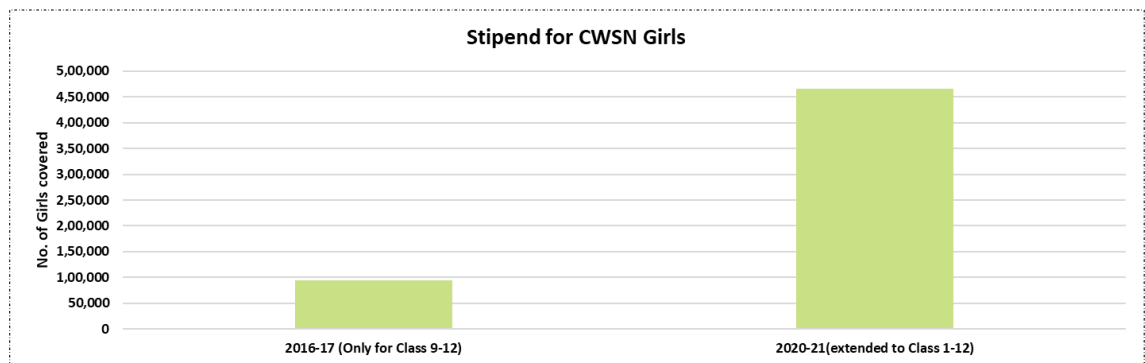
- Several interventions for improvement of quality of education undertaken under Samagra Shiksha:
  - To improve learning outcomes at the Elementary level NISHTHA – National Initiative for School Heads’ and Teachers’ Holistic Advancement was launched on 21st August 2019 under Samagra Shiksha.
  - NISHTHA aims to build the capacities of around 42 lakh teachers and Heads of Schools.
  - Assessments of learning outcomes, Rashtriya Avishkar Abhiyan (RAA), use of ICT and Digital Initiatives, etc. are being undertaken.
  - New schools at all levels (Primary to Senior Secondary level), strengthening of school infrastructure, Kasturba Gandhi Balika Vidyalayas (KGBVs),
  - Residential Schools/Hostels, Transport/Escort Facility to children in special circumstances and for Children with Special Needs (CWSN), etc. for improving access to the children.
  - Out of school children are also being identified and provided special training for mainstreaming
  - Existing Kasturba Gandhi Balika Vidyalayas (KGBVs) are being upgraded to provide residential and schooling facilities up to Class-XII.

|   | 2018-19 | 2019-20 |
|---|---------|---------|
| KGBVs upgraded from class VIII to class X   | 729     | 207     |
| KGBVs upgraded from class VIII to class XII | 503     | 183     |

Self-defence training is being provided for girls in Government schools at upper primary to senior secondary level.

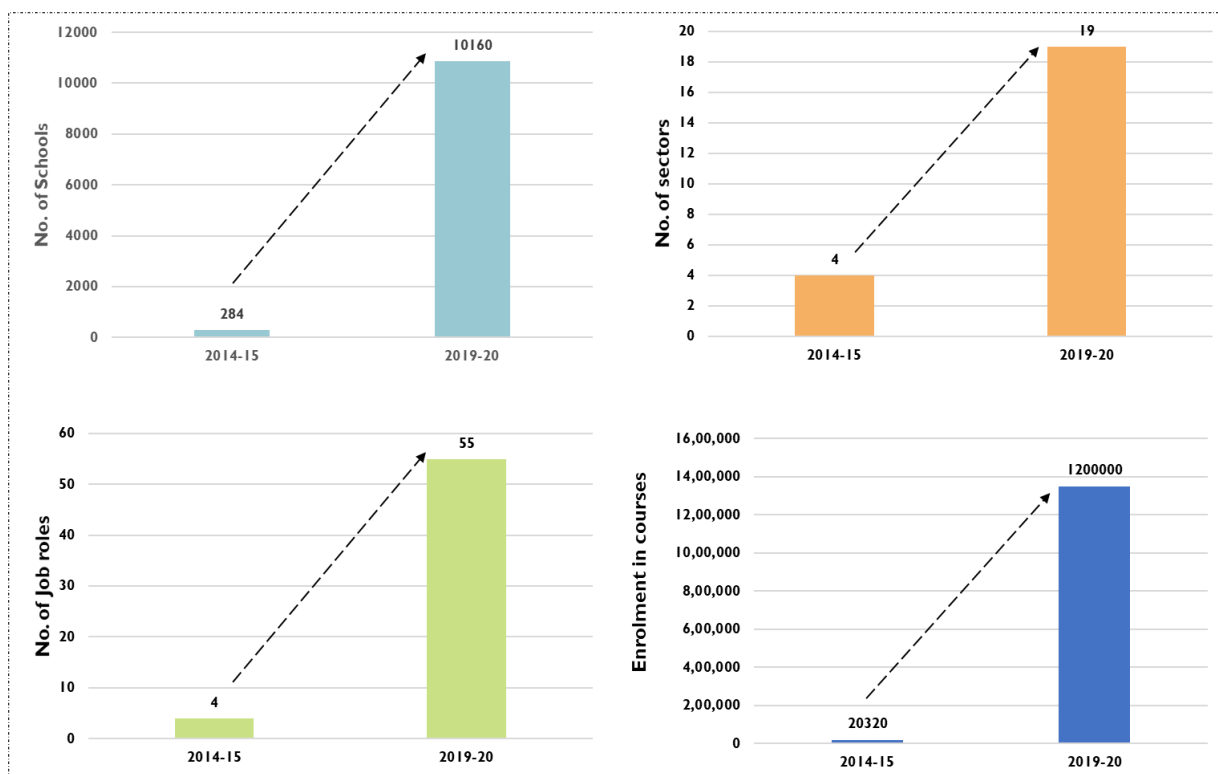


To encourage and improve the enrolment of children with special needs (CWSN), a stipend for CWSN girls is now provided from classes I to XII. Various Interventions like identification & assessment camps, provision of aids & appliances, assistive devices, resource rooms, etc., making school infrastructure barrier-free and resource support for Special Educators are provided.



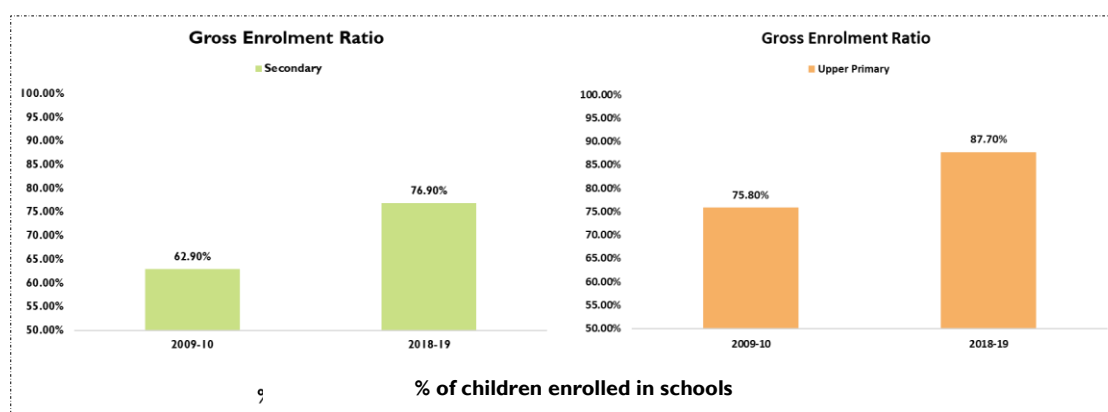
Vocational education has been integrated with general academic education. NSQF (National Skills Qualification Framework) compliant vocational courses covering 55 Job Roles in 19 Sectors are offered to the students at the Secondary and Sr. Secondary level.

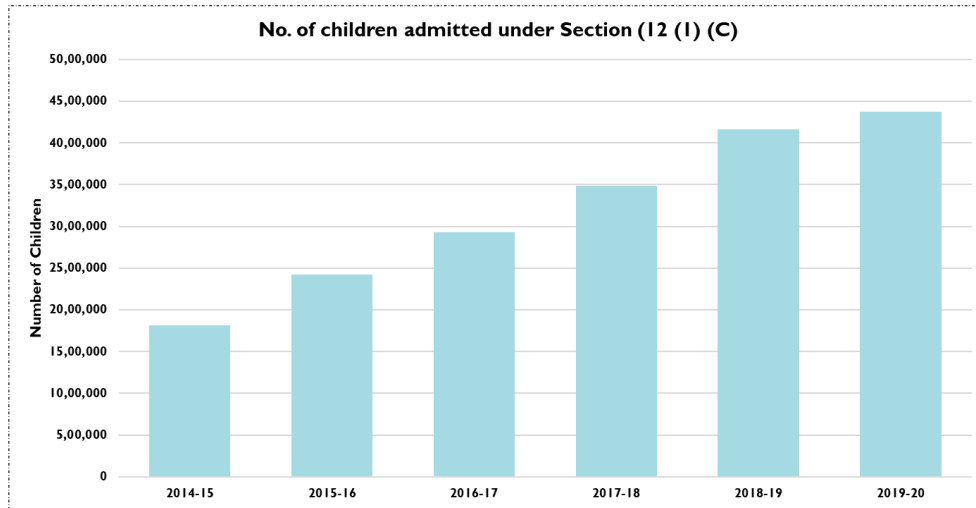
## Data on vocational education on no. of schools, sectors, job roles & enrolment across years



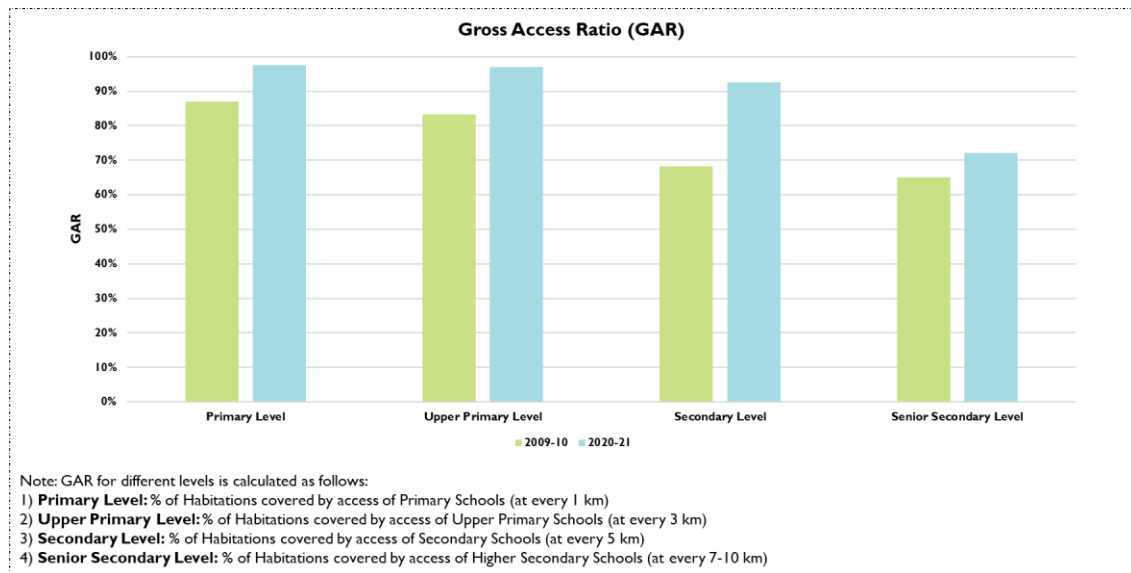
## Qualitative & Quantitative benefits

- Improvement in Gross Enrolment Ratio (GER) at all levels - Elementary, Secondary and Senior Secondary Level by providing universal access to schooling for all children in the age group of 3-18 years by 2030.

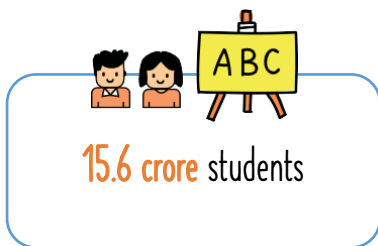




- Underserved areas to be covered in a phased manner to improve the Gross Access Ratio (GAR) at all levels



- Infrastructure facilities to be provided to expand accessibility and quality of schooling.
- Standardized training programs for in-service continuous professional development designed and provided through digital platforms such as SWAYAM/DIKSHA.
- DIKSHA with quality digital content to assist teachers available to address the challenges of multilingual and diverse classrooms.
- The scheme covers 11.6 lakhs schools, over 15.6 crores students, and 57 lakhs Teachers of Government and Aided schools (from pre-primary to senior secondary level) by involving all stakeholders of the school ecosystem i.e., teachers, teacher educators, students, parents, community, school management committees, SCERTs, DIETs, BITEs, Block Resource Persons, Cluster resource persons, volunteers for providing quality, inclusive and equitable education.



## Future impact

### Emphasis on FLN



A national mission under Samagra Shiksha will be set up to achieve the target of foundational literacy and numeracy for all students of Class III by 2025



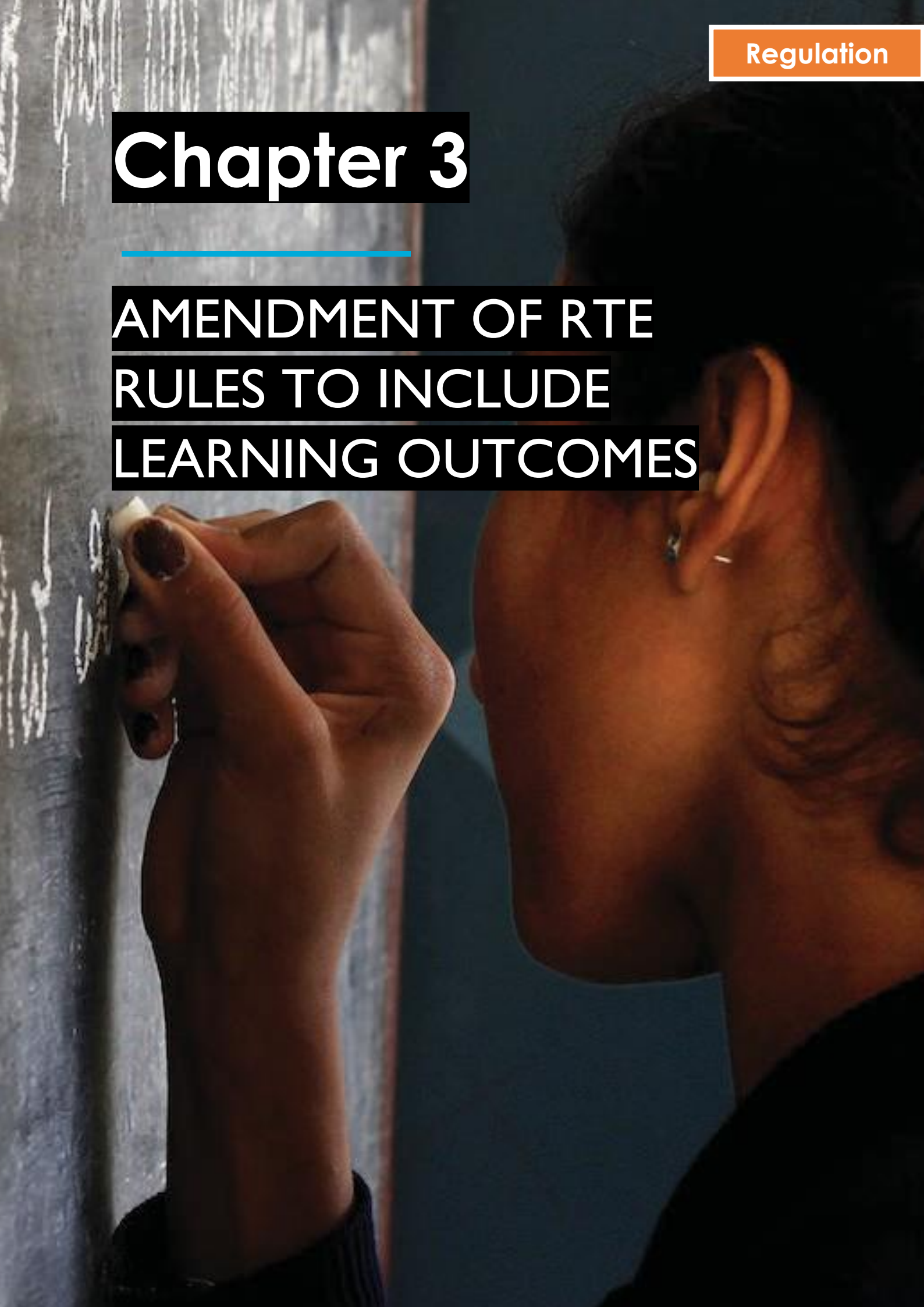
Focus on early reading, writing & mathematics.

- Samagra Shiksha is now being aligned with NEP 2020 recommendations and will play a crucial role in translating the vision of NEP on the ground level.
- The major impact of the scheme will be the universalisation of pre-primary education, Strengthening and Expansion of Pre-School to ensure that all children entering Grade-I are school ready.
- Safe and high-quality ECCE at Anganwadis/Pre-school/Balavatika; Before the age of 5 every child will move to a “Preparatory Class” or “Balavatika” (that is, before Class I)
- Emphasis on Foundational Literacy and Numeracy (i) A national mission under Samagra Shiksha will be set up to achieve the target of foundational literacy and numeracy for all students of Class III by 2025 (ii) Focus on early reading, writing & mathematics.
- Expansion of schooling facility, improving learning outcomes for every child in every grade and transforming the curriculum to encourage holistic development and 21st-century skills such as critical thinking, creativity, scientific temper, communication, collaboration, multilingualism, problem-solving, ethics, social responsibility, and digital literacy.
- Improvement in the quality of teachers.
- There will be a greater emphasis on equity and inclusiveness by creating an Inclusion Fund for Gender, Special Education Zones (SEZs) for areas with a significant population of Socially & Economically Disadvantaged Groups, such as SC, ST, Minorities, and Inclusive education for Divyang Children.

# Chapter 3

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## AMENDMENT OF RTE RULES TO INCLUDE LEARNING OUTCOMES



## Need for the reform

- The Right of Children to Free and Compulsory Education Act (RTE), 2009 entitles every child in the age group of 6–14 years the right to free and compulsory elementary education. Sustainable Development Goal 4 aims to



*“ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.”*

The goal implies the effective acquisition of foundational and transferable skills as the basis for learning throughout life, as well as a focus on the relevance of learning - both for the world of work, and for personal, civic, and social life.



*Before a child reads to learn in future, it is important that he learns to read in the beginning. This development journey from Learn to Read to Read to Learn will be completed through Foundational Literacy and Numeracy..*

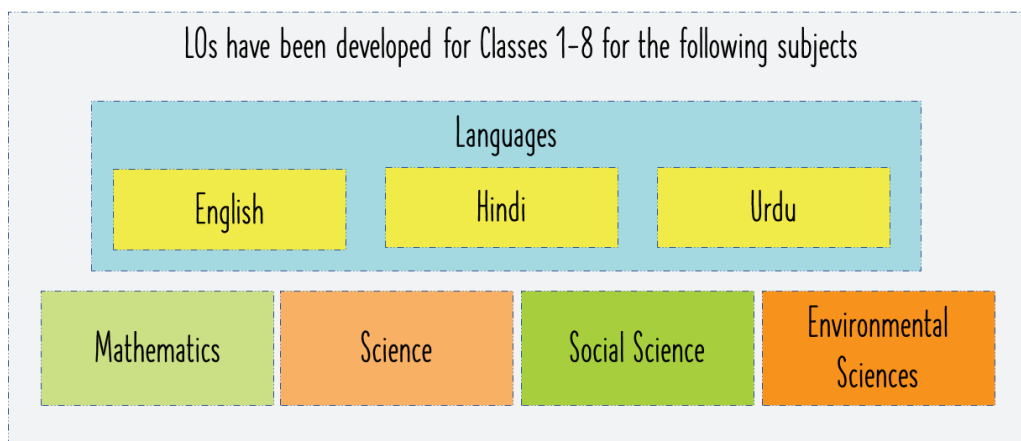
- Quality of education has implications in areas that are critical to improving learning processes and outcomes. These include teacher education, training, and professional development, curriculum development, and the design of teaching and learning materials, as well as learning assessment.

## Approach and Present Impact

- To focus on quality, the Central RTE Rules have been amended on 20th February 2017 to include a reference on class-wise, subject-wise Learning Outcomes, to serve as a guideline for States and UTs to ensure that all children acquire appropriate learning levels.

- Competencies are the applied skills and knowledge that enable learners to successfully conduct their life and perform the work required of them in daily life. They are a way to verify that a learner has in fact learned what was intended.
- Competency-Based Education requires lucid Learning Outcomes or LOs w.r.t skills and proficiencies to be defined.
- Learning Outcomes are a set of benchmark competencies that are grade-appropriate and lay down standards to be achieved by each child in school education. These help a teacher/parent/student understand the levels of achievement and proficiency and the gaps that are to be filled.

- The reference of Learning Outcomes has been included to (i) Prepare class wise, subject wise learning outcomes for all elementary classes: and (ii) Prepare guidelines for putting into practice continuous and comprehensive evaluation to achieve the defined learning outcomes.
- The States and UTs have also included a reference to Learning Outcomes in their respective RTE Rules.
- Learning Outcomes for Classes I to VIII in Languages (Hindi, English, and Urdu), Mathematics, Environmental Studies, Science, and Social Science up to the elementary stage have been developed by NCERT. The document includes Curricular Expectations, Pedagogical Processes, and Learning Outcomes for each subject in each class.

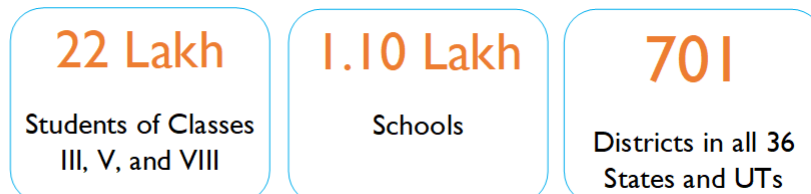


- Number of Learning Outcomes (Elementary)

| Sr. No. | Subject        | Class I | Class II | Class III | Class IV | Class V | Class VI | Class VII | Class VIII |
|---------|----------------|---------|----------|-----------|----------|---------|----------|-----------|------------|
| 1       | Hindi          | 14      | 17       | 14        | 18       | 17      | 20       | 22        | 23         |
| 2       | English        | 15      | 12       | 14        | 19       | 19      | 17       | 22        | 27         |
| 3       | Mathematics    | 9       | 7        | 12        | 13       | 8       | 18       | 21        | 21         |
| 4       | Urdu           | 7       | 13       | 10        | 7        | 8       | 4        | 6         | 4          |
| 5       | EVS            |         |          | 15        | 15       | 13      | 14       | 16        | 15         |
| 6       | Social Science |         |          |           |          |         | 26       | 34        | 32         |
| 7       | Science        |         |          |           |          |         | 14       | 16        | 15         |

- These are not prescriptive and are contextualised as per the local specific requirements without much deviation from the learning outcomes developed at the National level.
- All the States & UTs have translated the Learning Outcomes document into their regional languages and circulated the same to all the schools.
- The National Achievement Survey (NAS), 2017 was conducted on 13th November 2017 based on these learning outcomes, through which the learning levels of around 22 lakh students of Classes III, V, and VIII from 1.10 lakh schools across 701 districts in all 36 States and UTs were assessed.

NAS assessed learning levels of





- Learning Outcomes for the Secondary Stage has also been developed in all subject areas.
- These learning outcomes have strong linkages with Sustainable Development Goals-4 with regards to universal quality education.
- Number of Learning Outcomes (Secondary)

| Sr. No. | Subject                       | Class IX | Class X |
|---------|-------------------------------|----------|---------|
| 1       | English                       | 30       | 36      |
| 2       | Hindi                         | 24       | 27      |
| 3       | Science                       | 19       | 19      |
| 4       | Social Science                | 12       | 12      |
| 5       | Mathematics                   | 13       | 15      |
| 6       | Health and Physical Education | 19       | 16      |
| 7       | Art Education (Visual Art)    | 17       | 17      |
|         | Performing Art (Music)        | 26       | 37      |
|         | Dance                         | 24       | 17      |
|         | Theatre                       | 11       | 21      |

## Future Impact

- Learning Outcomes at Higher Secondary stage for the following curricular areas are under development in the subject areas of English, Hindi, Sanskrit, Urdu, Mathematics, Biology, Chemistry and Physics, Human Ecology and Family Science, Economics, Geography, History, Political Science, Psychology, Sociology, Accountancy, and Business Studies, Painting and Music, Health & Physical Education.
- The gap between the current state of learning outcomes and what is required to be achieved would help in devising appropriate strategies for addressing the gaps. This will ensure that all students are obtaining the desired Learning Outcomes and can use them in their life.
- Learning Outcomes would address the diversity in the syllabi and contents and provide a well-defined criterion to the teachers. The students will also be able to develop appropriate competencies.
- Learning Outcomes are measurable and will bring accountability to all stakeholders in the education system.
- The focus of teaching-learning and assessment would be shifted from content mastery to competency mastery. Curriculum, pedagogical processes, and assessments would also be changed to achieve the desired Learning Outcomes.

# Chapter 4

## AMENDMENT OF RTE ACT 2009 FOR TRAINING OF ALL UNTRAINED TEACHERS



## Need for the Reform

- As of 31st March 2015, 18 State and UT Governments had reported that there are 511,679 untrained teachers in service in Government schools. Further, as per U-DISE, in 2015-16, there were 597,765 un-trained teachers in service in the unaided private schools across the country.
- Section 23(1) of the Right of Children to Free and Compulsory Education (RTE) Act, 2009 prescribes that-



*Any person possessing such minimum qualifications, as laid down by an academic authority, authorized by the Central Government, by notification, shall be eligible for appointment as a teacher.*

- The proviso to Section 23(2) of the RTE Act reads as under:



*Provided that a teacher who, at the commencement of this Act, does not possess minimum qualifications as laid down under sub-section (1), shall acquire such minimum qualifications within a period of five years.*

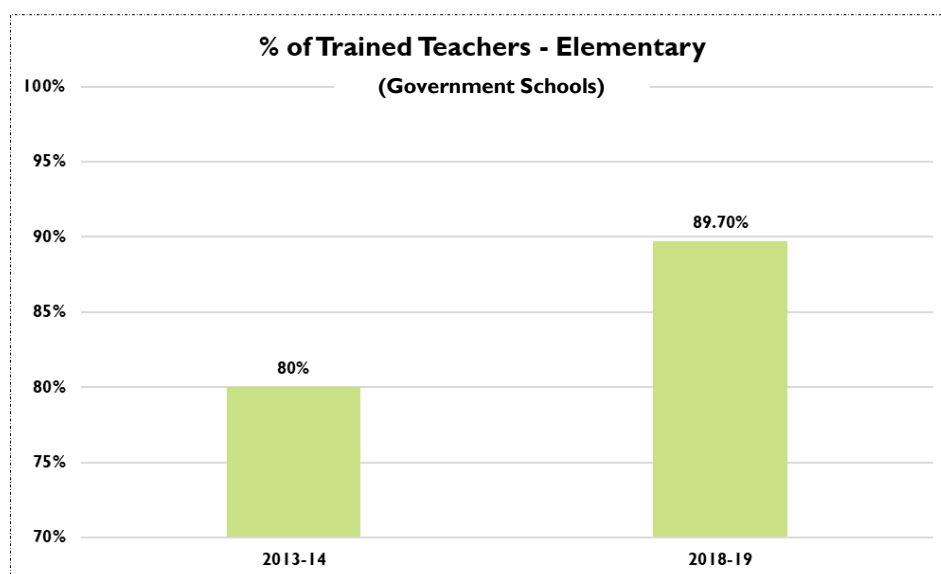
- In exercise of the powers conferred by Section 23(1) of the RTE Act, 2009, the National Council for Teachers Education (NCTE) was notified by the Central Government as academic authority to lay down the minimum qualifications required for a person to be appointed as a teacher. Accordingly, NCTE vide its notification dated 23.08.2010 (as amended from time to time) has prescribed the minimum qualifications for a person to be eligible as a teacher for classes I to VIII.
- To ensure that all in-service untrained teachers, acquire the minimum qualifications prescribed by the academic authority, it was decided that an appropriate amendment in the RTE Act, 2009 be carried out to extend the period for acquiring such training up to 31st March 2019.



*All the teachers also have to learn a lot of new things, as well as unlearn a lot of old things...*

## Approach and Present Impact

- The amendment to Section 23(2) of the RTE Act to extend the period for acquiring training by the untrained in-service elementary teachers was unanimously passed by both the Houses of Parliament on 1st August 2017.



- The new proviso added after the amendment is as under:



*Provided further that every teacher appointed or in position as of the 31st March 2015, who does not possess minimum qualifications as laid down under sub-section (1), shall acquire such minimum qualifications within a period of four years from the date of commencement of the Right of Children to Free and Compulsory Education (Amendment) Act, 2017. (i.e., 31st March 2015)*

- The National Institute of Open Schooling (NIOS) was entrusted with the task to train the untrained in-service elementary teachers, through 'Open Distance Learning Mode'. All the states and UTs were informed about the modalities of the course and NIOS published advertisements in National/Regional newspapers to give wide publicity to the course to ensure that no untrained in-service elementary teacher is left. The course started on 3rd October 2017.
- Also, a six-month bridge course was conducted by NIOS for teachers who are graduates and B.Ed. and are teaching at primary level as the prescribed qualification for teaching is D.El.Ed.
- A unique feature of this initiative was that the study material prepared by NIOS was in self-instructional mode and these were uploaded on the SWAYAM platform in four quadrants i.e. (1) Audio/Video lectures, (2) specially prepared reading material that can be downloaded/printed, (3) self-assessment tests through tests and quizzes and (4) an online discussion forum for clearing the doubts.
- All teachers were given instructions online through the NIOS portal, SWAYAM portal, and SWAYAM PRABHA channel with separate arrangements for the face-to-face program.

### Qualitative & Quantitative Benefits

- All untrained in-service teachers were given an opportunity to acquire professional qualifications through this course.
- The online D.El.Ed. course was aimed to enhance the capacities of teachers thereby improving the quality.

- It is expected that ultimately the school going children will be benefitted by the presence of professionally qualified teachers.
- A total of 1,378,979 elementary teachers from Government, Government-Aided, and Private-Unaided Schools had registered for undergoing the D.El.Ed course, which was completed on 31st March 2019. A total of 964,300 teachers have successfully completed the course.
- 90,000 candidates registered for the online bridge course for B.Ed. teachers out of which 78,000 have successfully completed the course.

## Future Impact

- After this massive exercise of training of all untrained teachers in the system, it is expected that there will be an improvement in the learning outcomes of students.
- Teachers will be well-equipped to handle the expectations of all stakeholders.
- After acquiring professional qualifications, teachers can now focus on specialised in-service training i.e., innovative pedagogies, learning assessment, etc.
- Teachers will be motivated to adopt and adapt to new changes in technology and pedagogy.

# Chapter 5

## AMENDMENT OF RTE ACT IN NO DETENTION PROVISION



## Need for the Reform:

- RTE Act, 2009, represents the consequential legislation to Article 21-A inserted in the Constitution of India through the Constitution (86th Amendment) Act, 2002.
- In recent years, States and Union territories have been raising the issue of adverse effects on the learning levels of children as section 16 of RTE Act, 2009 does not allow holding back of children in any class till the completion of elementary education.
- Therefore, to improve the learning outcomes in the elementary classes and after wide deliberations with all the stakeholders, it was decided to amend section 16 to empower the appropriate Government to decide as to whether to hold back a child in the fifth class or the eighth class or both classes after providing additional instruction and granting an opportunity for re-examination.

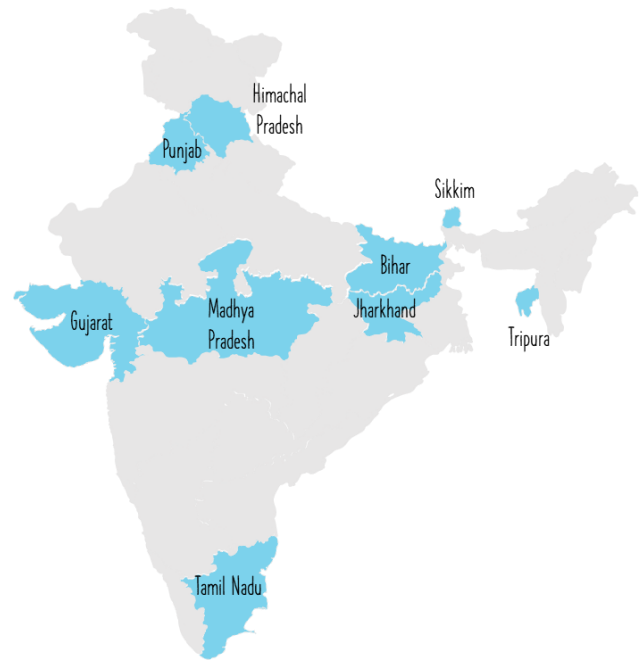


“ Every country reforms its education system according to its national values and national goals. The idea is that the country’s education system should ensure the future of not only its present but future generations as well. This is the idea behind India’s National Education Policy.

## Approach and present Impact:

- Accordingly, the Right of Children to Free and Compulsory Education (Amendment) Act, 2019 amending sections 16 and 38 of the RTE Act, 2009, was notified on 11th January 2019 and came into force with effect from 1st March 2019.
- States are now empowered to decide upon the detention of children in classes 5 & 8.
- States must ensure that the children who are not able to clear the annual examination are given supplementary instruction for 2 months and are allowed to re-appear for the annual examination.
- No child will be expelled or forced to drop out of elementary school if he or she must repeat a class.

- So far, 9 States i.e. Bihar, Madhya Pradesh, Sikkim, Punjab, Gujarat, Himachal Pradesh, Jharkhand, Tamil Nadu, and Tripura have amended their state RTE Rules.
- The Central RTE Rules are under review for amendment keeping in view the provisions of the National Education Policy 2020.



## Future Impact

*“The National Education Policy, 2020 also envisages that “all students will take school examinations in Grades 3, 5, and 8 which would test achievement of basic learning outcomes, through assessment of core concepts and knowledge from the national and local curricula, along with relevant higher-order skills and application of knowledge in real-life situations, rather than rote memorization. The Grade 3 examination, in particular, would test basic literacy, numeracy, and other foundational skills.”*

- The aim behind the provision in NEP 2020 is to use the results of school examinations for continuous monitoring and improvement of the schooling system in general, and achievement of learning outcomes by each child, in particular.
- The provision of annual examination and detention at Class 5 or 8 or both is likely to introduce transparency and accountability in the education systems for all stakeholders.
- There will be a greater focus on the attainment of learning outcomes by all students rather than education without learning. This will help in improving the overall quality of education.
- As the examination includes a continuous evaluation of class-based activities, it will help in the overall development of the child



# Chapter 6

## NATIONAL ACHIEVEMENT SURVEY



## Need for the reform

- Earlier rounds of National Achievement Surveys were conducted using a small state-wise sample and did not focus on learning outcomes making it exceedingly difficult to design interventions for improvement of quality of education in the country, at a localized level.
- NAS 2017 has been conducted to map progress towards achieving the learning outcomes and to monitor the health of the country's education system.
- **For the first time**, NAS 2017 used the district as the sampling frame and was based on an assessment framework developed to assess the learning levels based on subject-specific Learning Outcomes (LO) for Classes III, V, and VIII.
- Findings from NAS 2017, illuminate how our education policies and practices need to evolve to improve the learning levels of our children.

~50%

of Class III students have basic or below basic proficiency in Maths and Languages and that student performance gets worse along subsequent years,

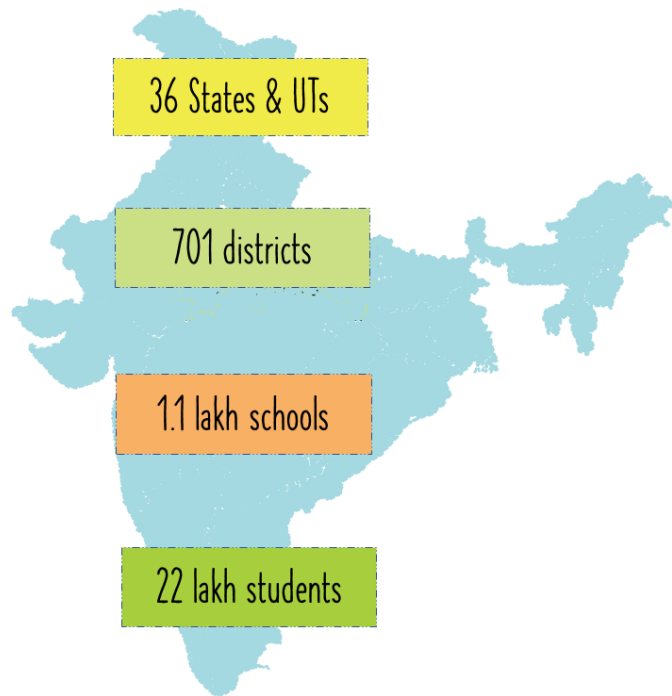
~60%

of class VIII students showing only basic or below basic proficiency

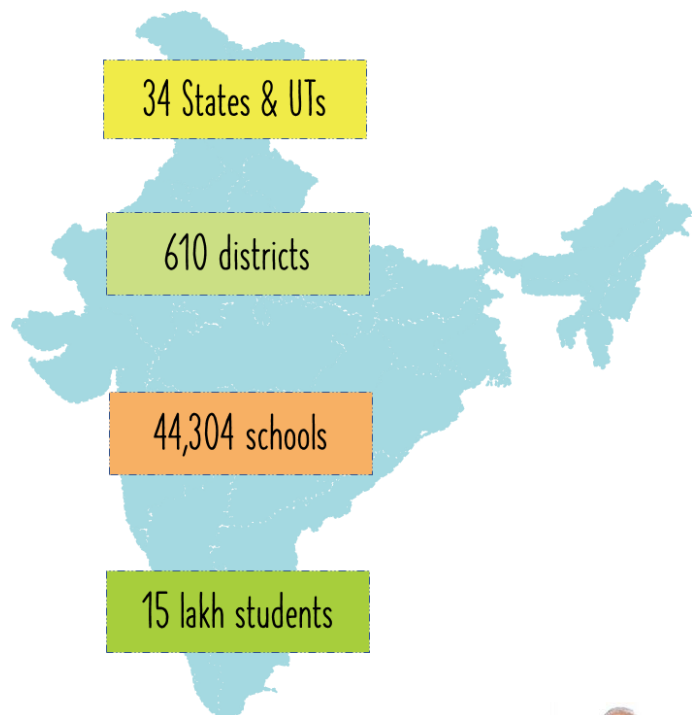
## Approach and Present Impact

- The National Achievement Survey (NAS) 2017 was held on 13th November for assessing the competencies developed by the children at the grade levels III, V, and VIII in different subject areas such as languages, mathematics, EVS/Science and Social Sciences in the Government and Government aided schools.
- The Students of Classes III and V were assessed on Reading Comprehension, Mathematics, and Environmental Studies, and Class VIII students were assessed on Language, Maths, Science and Social Science.

- NAS 2017 was administered with the district as the unit of reporting covering 701 districts in all the 36 States and UTs and covered 22 lakh students from 1.10 lakh schools. National Achievement Survey for Class X was also conducted throughout the country on February 05, 2018, in Government, Government-aided, and private schools.

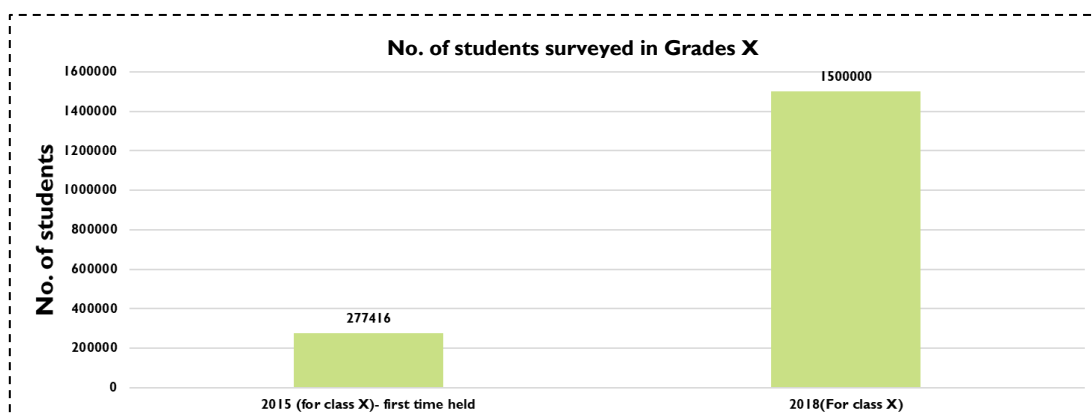
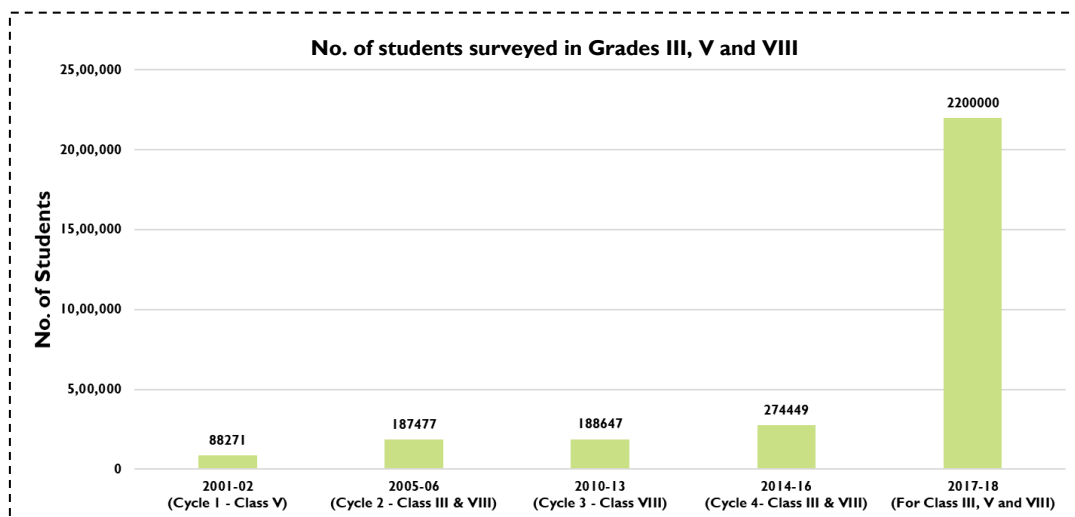
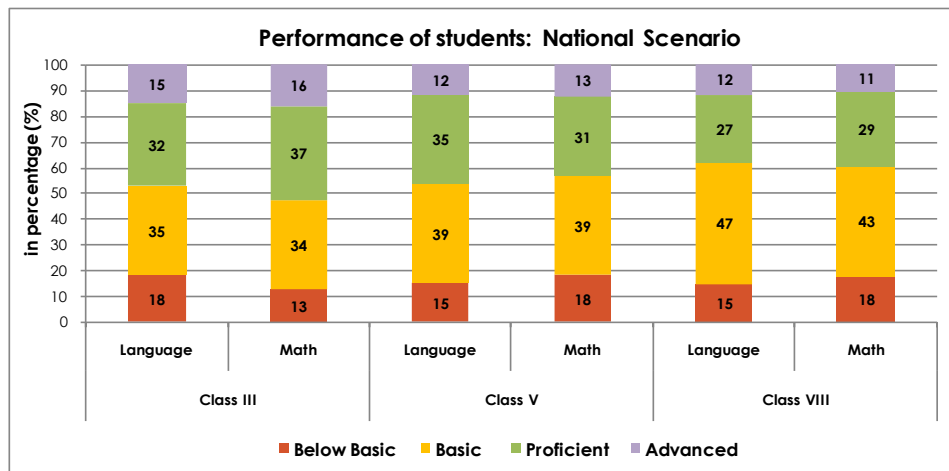


- For Class X, the learning levels of 15 lakh students in 44,304 schools across 610 districts in 34 States and UTs were assessed in 5 subject areas of English, Mathematics, Science, Social Science, and Modern Indian Language (MIL).



“ Under the National Education Policy, as far as possible, the local language, mother tongue, is stated as the medium of instruction for education up to at least grade five. I see that some people are confused about it. There is no restriction on learning or teaching languages other than mother tongue in the National Education Policy.

- State and District Report Cards for both elementary and secondary level for NAS 2017/18 have been released and placed in the public domain on [ncert.nic.in](http://ncert.nic.in).



## Participation in NAS 2017



## Future Impact

Post NAS capacity building and interventions:

- NAS 2017 brought into focus gaps in quality of education and helped in the preparation of roadmaps by states for improving their performance in subsequent assessment cycles.
- The 701 District Report Cards (DRCs), 36 State Learning Reports (SLRs), and National Technical Report are being used to inform Policies, Practices, and Teaching Learning strategies.
- The learning gaps identified are used to provide feedback to the districts in the States and UTs.
- A framework of the intervention was suggested to improve the learning levels in the schools.
- NAS 2017 weighted and scaled data shared with States/ UTs to help them carry out independent research on variables of interest.
- Orientation on evolving learning strategies to enhance learning outcomes at different grade levels-outcome-based pedagogy and orientation of school leaders in the use of assessment data (DRCs and SLRs) to improve learning in the States and UTs.

- Facilitating the use of alternate instructional strategies (sports and art integrated learning) to bridge the learning gap with the support of State functionaries (SCERTs/ SIEs).
- Seeking support from the community to improve the learning levels.
- Based on the results from previous NAS rounds, exposure visits/field visits are being scheduled for model schools to facilitate the sharing of best practices.

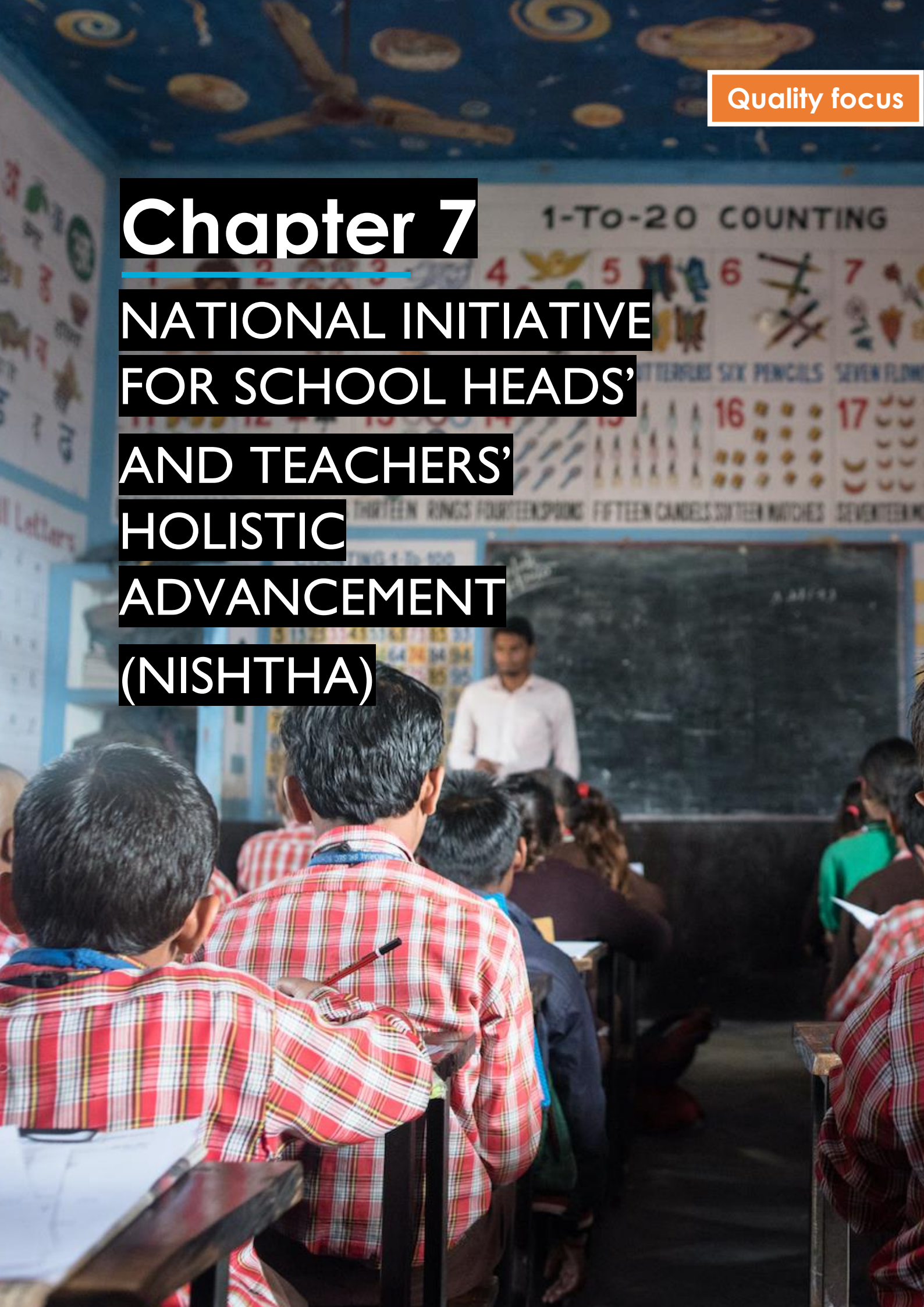
The next NAS will be held on 12<sup>th</sup> November 2021. Instrument development, testing, finalization of the test items, sampling of the schools, etc. will be done by NCERT. However, the actual administration of the test in the sampled schools will be done by CBSE.



“As children progress in classes, they should develop a spirit to learn more; children’s minds, their brain should start thinking scientifically and logically. It is very important that they should develop mathematical thinking and scientific temperament. And mathematical thinking does not mean that children solve only mathematics problems, but it is a way of thinking.”

# Chapter 7

## NATIONAL INITIATIVE FOR SCHOOL HEADS' AND TEACHERS' HOLISTIC ADVANCEMENT (NISHTHA)



## Need for the Reform

- Remarkably high marks being obtained in school board exams is a symptom of an assessment system that relies heavily on rote learning.
- It is not possible for schools to move away from a rote learning-based approach to more competency-based learning unless all teachers, heads of schools, and others involved in the school administration are oriented to develop in their students, competency-based higher-order thinking skills.

### Student Achievement Increases when



Children go out and play during the games period



Medium of instruction is in the language spoken at home,



Read material other than textbooks and



Participate in classroom activities.

Source: NAS, 2017

- In the light of the above, an integrated teacher training program was designed, and pilot tested in Tripura.
- Based on learning from this program, it was decided to develop a nationwide integrated training program to build capacity for around 42 lakh participants covering all teachers, Heads of Schools at the elementary level in all Government schools, faculty members of State Councils of Educational Research and Training (SCERTs), District Institutes of Education and Training (DIETs) as well as officials and Resource Persons from Block Resource Centres (BRCs) and Cluster Resource Centres (CRCs) in all States and UTs.

## Approach and Present Impact

- National Initiative for School heads and Teachers Holistic Advancement (NISHTHA) is a **first of its kind teacher training program under Samagra Shiksha** wherein the Government of India, through its academic bodies such as the National Council of Educational Research and Training (NCERT) and National Institute of Educational Planning and Administration (NIEPA), is taking a lead role in changing the landscape of in-service teacher training.
- The Modules for NISHTHA have been developed through a consultative process involving suggestions from States and UTs and CBSE, KVS, NVS, School Principals, and Non-Governmental Organizations, such as Kaivalya Foundation, Tata Trust, Azim Premji Foundation, and Aurobindo Society.
- The prominent features of these integrated programs are the activity-based modules including educational games and quizzes, social-emotional learning, art-integrated learning, motivational



interactions, team building, preparation for the school-based assessment, in-built continuous feedback mechanism, online monitoring and support system, training gap, and impact analysis (Pre and Post training).

- The training given in 'NISHTHA' is not based on the 'Chalk and Talk' method but is activity-based.
- The goal is to motivate and encourage teachers to use these activities in classroom transactions to ensure the engagement of all students and bring the best out of them.
- COVID-19 has presented challenges for face-to-face training and but has also provided us with several opportunities to innovate, revamp, and integrate technology in "In-service Teacher Training".
- The remaining training of NISHTHA at the elementary level was started online on the DIKSHA platform from October 2020 by the NCERT.
- The online training uses high-quality professionally made e-content following the four-quadrant approach consisting of video, text, self-assessment, and learn more.

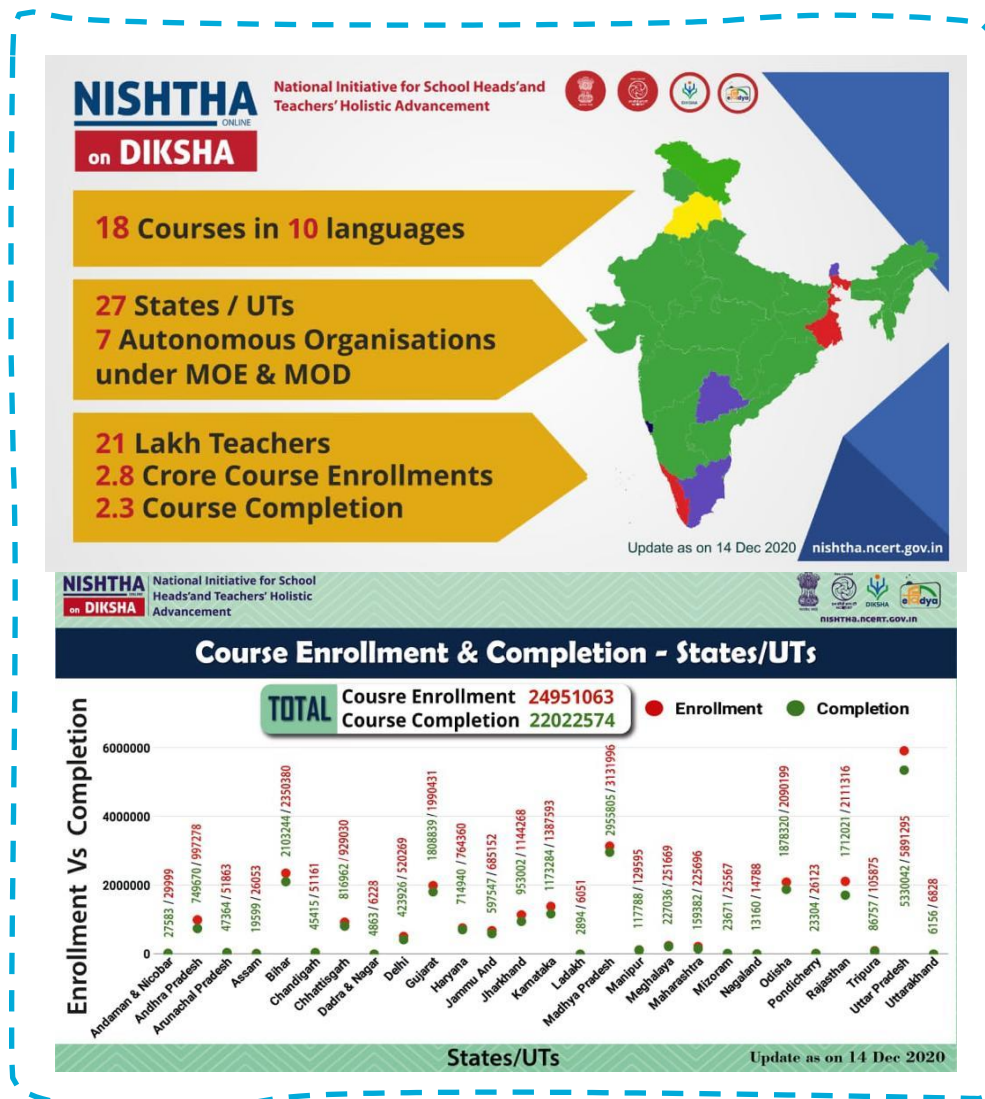


## Qualitative Benefits of NISHTHA

### Advantages of the Training Program

- ✓ Greater transparency in the system,
  - ✓ Standardized training material with enough scope for contextualization,
  - ✓ Togetherness among different stakeholders,
  - ✓ Self-evaluation of teachers and School Heads, etc.
  - ✓ Through need assessment, the system will be aware of the gaps in the training of teachers and school heads and can address those gaps through appropriate strategies.
- This integrated training program will help create a high-quality cadre of trainers, a support system for teachers, a robust follow-up mechanism, and a common platform for all States and UTs, provide a forum for teachers to discuss their initiatives, challenges, and solutions.

- This will bring teachers of all age groups and subject areas together for better peer learning.
- Also, the teachers in the remotest areas of the country will be exposed to the various initiatives taken and provisions made by the Government under the schemes.
- Besides, a comprehensive monitoring and mentoring mechanism have been ensured through embedded post-training interventions that will ensure continuity in capacity building.

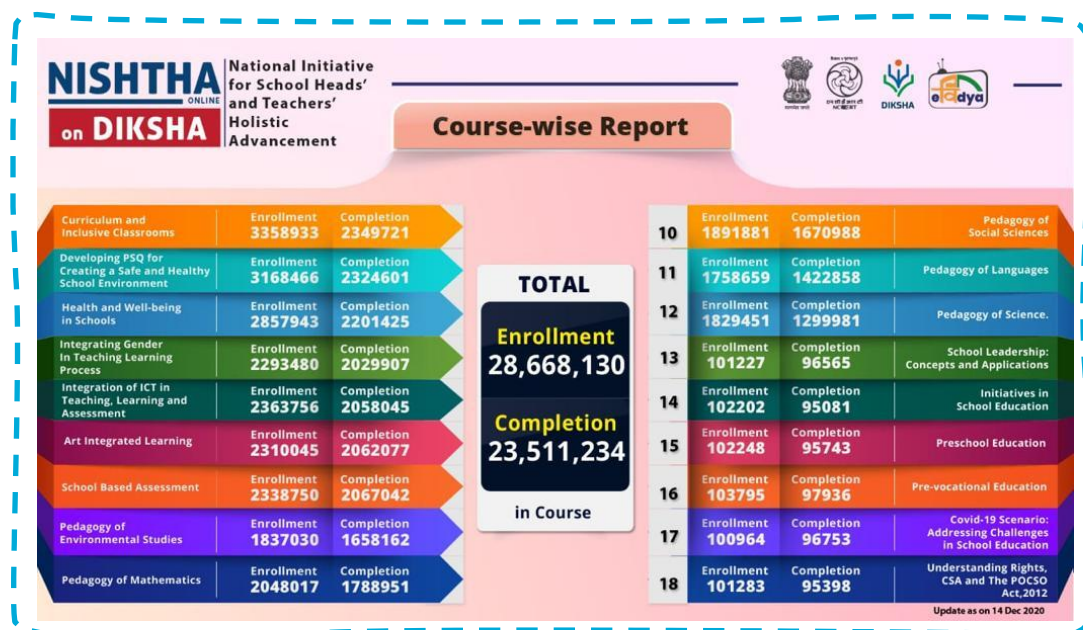


### Quantifiable benefits

These integrated teacher training programs aimed to build the capacities of around 42 lakh teachers and Heads of Schools, faculty members of SCERTs and DIETs and Block Resource Coordinators and Cluster Resource Coordinators.

- Since August 2019 up until the pre-lockdown phase, a total of 23,137 KRPs/SRPs and 1,699,931 School Heads and Teachers have been trained under NISHTHA in-person.

- Post-lockdown 18 modules have been contextualized and translated into 10 regional languages and have been uploaded on DIKSHA for online NISHTHA training launched in October 2020.
- 27 states and 7 autonomous (CBSE, KVS, NVS, AEES, Sainik Schools, CTSA and CICSE) organisations under MoE and MoD are conducting online NISHTHA courses in 10 languages (Assamese, Bengali, Bodo, English, Gujarati, Hindi, Kannada, Odia, Telugu, and Urdu).
- The 18 online modules have seen more than 2.8 crore registrations and 2.3 crore completions covering nearly 21 lakh teachers.



## Future Impact

The National Education Policy, 2020 states that

Each teacher will be expected to participate in at least 50 hours of CPD opportunities every year covering the latest pedagogies regarding foundational literacy and numeracy, formative and adaptive assessment of learning outcomes, competency-based learning, and related pedagogies, such as experiential learning, arts-integrated, sports-integrated, and storytelling-based approaches, etc.

Looking to the success of the reform, and the equally huge savings by undertaking it in the online mode, the Department plans to continue systematically building capacities of teachers in the country through standardise training programs in the online mode

- Standardised capacity building has the advantage of conveying the nation's priorities in a very systematic and uniform manner, with no loss of understanding in transition.

- Improvement in learning outcomes of the students.
- Creation of an enabling and enriching inclusive classroom environment
- Teachers become alert and responsive to the social, emotional, and psychological needs of students as first-level counsellors.
- Teachers are trained to use Art as pedagogy.
- Creation of a healthy and safe school environment.
- Integration of ICT in teaching-learning and assessment.
- Developing a stress-free School-Based Assessment focused on the development of learning competencies.
- Teachers adopt Activity Based Learning and move away from rote learning.
- Teachers and School Heads become aware of new initiatives in school education.
- Transformation of the Heads of Schools into providing academic and administrative leadership for the schools for fostering new initiatives



Launch of NISHTHA on 21<sup>st</sup> August 2019



Training of KRPs and SRPs by National Resource Person: NISHTH

## BusinessLine

HRD Ministry launches NISHTHA, to train over 42 lakh teachers  
PTI New Delhi | Updated on August 21, 2019 Published on August 21, 2019



The Ministry of Human Resource Development (HRD) launched the National Initiative for School Heads' and Teachers' Holistic Advancements (NISHTHA) here on Wednesday. This is aimed at training over 42 lakh teachers across the country.

"Teacher training is our priority. In a bid to boost education and employment, we are focusing on reskilling the teaching workforce. NISHTHA is the world's biggest such project and will focus on training 42 lakh teachers from across the country," HRD School Education Secretary Rina Ray said at the launch event.

HRD Minister Ramesh Pokhriyal Nishank launched the initiative's website, training modules, primer booklet and mobile app built for the purpose.

NISHTHA in Media



NISHTHA Training of teachers

# Chapter 8

## PM eVidya



## Need for the Reform

To shift towards “New Age Learning” and increase the focus on 21st-century skills and interdisciplinary approaches, the New Education Policy (NEP) emphasises a holistic, learner-centred, flexible system empowering students

- The Government is committed to ensuring learning for all, with equity, to cover all students at all levels of education and in all geographical locations, even in the remotest parts of the country so that the conveniences of accessing any service through the click of a button is no longer the luxury of the rich alone.

## Approach and Present Impact

### प्रधान मंत्री eVidya - PM eVidya

- A comprehensive initiative called PM eVidya is launched as a part of the Atma Nirbhar Bharat Programme, which unifies all efforts related to digital/online/on-air education to enable coherent multi-mode access to education.

#### Initiatives Include

- ✓ DIKSHA the nation’s digital infrastructure for providing quality e-content for school education in states/UTs: and QR coded Energized Textbooks for all grades (one nation, one digital platform)
- ✓ Access through TV channels: One earmarked TV channel per class from 1 to 12 (one class, one channel)
- ✓ Extensive use of Radio, Community radio, and CBSE Podcast- Shiksha Vani
- ✓ Special e-content for visually and hearing impaired developed on Digitally Accessible Information System (DAISY) and in sign language on NIOS website/ YouTube

## DIKSHA

- DIKSHA is the ‘one nation: one digital platform’ for school education in India.
- Digital Infrastructure for Knowledge Sharing (DIKSHA) portal and mobile app created by MoE is a storehouse of a large number of eBooks and e-Contents created by States/UTs and National level organizations.
- The e-Textbooks of NCERT and related e-Contents, mapped with QR Codes, are available on DIKSHA, which can be accessed by logging on to <https://diksha.gov.in/> or <https://diksha.gov.in/ncert/>
- DIKSHA is being transformed into a platform for the coherence of access with TV and radio.

- DIKSHA is designed to inherently support states/UTs to exercise autonomy, independence, and choice to craft and run learning programs to suit their needs and achieve their goals.
- E-Content is available in 31 Indian languages on DIKSHA: Hindi, Malayalam, Marathi, Bhojpuri, Lepcha, Halbi, Tamil, Bodo, Konkani, Urdu, Sanskrit, Gujarati, Mythili, Sargujia, Kannada, Brij, Odia, Awadhi, Khasi, Chhattisgarhi, Punjabi, Telugu, Gondi-Dantewada, Gondi-Kanker, Bundelkhandi, Manipuri, Kudukh, Bhutia, English, Bangla, Mizo



- Presently the content on DIKSHA relates to grades 1-12.
- Almost all states and NCERT have QR coded e-content for Energized Textbooks. So far 3,626 Energized Textbooks have been developed by NCERT and states/UTs.
- A fivefold increase has been registered in Content Play and Eightfold in Content downloads during the period 22nd March to end of April 2020.
- The page views have seen a significant rise from the 1st of April 2020 to 14th December, 2020. This is evidence of the popularity of DIKSHA amongst its users.
- NCERT has also onboarded on DIKSHA and e-Contents from Portals like National Repository of Open Educational Resources (NROER) and e-Pathshala are also uploaded on DIKSHA thereby making access easier for all stakeholders.



DIKSHA consumption from initiation till 14th December 2020; Source: diksha.gov.in



**DIKSHA is a flexible and evolving platform, with the below-mentioned diverse set of solutions, developed and that will continue to expand, based on the aggregated needs of the various states/UTs.**



Resilience during COVID-19 shock: Multiple programs to continue learning & training

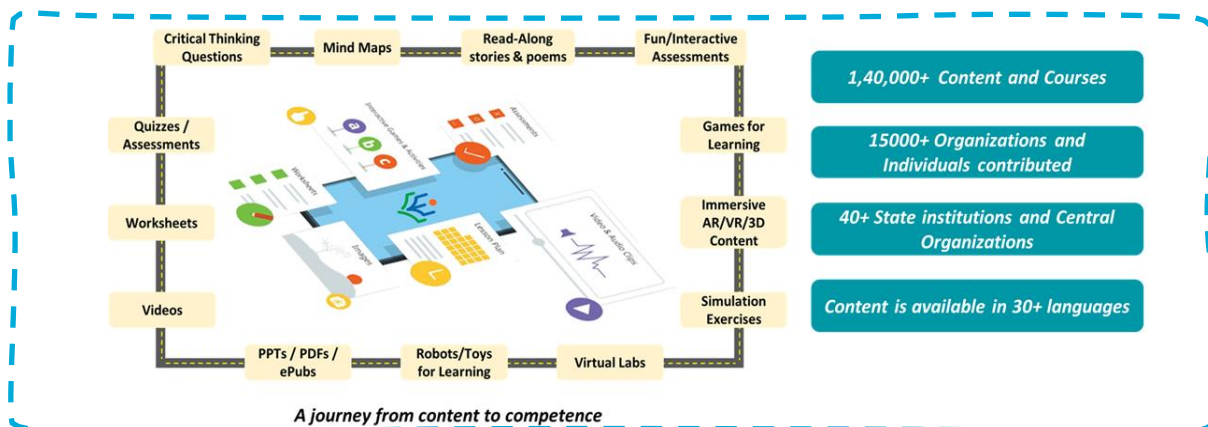
The energised textbook solution allows educational boards to achieve just-in-time access to digital content through QR codes printed in textbooks.

**Instant, relevant, trusted help:  
'Energised' textbooks with QR codes**

- 3500 + Energized Textbooks with QR codes on DIKSHA
- 60 Crore + energized textbooks have been printed and distributed across the country
- 18 Crore + students
- 70 Lakh + teachers

Bridging of physical and digital worlds by 'energizing' textbooks

The QR coded textbooks provide access to a wide variety of digital contents as shown below:



Variety & diversity in content

### NISHTHA on DIKSHA

A nationwide teacher training program, 18 courses have been contextualised and rolled out in 10 regional languages. **These courses have recorded more than 2.8 crore course enrolments and 2.3**

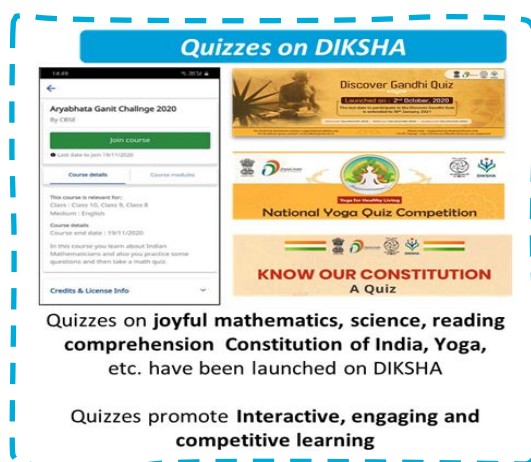
**crore course completions.**

*Digital Teacher Training has enabled continuity in training of teachers during COVID-19 and is a world record in the making; Data updated till 15th December 2020*

Apart from NISHTHA training, multiple modular courses have been launched by central bodies like CBSE and states such as Haryana, Uttar Pradesh, Rajasthan, Gujarat, Madhya Pradesh, Puducherry, Jharkhand, and NCT of Delhi to build or enhance specific knowledge and skills of their teachers.

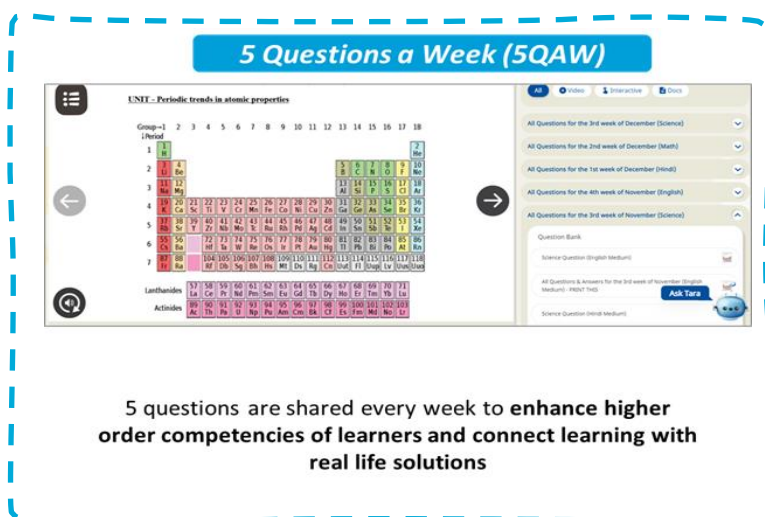
### ASSESSMENTS ON DIKSHA

- Quizzes prove to be an interactive format for joyful learning and promote healthy competition. Examples of some of the quizzes conducted on DIKSHA are shown below.



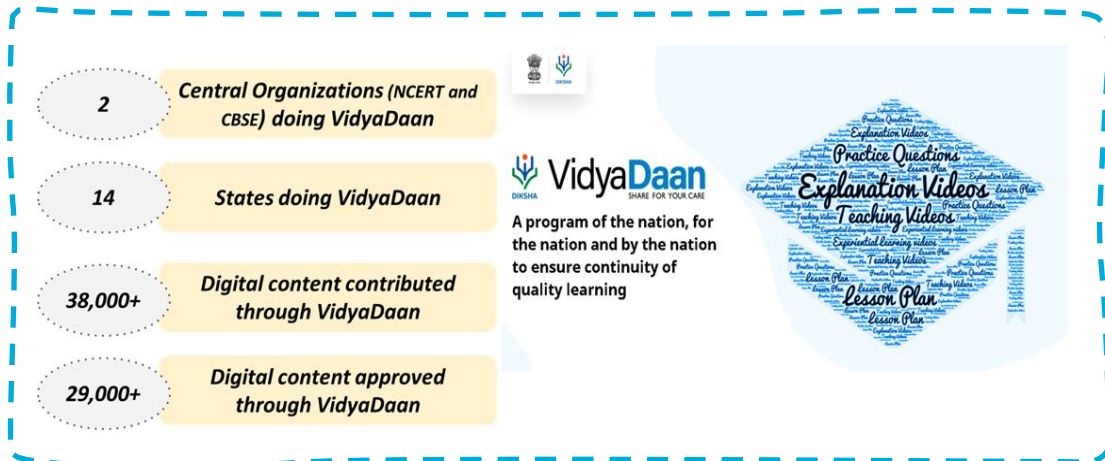
Quizzes conducted on DIKSHA

- To make assessments more interesting for the learners, 5 questions are shared every week. Creative and critical thinking practice resources are also available on DIKSHA to enable the transition to competency-based learning of students as well as teachers



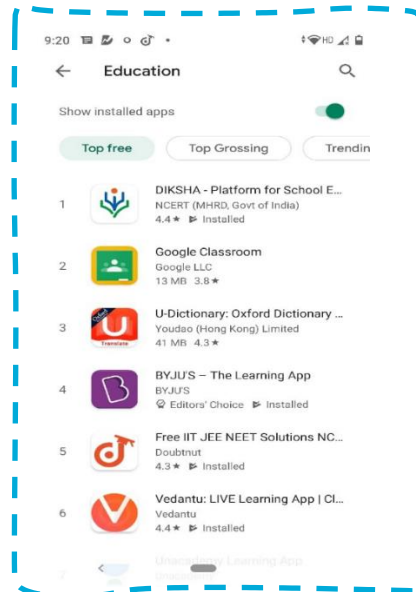
Conducting a wide variety of assessments

- In April 2020 **VidyaDaan** was launched as a national content contribution program that leverages the DIKSHA platform and tools to seek and allow contribution/donation of e-learning resources for school education by educational bodies, private bodies, and individual experts. Following are some of the key highlights of VidyaDaan as a program from across the nation.
- 14 States/UTs and central organizations (including CBSE and NCERT) are leveraging VidyaDaan to source content on DIKSHA – Goa, Telangana, Kerala, Odisha, Assam, UP, Gujarat, J&K, Chandigarh, Punjab, Maharashtra, Bihar.



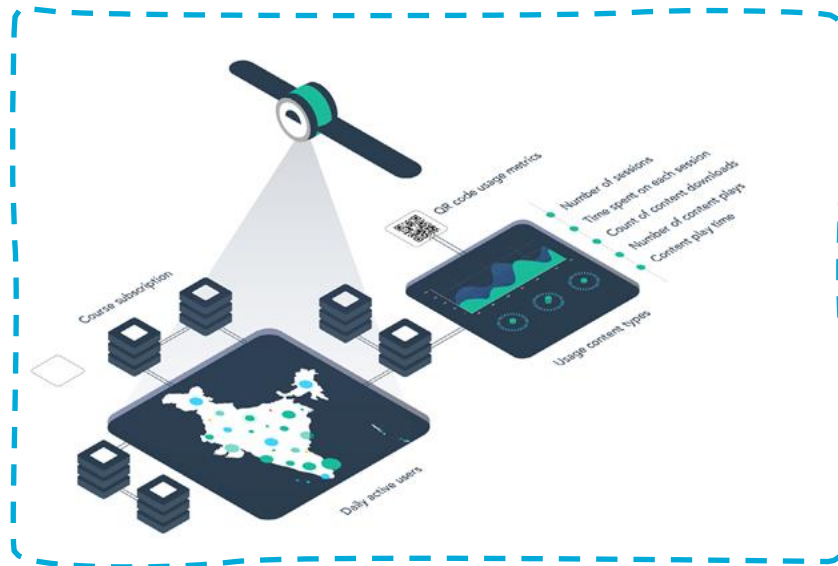
VidyaDaan - a program to source high-quality content in a controlled manner leading to diversity in content

- Online MOOC courses and chapter wise **e-content of the National Institute of Open Schooling (NIOS) is being uploaded on DIKSHA**. A repository of **~50,000 content** from the National Institute of Open Schooling (NIOS) will be available on DIKSHA from May 2021 onwards. The repository will comprise explanation videos and reading materials.
- DIKSHA app has been rated as one of the top-rated Free Education App on Google Play Store in India since May 2020.



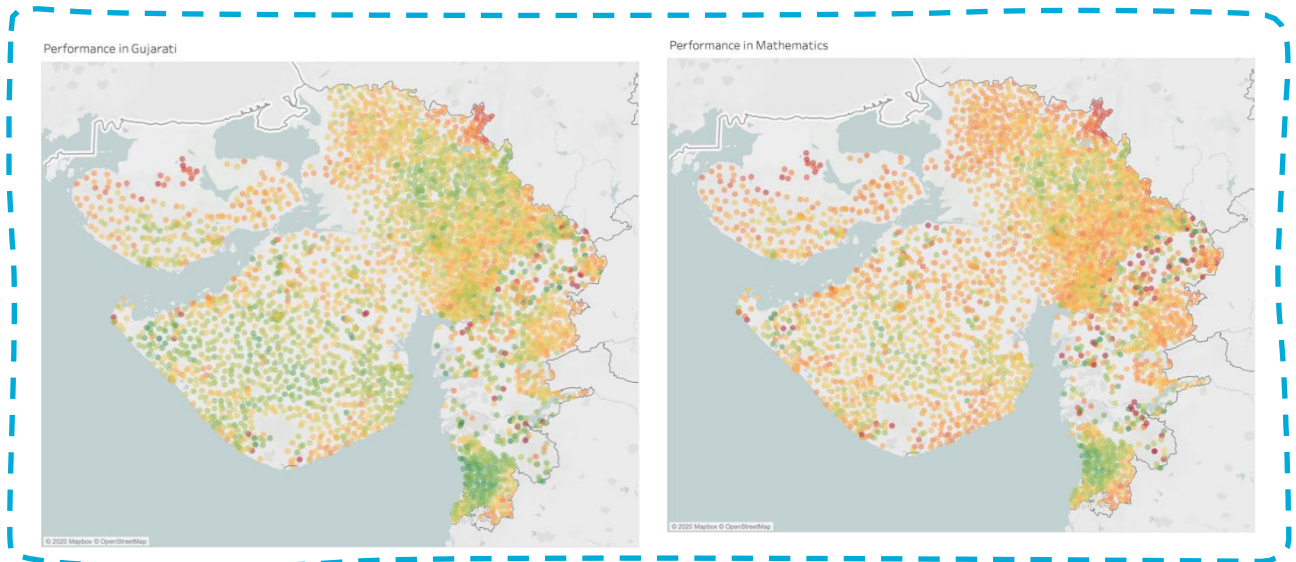
Top-rated Free Education app on Google Play Store in India in May 2020

- Comprehensive and anonymised data emitted from DIKSHA provides the ability to see and empower all stakeholders to implement data-driven interventions



Data emitted from DIKSHA empowering all stakeholders

Gujarat has successfully established a Control and Command Center (CCC) and is leveraging it to continuously measure, monitor, and improve upon the data emitted by DIKSHA. It has provided a positive reinforcement speed to the state's ability to analyze and see the performance at a cluster level.



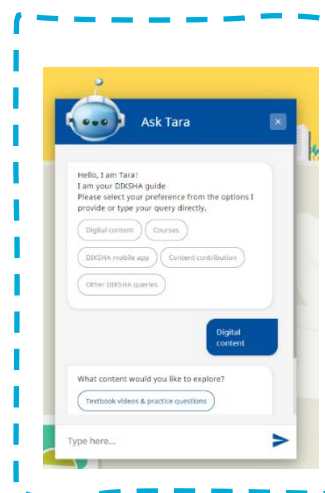
CCC set up in Gujarat helping the state to drive targeted interventions

## Interactive Chatbot on DIKSHA

DIKSHA is also leveraging an open-source AI-based chatbot framework, **'TARA', an interactive Chatbot** that is engaging users in multiple ways

- ✓ To discover content - Digital textbooks, courses, quiz, etc - launched by their state/board
- ✓ Find answers to frequently asked questions
- ✓ Delivering news and announcements
- ✓ Clarifying doubts about DIKSHA

Future use-cases include getting answers for curriculum-related questions, practice, or take a quiz. The effective utilization of artificial intelligence and machine learning technologies is enabling TARA to ensure human-like chat interactions.

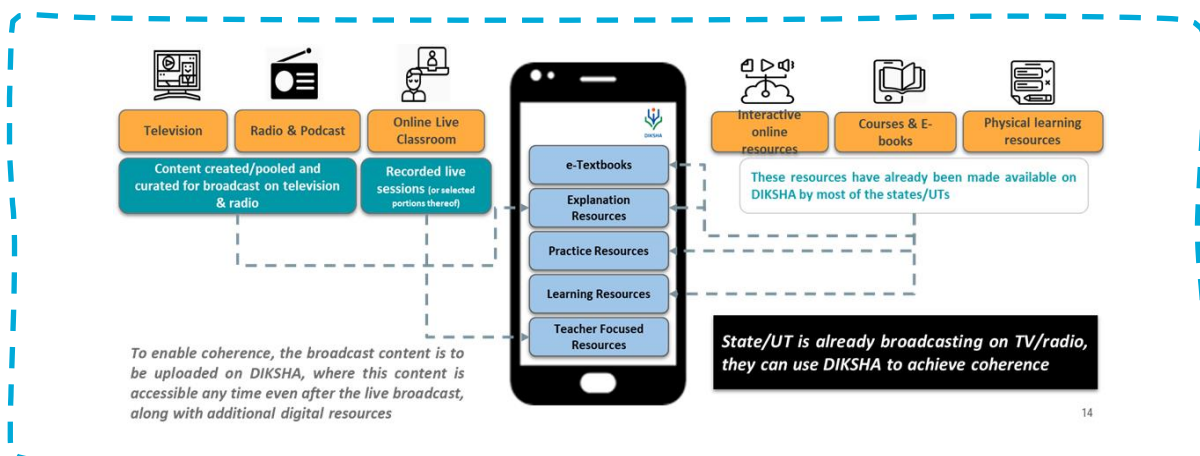


## Access through TV channels

Swayam Prabha DTH channels are meant to support and reach those who do not have access to the internet.

- 12 Swayam Prabha Channels are earmarked for school education under the one class: one TV channel initiative.
- Provision is made for a telecast of live interactive sessions on these channels with experts from home through Skype.
- The Department of School Education and Literacy also tied up with private DTH operators like Tata Sky & Airtel to air educational video content to enhance the reach of these channels.
- NCERT has launched a beta run of leveraging DTH channels to disseminate class wise curriculum-linked content under the PM eVidya initiative with effect from 1st September 2020.

- To ensure coherent access through multimodal delivery, the broadcasted content will be organised by chapter & topics on DIKSHA to ensure asynchronous usage by anyone, anytime, anywhere.



Coherent Access under the PM eVidya program ensures inclusive, equitable access to education for all and enabling our response to COVID-19

## On Air

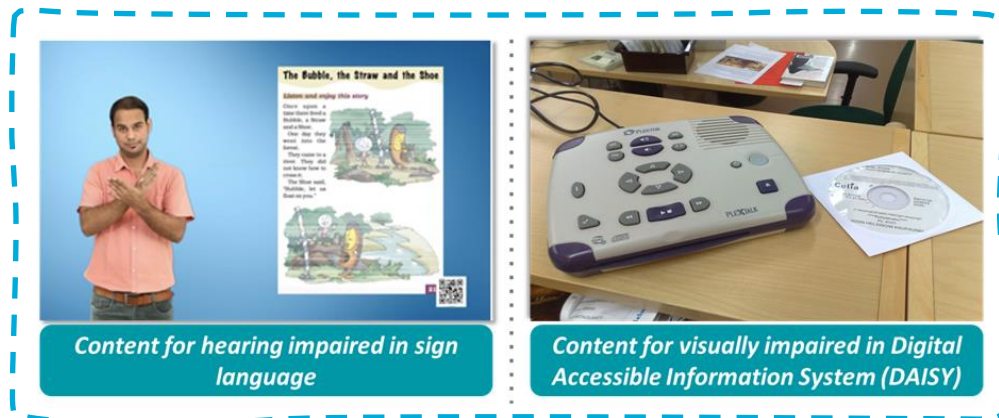
Radio broadcasting is being used for children in remote areas who have no internet connectivity (especially for grades 1 to 5) to ensure that absence of internet does not impede accessibility of relevant quality content. The broadcasts focus on inclusive learning.

- 289 Community Radio Stations have been used to broadcast content for NIOS for grades 9 to 12.
- 341 pieces of curriculum-based radio programs (Classes 1 -8) and 06 for class 10 produced by CIET-NCERT for its dissemination/ broadcast on 77+ Radio Stations (12 GyanVani FM Radio Stations, 65 Community Radio Stations),
- A Podcast called Shiksha Vani of the Central Board for Secondary Education (CBSE) is being effectively used by learners of grades 9 to 12. All these content radio content and podcast also coming on DIKSHA in the coming months

## For the differently abled

To ensure the inclusiveness of children with special needs, the following content types are being provisioned:

- 82 videos of Sign Language for CWSN are uploaded on DIKSHA
- 121 audiobooks are uploaded on DIKSHA
- For visually and hearing-impaired students, study material has been developed in a Digitally Accessible Information System (DAISY) and sign language.
- Additionally, one DTH channel is being operated specifically for hearing impaired students in sign language.



Digital Content for the differently-abled

## Future Impact

**Imagining & shaping digital education as a long-term learning strategy towards ensuring “New Age Learning” is critical to our journey which will help us leapfrog.**

- We can leapfrog in education when we unleash the potential of a billion Indians - to learn and to help each other learn. Education is about learning, and learning should not just be restricted to schools. It should be learning by all, learning for all, learning with all.
- An approach towards integrating the use of technology with the education system will lead to development.
- Provisioning virtual labs, AR/VR content, games, and simulations on DIKSHA is aligned with the objectives of NEP to focus on ‘learning by doing’.
- The NEP 2020 lays stress on several areas of integration of ICT in school education as shown below. The PM e-Vidya initiative aims to achieve each of these outcomes.



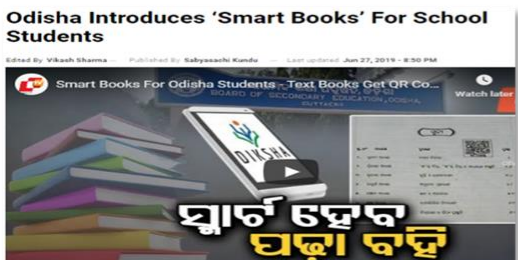
|  |  |
|--|--|
| <b>Content creation, digital repository, and dissemination</b> | <ul style="list-style-type: none"> <li>• Coursework, Learning Games &amp; Simulations, item banks, TPD, virtual labs</li> <li>• Augmented Reality and Virtual Reality apps,</li> <li>• Gamification of Indian art and culture</li> </ul>                                     |
| <b>Addressing the digital divide and equity</b>                | <ul style="list-style-type: none"> <li>• Use of television, radio, and community radio.</li> <li>• Removing language barriers - Content in all Indian languages.</li> <li>• e-content for disabled students.</li> </ul>  |
| <b>Training of teachers</b>                                    | <ul style="list-style-type: none"> <li>• ICT integrated pedagogy</li> <li>• How to become high-quality online content creators themselves</li> </ul>   |
| <b>Promoting digital learning</b>                              | <ul style="list-style-type: none"> <li>• Through different effective models of blended learning.</li> </ul>  |
| <b>Laying down standards</b>                                   | <ul style="list-style-type: none"> <li>• Content</li> <li>• Technology</li> <li>• Pedagogy for online/digital teaching-learning</li> <li>• Guidelines for e-learning by States, Boards, schools.</li> </ul>  |
| <b>Mathematical and computational thinking</b>                 | <ul style="list-style-type: none"> <li>• Starting with the foundational stage itself, using puzzles/games</li> <li>• Activities involving coding will be introduced in the Middle Stage.</li> </ul>  |
| <b>Other special areas for online learning</b>                 | <ul style="list-style-type: none"> <li>• Vocational courses,</li> <li>• The teaching of languages, and Knowledge of India</li> <li>• Rich e-content for gifted children, open school, adult education,</li> <li>• e-libraries,</li> <li>• virtual/e-museums, etc.</li> </ul> |

- The teachers - 'our heroes' - are also being trained to leverage digital tools and resources. Ensuring multi-modal access is not limited to student learning initiatives only. The digital training courses for teachers are also made available online in a way to enable "anytime, anywhere" access.
- Overall, Indian education is being readied to adapt to a framework for enhancing learning within as well as outside the classroom. The foundation of this framework will be the Online/Digital Education Guidelines and Standards which will address the digital divide, enabling equitable learning.
- The present initiatives and the collective efforts are aimed at fulfilling our vision of making India a Global Knowledge Superpower and restore India's glory as a great centre of learning

# National Media Coverage of DIKSHA



## स्कूल के बच्चों को हाइटेक बनाने की कवायद



# Chapter 9

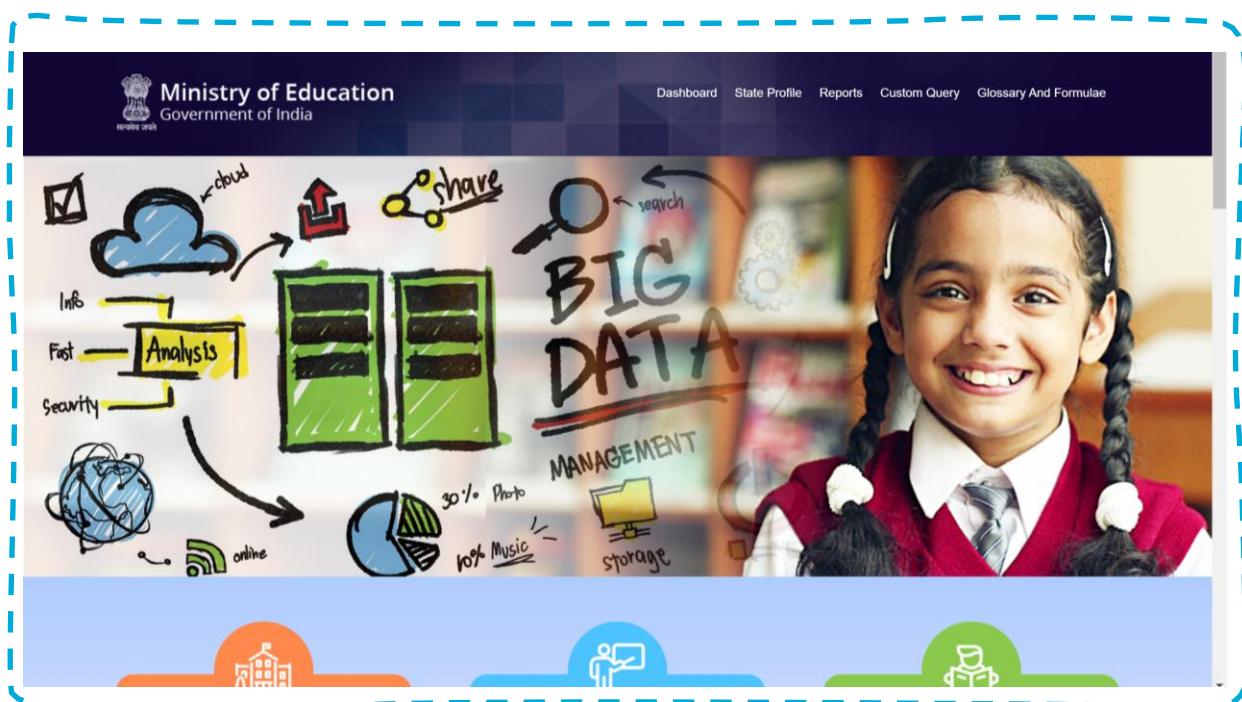
## DEVELOPMENT OF A SINGLE SOURCE OF DATA FOR SCHOOL EDUCATION – RE-ENGINEERING UDISE+



## Need for the Reform

- The “Unified District Information System for Education (UDISE)” was collecting data for the school education system in India for long.
- Under the UDISE, about 15 lakh schools fed the data manually at the school level in a paper version of the Data Capture Format (DCF) each year.
- To improve this system and reduce the time lag in data collection, compilation, and generation of reports, the DOSEL has developed the “Unified District Information System for Education Plus (UDISE+)” from the reference year 2018-19.
- Online uploading of data has been made mandatory in UDISE+, along with inbuilt validation checks and subsequent data verification at the Block, District, and State levels. This was ongoing reform.
- The UDISE Data was being collected by various States in different ways and modes. It took some time to streamline various sources especially taking various State Governments on board for establishing a unified database.

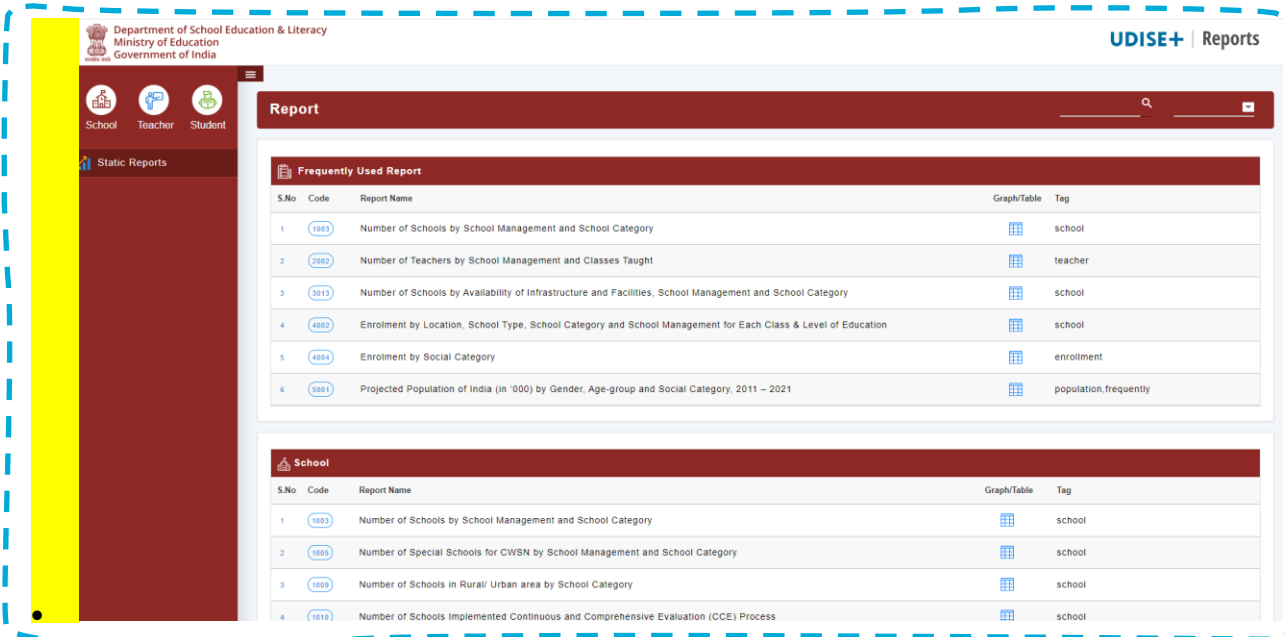
## Approach and Present Impact



- UDISE+ truly reflects the “one nation one database” motto in the school education sector. Data capture has been made online in this system to reduce time lag and ensure real-time data validation from the school level.
- Most of the States provide data directly in this system. Although seven States provide data centrally from the back end, they too conform to the rigorous standards of data validation rules set for the UDISE+ database.
- The entire database is maintained centrally in the NIC server.
- It also has a three-stage data verification at the Block, District, and State levels.



- In the year 2020-21, the DOSEL has developed more than 80 reports in the online UDISE+ application portal to show the statistics on school education at national, State/UT, district, and block levels.



- Data from earlier years are also being added to this portal so that time-series analysis can be carried out using this data.
- At present data for most of the frequently used statistics on schools, enrolment and teachers are available for the reference years 2012-13 to 2018-19.
- For encouraging research work using micro-data, an online facility has also been developed for researchers to register and download anonymised microdata on school education. All these facilities are available in the public domain at <https://udiseplus.gov.in/udise-home/#/Publication>

## Future Impact

- UDISE+ brings uniformity in data sharing and helps all the stakeholders in the school education system, including the students, parents, teachers, administrators of the school education system from the block, district, state, and national level, researchers, academicians, Planners, multilateral agencies like the UNESCO, UNDP, etc.
- UDISE+ data is used to monitor the progress of the Samagra Shiksha, for getting feedback from school teachers regarding the New Education Policy, etc.
- It is also used to effectively implement schemes run by other Ministries in the Government of India and State Governments.
- UDISE+ is truly a reflection of the one nation one database motto in the school education sector.

## UDISE Data Sharing Policy

### Need for the Reform

There is an urgent need to streamline the process of Data sharing and formalization of Data protection measures to prevent data from misuse and unauthorized access. A policy for data sharing needs to be an integral part of any new study and requests for previously created datasets should always be assessed for the feasibility of sharing when an access request is made.



### Approach and Present Impact

- The Unified District Information System on Education Plus (UDISE+) is a real-time, robust, and credible information collection system currently catering to over 15 lakhs schools, 9 lakhs+ teachers from pre-primary to higher secondary levels, and more than 26 crore enrolments from Pre-primary to Higher Secondary.

- Summary results of national, state, district, and block-level from UDISE+ data is available in the public domain at <https://udiseplus.gov.in/udise-home/##Publication>.
- Besides, data is shared with multiple internal and external agencies both within and outside India.
- DoSEL's various dashboards in Web portals and applications serve as an interface for providing transactional data to Government and private users in a pre-defined summary format.
- However, there was a long-standing demand from academicians and researchers for microdata for analytical research.
- Therefore, the Data Sharing Policy has been framed in May 2020 to facilitate access to anonymised microdata of UDISE+ at the school level to meet a variety of requirements like policy formulation by Government agencies, undertaking Analytics project, Research activities, academic studies, etc.

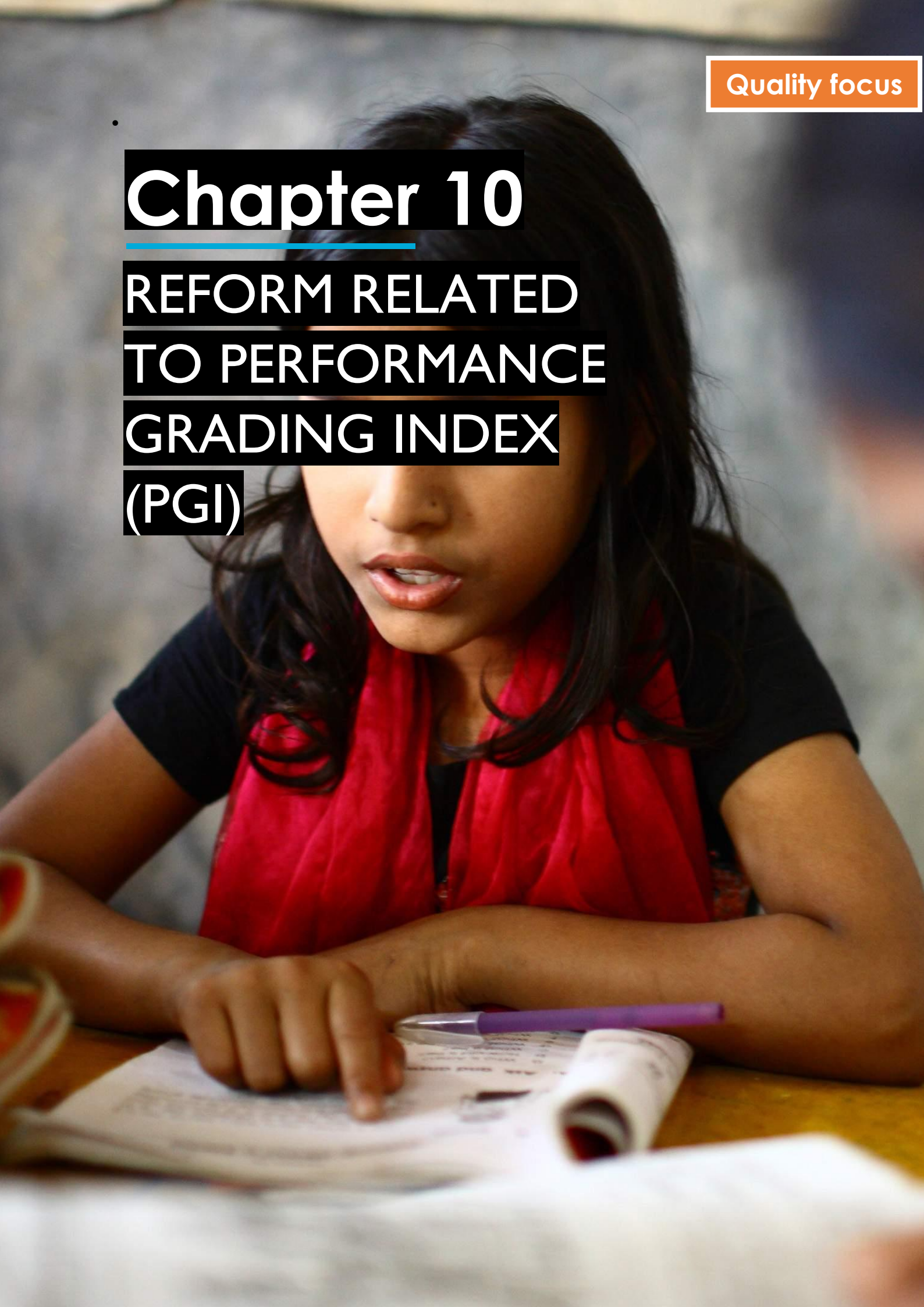


## Future Impact

- This data sharing policy is to ensure DoSEL has procedures in place to enable the appropriate sharing of school level microdata collected by the DoSEL, particularly through the online UDISE+ system, in a research environment that increasingly encourage access to publicly funded research data.
- It enables the data users to access the data in Government. as well as in the Private Sector.
- The data sharing policy would help data users and data solicitors get access to data through the established procedure and defined norms.
- Within one month of making the facility available online in November 2020, more than one hundred researchers have registered for using this.

# Chapter 10

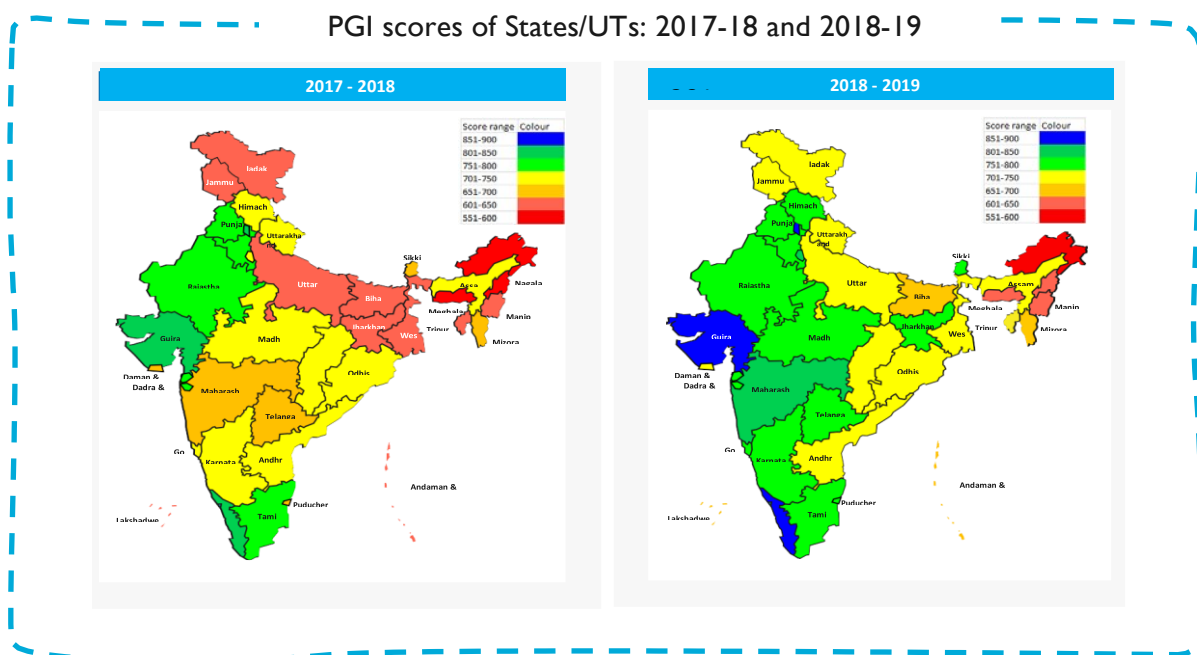
## REFORM RELATED TO PERFORMANCE GRADING INDEX (PGI)





## Need for the reform

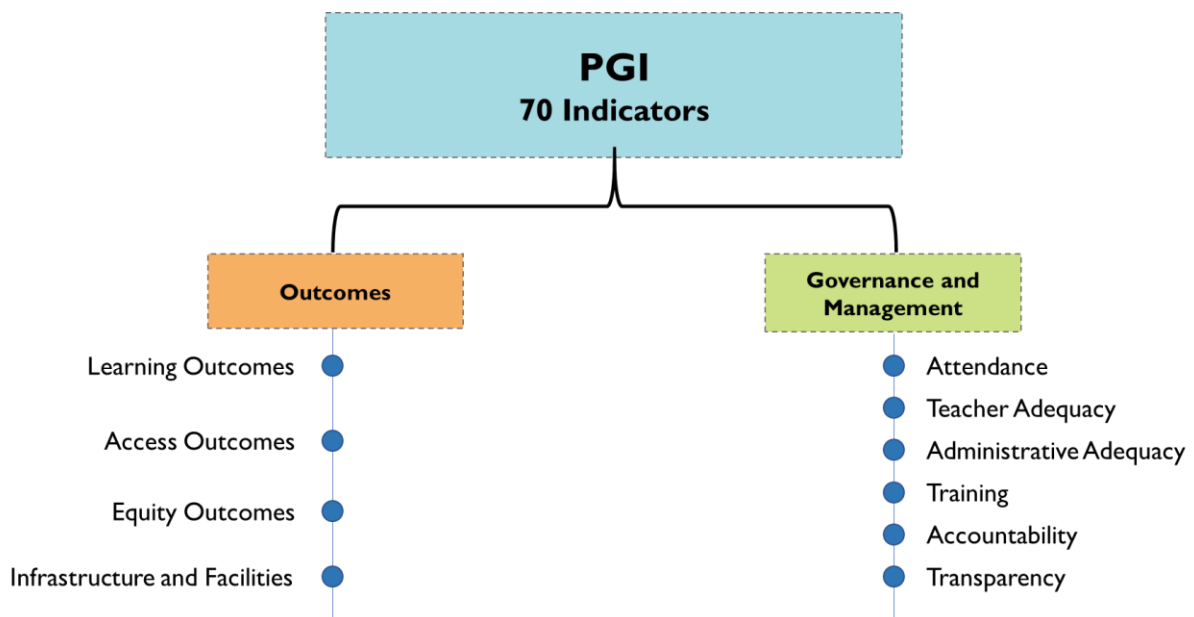
- The Indian Education System is one of the largest in the world with more than 15 lakh schools, 94 lakh teachers, and nearly 25 crore students of primary to higher secondary levels from varied socio-economic backgrounds.
- Due to the non-availability of a uniform yardstick for measuring the performance of states concerning school education, comparing the improvements became difficult.
- The DoSEL carried out a pilot during September-October, 2017 when all States and UTs were graded online on the Shagun platform on their performances under the SSA.
- The pilot covered 10 indicators and was extraordinarily successful.
- The Performance Grading Index (PGI) developed by DoSEL is based on the experience from this pilot and the feedback from all States and UTs.
- A common and comprehensive framework was needed for grading the performance of different states and UTs against certain common benchmarks and also provide them with a roadmap for making improvements



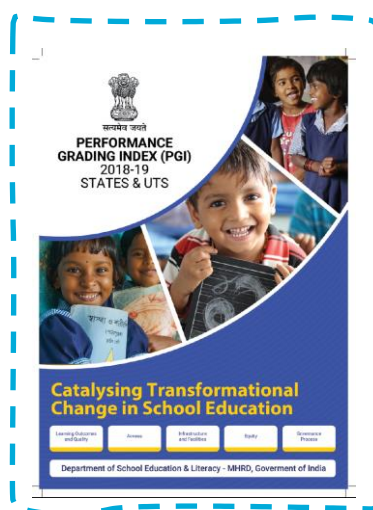
## Approach and present Impact

- The PGI developed to grade States and UTs allows more than one State/ UT to occupy the same grade and therefore give all the States and UTs chances to ultimately reach the highest level.
- The PGI has been conceptualized as a tool to encourage States and UTs to adopt certain practices like online recruitment and transfer of Teachers, electronic attendance of Students & Teachers, etc.

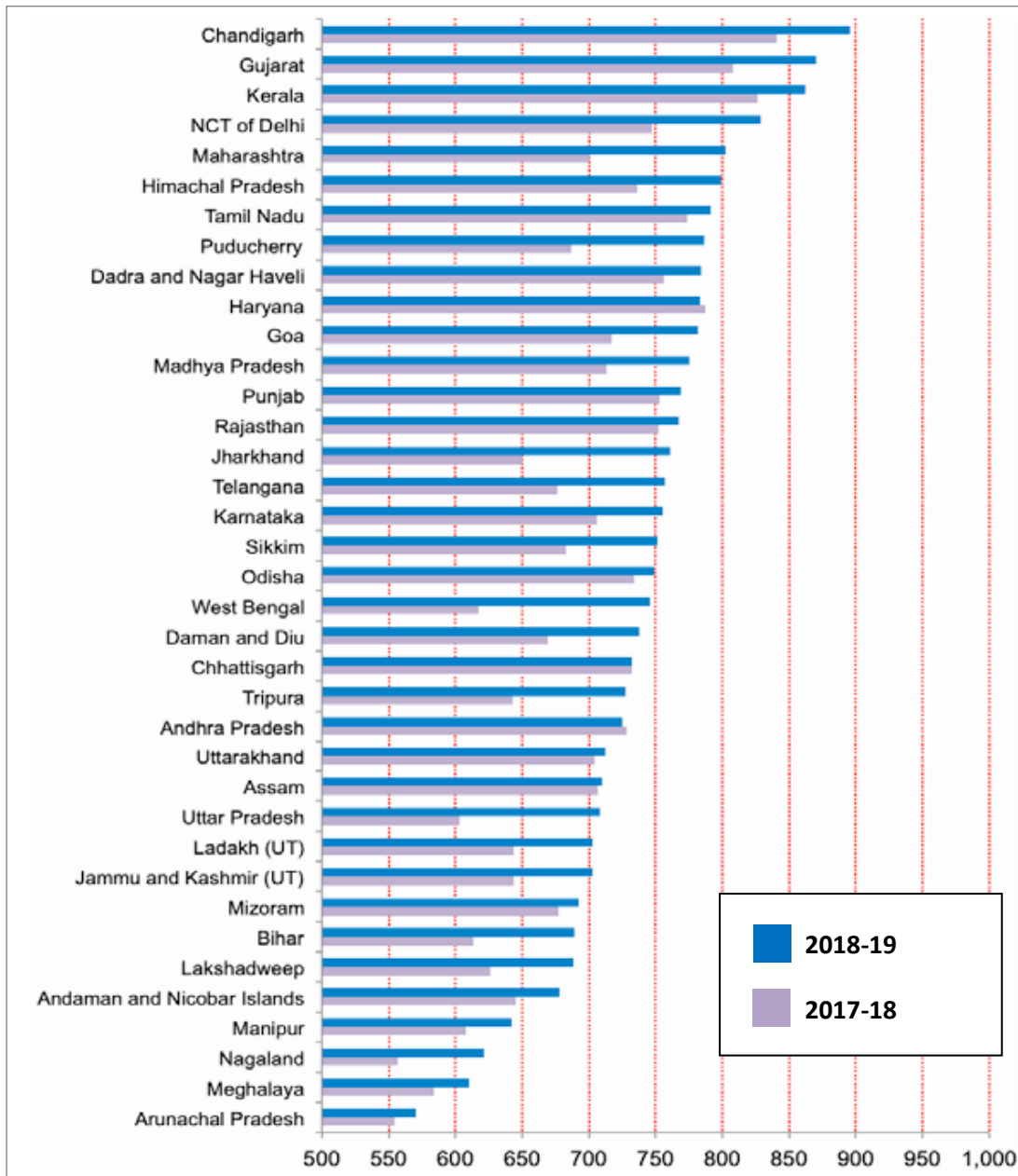
- The PGI has seventy (70) indicators divided into two categories, namely, Outcomes and Governance and Management.



- ✓ The first category is divided into four domains namely, learning outcomes, access outcomes, infrastructure and facilities, and equity outcomes.
- ✓ The second category covers attendance, teacher adequacy, administrative adequacy, training, accountability, and transparency, etc.
- The total weightage under PGI: State is a thousand points. Each indicator has been given either twenty or ten points.
- The PGI: State report for the reference years 2017-18 and 2018-19 have been released. It is available in the public domain in [https://www.education.gov.in/hi/statistics-new PGI Report 2018-19](https://www.education.gov.in/hi/statistics-new%20PGI%20Report%202018-19) and PGI Report 2017-18.



PGI Score of States / UTs: 2018-19 and 2017-18



## Future Impact

- As a logical next step of the PGI: State, an 83-indicator based PGI: District has been finalized to grade the performance of all districts in school education. The online data collection and compilation mechanism for PGI: District is being developed and will be launched shortly.
- The PGI District is expected to help the state education departments to identify gaps at the district level and improve their performance in a decentralized manner
- PGI helps all the stakeholders in the school education system, including the students, parents, teachers, and administrators of the school education system from the block, district, state, and national levels.

- The indicator-wise PGI score shows the areas where a State needs to improve. The PGI provides grades to the States and UTs.
- Grading, by allowing several States and UTs to be considered at the same level, eliminates the phenomenon of one improving only at the cost of others, thereby casting a stigma of underperformance on the latter, though, in effect they may have maintained the status quo or even done better than earlier.
- Grading, in an ideal situation, allows all the States and UTs to be construed as star performers and be at Level I, which is the goal that the PGI hopes to achieve.
- Performance grading Index will reflect the relative performance of all the State/UTs in a uniform scale which encourages State/UTs to perform better.

# Chapter 11

## PARIKSHA PE CHARCHA

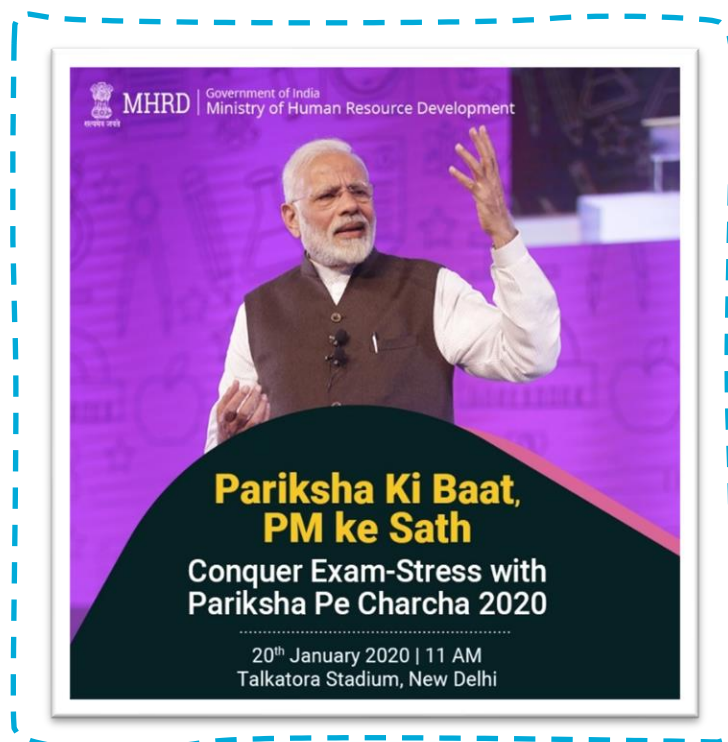




*Examination should be such, that it does not put unnecessary pressure on the students. And the attempt is not to evaluate the students only through an examination, but to evaluate various aspects of the development of the students by self-assessment and Peer-to-Peer assessment.*

## Need for the Reform:

- Board exams are considered as one of the stressful events in the lives of most students. The stress and anxiety also impact the performance of the examinees.
- To address the sense of pressure among both the students and their parents caused by examinations, the Hon'ble Prime Minister started 'Pariksha Pe Charcha' or 'In conversation on exams'.
- This initiative inimitably addresses the challenge of handling the students' sense of anxiety by connecting the Hon'ble Prime Minister directly to students and parents in an innovative format.
- After three editions of Pariksha Pe Charcha, board examinees now really look forward to their conversation with the Hon'ble PM every year to hear him address their concerns in extremely experiential and practical ways.



## Approach and Present Impact

- The Town Hall format of the event where the Hon'ble Prime Minister directly interacts with school students at the Talkatora Stadium, New Delhi is incredibly unique. Here, children from

within the audience, as well as children connected live through online modes from schools in India and abroad directly ask their questions to the Hon'ble PM.

- The Hon'ble PM replies patiently to each question by relating real-life experiences with wit and humour.
- The last three editions of this event held in January 2017, January 2018, and January 2019 were a stupendous success.
- Just before the event, an online competition is organized for the students of classes 9 to 12 through [www.mygov.in](http://www.mygov.in) portal on identified themes.
- Selected winners eventually get a chance to attend Pariksha Pe Charcha and interact live with honourable Prime Minister, Shri Narendra Modi in New Delhi.



- Students from all 37 States and UTs participated in the program. Children of the 250 schools under CBSE/KVS in 25 foreign countries also participate enthusiastically.
- The programs are broadcast live by Doordarshan through DD National, DD News, and DD India, on All India Radio, Live web streaming on websites of PMO, MoE, [www.MyGov.in](http://www.MyGov.in), YouTube channel of MoE, Facebook Live, and other channels of MoE. Partnerships with Facebook, Google, Twitter, etc. are also encouraged.
- The popularity, warmth, and ownership of the programs can be measured by the fact that the live telecast of the programs is viewed each time by over 15 crores people not only in India but also in 25 countries across the world.

## Future Impact



The Prime Minister, Shri Narendra Modi interacting with the students, teachers and parents during the 'Pariksha Pe Charcha 2020'

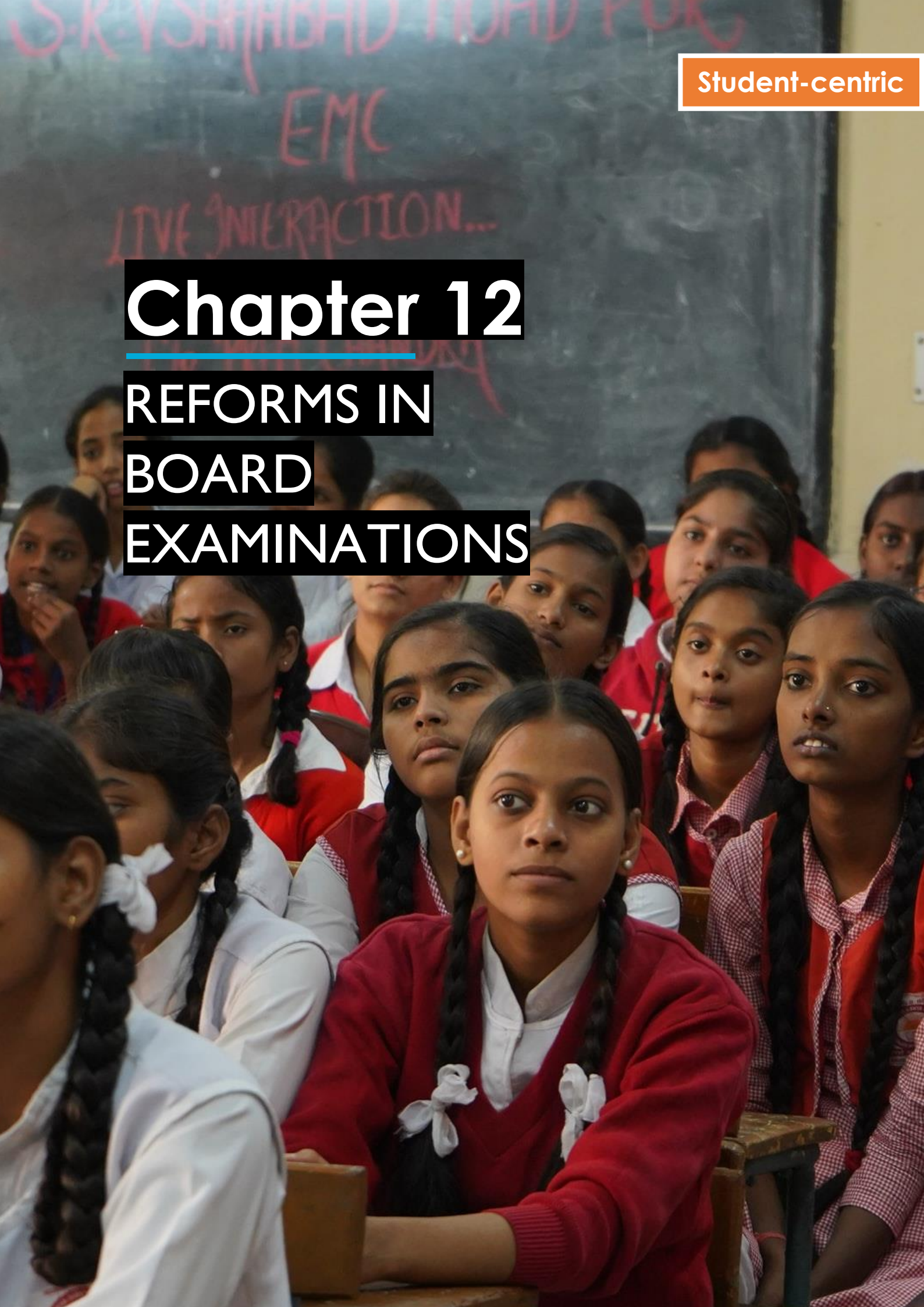
- **For the first time anywhere in the world**, the leader of the nation is taking out time from his extremely busy schedule and spending it with school students, to show the possibilities in the future for them and make them more aware of their capacities in a unique way!
- Shri Narendra Modi, the Hon'ble Prime Minister of India, interacting and spending time with children helped them not only to cope up with the exam stress but also covered several life lessons positively.
- Kids interacting with the leader of the nation directly prepares them to face the challenges of life ahead confidently and brings home the concern of the government for the mental health and well-being of the young human capital of the nation like never before.
- This interaction also helps children to understand the use of technology for learning intelligently and responsibly. The interaction helps children understand the vitality of Indian values, culture, heritage & traditions along with the significance of investing quality time with grandparents, etc



Student-centric

# Chapter 12

## REFORMS IN BOARD EXAMINATIONS





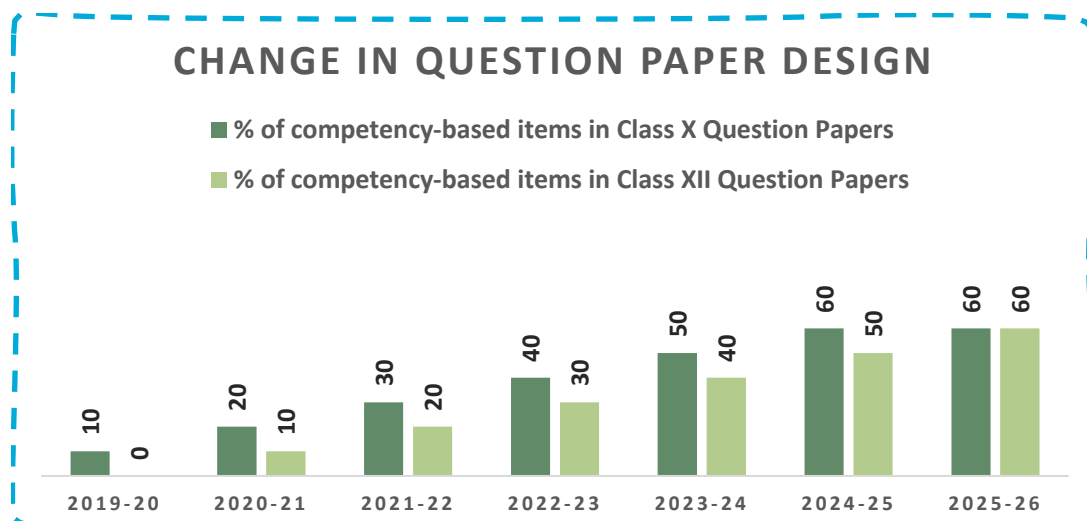
*Under the National Education Policy, emphasis has been laid on Holistic report card instead of a mark-sheet. Holistic report card will be a wide sheet of unique potential, aptitude, attitude, talent, skills, efficiency, competency and possibilities of students*

## Need for the Reforms in Board Examination:

- Central Board of Secondary Education is responsible for holding annual examinations for Classes X & XII of the students studying in its affiliated schools.
- As of date 24,445 schools are affiliated to CBSE and approximately 20 lakh students appear in the Class X examination and nearly 13 lakh students appear in Class XII examinations.
- Assessment should be regular, formative, competency-based, promote holistic learning and development of students, and test higher-order skills.
- However, the present system of assessment is summative and primarily tests rote memorization of students.
- It will not be possible for the education system to change towards competency-based learning unless the assessment pattern of Board examinations also changes.
- As the Board examinations are held across the country, they should also be credible and standardized. Technology can play a major role in achieving this. The certificates which are given to students who appear in the Board's examinations should also be easily available and accessible to them in a digital mode.

## Approach and Present Impact

- The period from 2015 to 2020 has seen a flurry of examination reforms undertaken by the Central Board of Secondary Education.
- **Change in QP design:** To test the understanding of students rather than mere content, CBSE has started modifying the design of its Question Papers (QP). This was done by adding 10% of questions oriented towards a higher-order application which are source/case-based and related to a real-life context. Such questions will be increased by 10 % every successive till the year 2025, reaching up to 60% competency-based questions in any given Question Paper.



- Change in QP format:** The Board has changed the format of its Question papers by adding 33% internal choices in the question paper, increasing the percentage of Objective Type Questions to 25%, and reduced the number of questions within the same time in classes X and XII in the year 2019. This has been done to reduce stress on students and equip them with the latest skills as per the global demand.
- Change in marking scheme:** For Board exams held in Feb-March 2019, the marking scheme prepared for the evaluators highlights that priority must be given to creative, correct, and relevant answers given by students other than the ones mentioned in the Marking Scheme. This has been done to encourage students to have better conceptual understanding and to be able to overcome issues related to rote-learning and rote-evaluation and for ensuring that creativity is recognized as an essential skill in our education system.
- Subjects offered at two levels:** The Board started offering Mathematics in Class-X at two levels i.e., Mathematics (Standard) and Mathematics (Basic) from the year 2019-20 so that students who find mathematics challenging or daunting can offer Mathematics Basic. This has reduced stress in students and increased the pass percentage of students.
- Choice in Mathematics at senior secondary level:** To provide a personalised learning opportunity and to meet the needs of students aspiring for higher education in Humanities, Commerce and Physical Science, etc, and a new course on Applied Mathematics at class 11<sup>th</sup> and 12<sup>th</sup> has been introduced from the year 2020-21.
- Structured Internal Assessment:** The Board has provided a systematic and transparent structure for internal assessment to be done by schools by dividing it into Pen and Paper Section, Multiple Assessment Activities such as Quizzes, Oral Tests, Projects, Portfolios, and Subject Enrichment Activities.

#### Improvements in Board Exams

- ✓ More Objective Type and Competency Based items
- ✓ Marking scheme for evaluation to prioritize student creativity
- ✓ Subjects will be offered at two levels "Basic" and "Standard"
- ✓ Structured internal assessment
- ✓ Training of examiners and evaluators on setting question papers
- ✓ Secure tracking of board exam material through CMTM

- **Facilitating CWSN candidates:** After the promulgation of the Rights of Persons with Disabilities (RPWD) Act, 2016, CBSE aligned its examination bylaws to the benchmark disabilities mentioned in the Act in the year 2018. The Board has also allowed CWSN to use a computer for writing the examination as per their needs apart from the other facilities from the year 2018.
- **Training examiners/evaluators:** To bring transparency and accuracy in the evaluation, CBSE has started focusing on the training of its examiners/evaluators. The Board has also initiated training of its Question Paper Setters and moderators to enable them to increase the validity and reliability of items and includes more competency-oriented and context-based items oriented towards higher-order skills rather than testing rote learning.
- **Facilitating sportspersons during exams:** The Board started a Special Exam Policy to promote talent in sports by giving special chance to those students who participate in National /International level sports competitions recognized by SAI/Ministry of Youth Affairs and Sports, Government of India. These students' dates of examinations were adjusted as per mutual convenience. So far 37 such students have been given the advantage of this policy (9 in 2018, 15 in 2019, and 13 in 2020 Board exams) and many of them have won medals for India at an international level.
- **Revamped Examination Byelaws after 20 years:** The examination bylaws of CBSE were entirely revamped after over 20 years, to be applicable from Board exams of 2019-20. onwards. This has resulted in making the examination process more secure and objective. CBSE prepared a standard policy for the selection of centres and followed it strictly. The new policy is aimed at objectively selecting centres with a good reputation. **In 2019, for the first time**, several regions of the country had no self-center at all. This increased the authenticity of Board examination
- **Adoption of Learning Outcomes:** CBSE made the adoption of Learning Outcomes published by NCERT mandatory vide a circular in January 2019. The learning outcomes developed by NCERT for each class will not only help the teachers to direct their teaching-learning in the desired manner but make other stakeholders responsible and alert towards their role for ensuring quality education.
- **Accessing certificates through Digi-Lockers:** To facilitate students to have 'anytime anywhere accessibility' to their credentials, CBSE opened Digi-lockers. Students are getting all their documents in Digi-locker like marks sheets, migration certificates, and pass certificates. This practice was initiated from the 2016 Board exams. With this measure, the digital academic documents can be accessed instantly by the examinees, a process which otherwise used to take at least 3 months. Now, obtaining duplicates required for admission/ employment is a hassle-free process. Face Matching Technology has also been introduced to download Digital Academic Documents in respect of students of foreign countries. This academic repository is now positioned to become one of the largest in the world.
- **Tracking and securing QP:** A mobile app is developed for tracking of movement of question paper packets, timings of opening the seal and packing the answer sheets. This was a geo-tagged and time-tagged app. The App is called CMTM App or Confidential Material Tracking and Monitoring App. The specialty of the app is that even the coordinates of the location of the material are also recorded. This app had a huge role to play in ensuring the security of the 2019 Board exams. The Board exams 2019 and 2020 were completed without a hitch.
- **App for locating exam centres:** The Board has developed an Exam Centre Locator (ECL) App to facilitate CBSE examinees to locate their centres on google map using their roll number. This

also helps to know the shortest route to reach the centre and the time required to reach the centre.

- **End to end online submissions related to board exams:** The entire examination system of Board Exam and Competitive Exam has been completely digitized and made online. A comprehensive one-stop portal has been developed and implemented in 2015 for online registration of students including fees and online post-exam data collection such as grades, practical, and theory marks. It also facilitates the generation of various reports online such as registration cards, admits cards, attendance sheets, and school/ centre material, etc. Total online data collection in a quantitative term is approximately 10 Crores including Pre and Post Exam data.

### Integrating Ek Bharat Shreshtha Bharat in classroom

- CBSE introduced mandatory Art-Integrated Project work for classes I to X to promote Art-Integrated Learning in schools and to make teaching-learning Competency-Based and joyful.
- As part of this, at least one Art-Integrated Project in each subject is mandatory for all students of classes IX and X from the academic session 2020-21 onwards.
- The project needs to integrate any art form of the paired state under Ek Bharat Shreshtha Bharat.
- Students of classes I to VIII are also expected to take at least one Art-Integrated Project (trans-disciplinary project) in a given academic year.
- The objective of AIL is not to promote arts and skills of arts but to use art as a tool to teach other subjects. The focus here is to accept arts as a medium of the learning process, where subject teachers make use of simple art forms in the classrooms and give opportunities to students to enjoy planned art activities.
- While learners experience the beauty of arts through this process, they also learn and articulate the core concept of different subjects and apply it in daily life in a joyful manner.
- Up until November 2020, more than 45 lakhs students had submitted arts-integrated projects at the secondary and senior secondary level.



- **Using Art for reducing stress:** Creative teachers of Art and Music of all JNVs have also given practice sessions to students to improve the skill of Art & Music along with addressing stress-related issues. To promote experiential learning and connecting knowledge to real-life situations teaching of core-subjects was integrated with different Art forms in all Kendriya Vidyalayas through their online sessions. Online sessions were organized in Visual/Performing/Creative Art forms to involve students in creative pursuits.
- **Doing away with the word “Fail”:** The pandemic has impacted the emotional and mental well-being of students to an exceptionally large extent. At a tender age, children are having to deal with emotions such as fear, confusion, a feeling of isolation, etc. some children have also had to deal with the loss of family members. The Board while reviewing its policies regarding results of board exams, decided to do away with the word “Fail” from its result certificate of students. Instead, the word “Essential Repeat” has been decided as a policy by CBSE. No child who took the Board exams in 2020 was given a mark-sheet with the words “Fail” on it. The change has been reflected in the certificate of the students who appeared for Board Examinations 2020.

### Quantitative Benefits:

- The introduction of Competency-Based items in Question Papers will shift the education system from rote learning to context-based learning and impact nearly 60 lakh students
- 54,586 i.e., 34% of total candidates registered in class X were offered newly introduced Basic Mathematics in the year 2020. This resulted in an overall increase in the Pass percentage of Mathematics.
- Internal Assessments has been benefitting nearly 60 Lakh students in classes IX-XII

- Alignment of facilities and extensions of concessions to all categories mentioned in RPWD-Act 2016 in CWSN will benefit nearly 20,000 CWSN students in classes IX-XII every year
- Examination Reforms like training of examiners and question paper setters and use of various apps has been benefitting nearly 30 lakh candidates in school examination every year
- Adoption of Learning Outcomes will benefit nearly 2 crore students in classes I-XII
- Arts Integrated Project has benefitted nearly 46 lakh students this year as part of Art Integrated project on the theme of Ek Bharat Shreshth Bharat
- CBSE has provided documents of around 4 crore students in their Digi-lockers

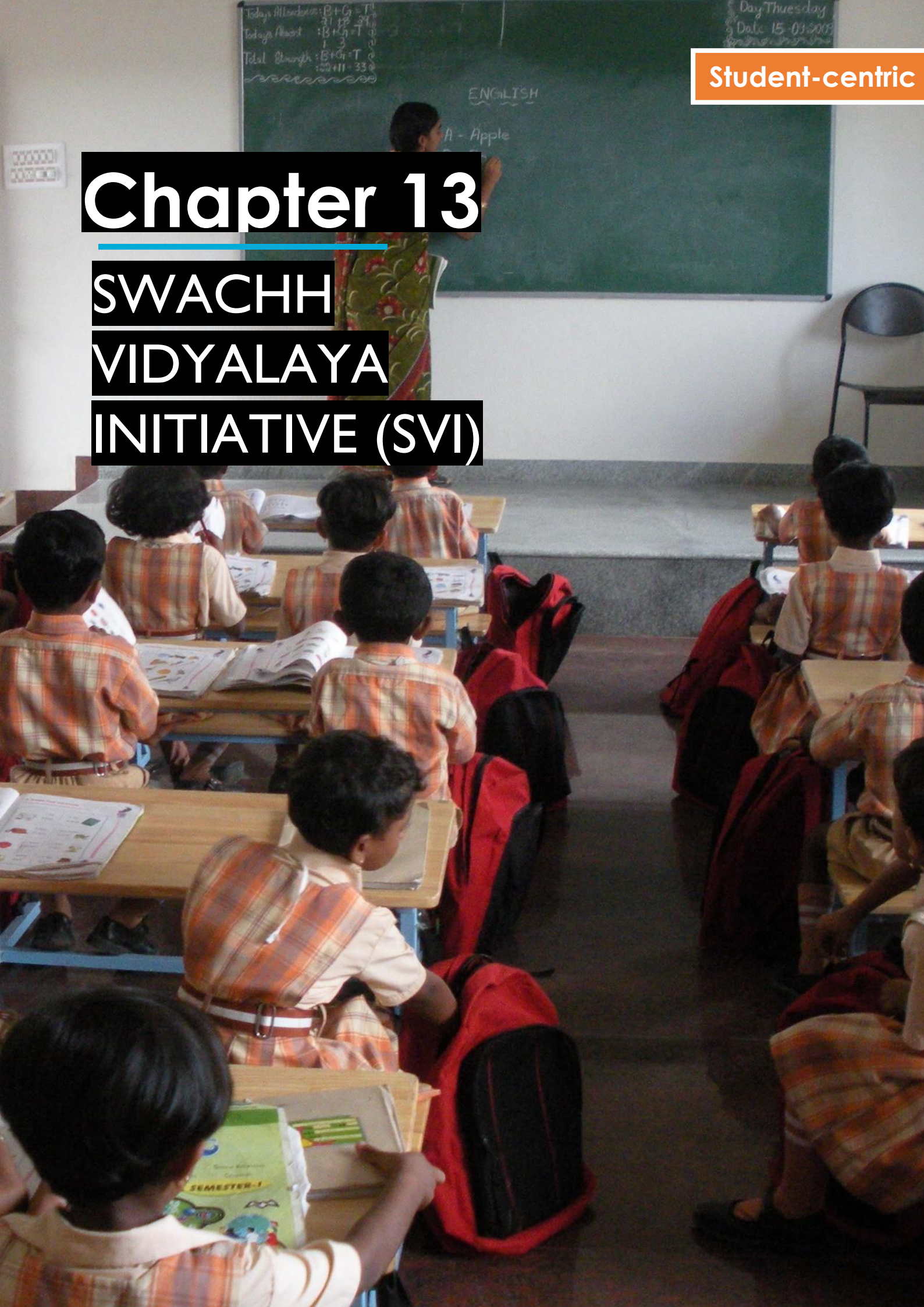
## Future Impact:

- Improvement in Learning Outcomes of the students.
- An integrative and interdisciplinary approach to learning because of a change in Board examination assessment pattern.
- A shift from 'rote' learning to 'applied learning' by students.
- Reduction in coaching classes.
- Board examinations to become less stressful
- Easy availability of Mark Sheets, Pass Certificates, Migration Certificates, Duplicate Certificates throughout the digital repository.
- Creation of an enriching and conducive classroom environment.
- Introduction of experiential learning, project-based, art integrated, and sports integrated learning in schools.
- Integration of technology in the conduct of exams.
- Standardized internal exams for the Boards.
- Students will be able to sit in the same year for improvement exams.
- Increased standardization, credibility, and transparency of the Board exams.
- Development of standardized questions for Board exams.

Student-centric

# Chapter 13

## SWACHH VIDYALAYA INITIATIVE (SVI)



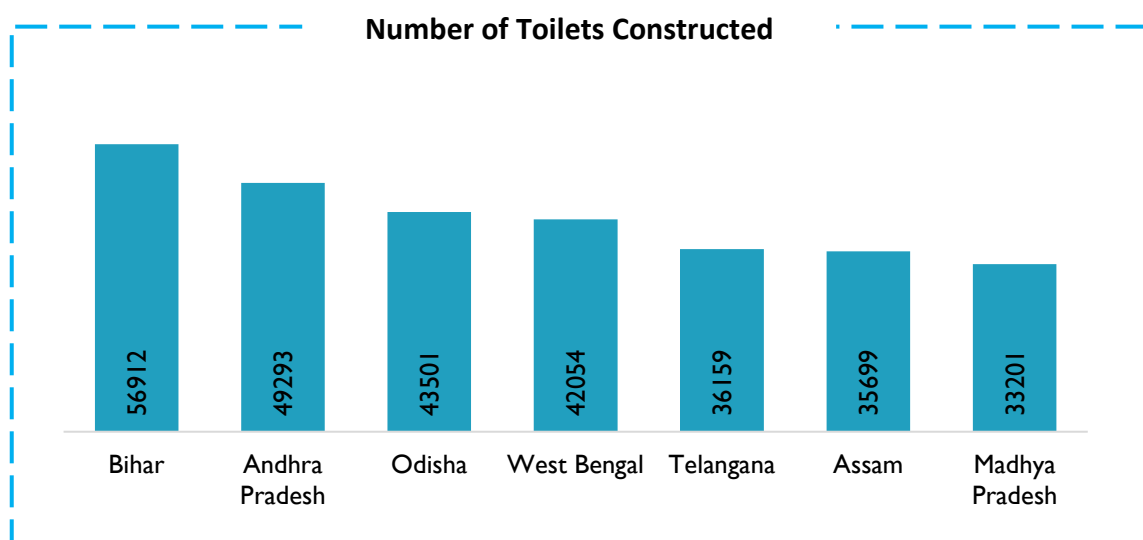


## Need for the Reform

- Lack of functional toilets and sanitation facilities is seen as a major reason for girl student's absenteeism and drop out.
- It can also lead to several health-related issues among children, and this impacts child retention.
- The RTE Act 2009 also provided for separate toilets for boys and girls in all elementary schools. However, gaps were still there in nearly 25% of the schools.
- In response to the clarion call made by the Prime Minister on 15 August 2014, the Department of School Education & Literacy launched the Swachh Vidyalaya Initiative (SVI) for the provision of separate toilets for girls and boys in all Government schools.

## Approach and Present Impact

- Under the initiative, 4,17,796 toilets including 1,90,887 girls' toilets were constructed/made functional in 2,61,400 Government schools in the one year up to 15th August 2015 in collaboration with State and UT Governments, Public Sector Undertakings (PSUs) & Private Corporates.



**4 Lakh +**

**Toilets built in one  
year up to 15<sup>th</sup> August  
2015**

- In keeping with the spirit of the Digital India initiative, the Swachh Vidyalaya programs conceptualized and developed a web portal to plan, implement, monitor, and support this initiative in real-time.
- The web portal, apart from other features, enabled corporates and partners to easily navigate and identify specific locations and schools they wished to support for the construction and repair of toilets. It allowed them to pledge financial and in-kind commitments.
- The digital solution provided the means to monitor the initiative in real-time through the portal. This also made the information on progress transparent and encourage public participation.

- Swachh Vidyalaya was one of the priority programs identified for the award in Excellence in Public Administration on Civil Services Day in 2016.

## Swachh Vidyalaya Puraskar (SVP)



- The Department of School Education & Literacy instituted the Swachh Vidyalaya Puraskar (SVP) in 2016-17 to recognize, inspire and celebrate excellence in water, sanitation, and hygiene practices in Government elementary and secondary schools at the District, State, and National levels.

### SVP 2016 - 2017

- More than 2.68 lakh schools in 35 States and UTs participated in SVP 2016-17, at District and State levels, in an online mode.
- 172 Government schools were awarded National awards for SVP 2016-17 on 1st September 2017 by Hon'ble Minister of Education (then Hon'ble Union Minister of HRD).
- Certificates of Recognition were given to the top 3 performing States viz. Tamil Nadu, Andhra Pradesh, and Rajasthan and the 11 best performing districts with the highest participation for the National awards.

## SVP 2017 - 2018

- Swachh Vidyalaya Puraskar 2017-18 was open to Private schools besides Government and Government aided schools.
- SVP 2017-18 received an overwhelming response from schools. 6,15,152 schools registered online for the awards, which is more than double the number of schools that participated in the SVP 2016-17.
- Top 52 schools were awarded the National awards for SVP 2017-18 by Hon'ble Minister of Education (then Hon'ble Union Minister of HRD) during the prize ceremony held on 18th September 2018 at New Delhi.
- Top 4 States viz. Puducherry, Tamil Nadu, Gujarat, and Andhra Pradesh and 9 districts namely Pondicherry, Srikakulam, Chandigarh, Hisar, Karaikal, Latur, Nellore, South Goa, and Vadodara, which had the maximum number of schools were awarded the National Level Awards for SVP 2017-18.

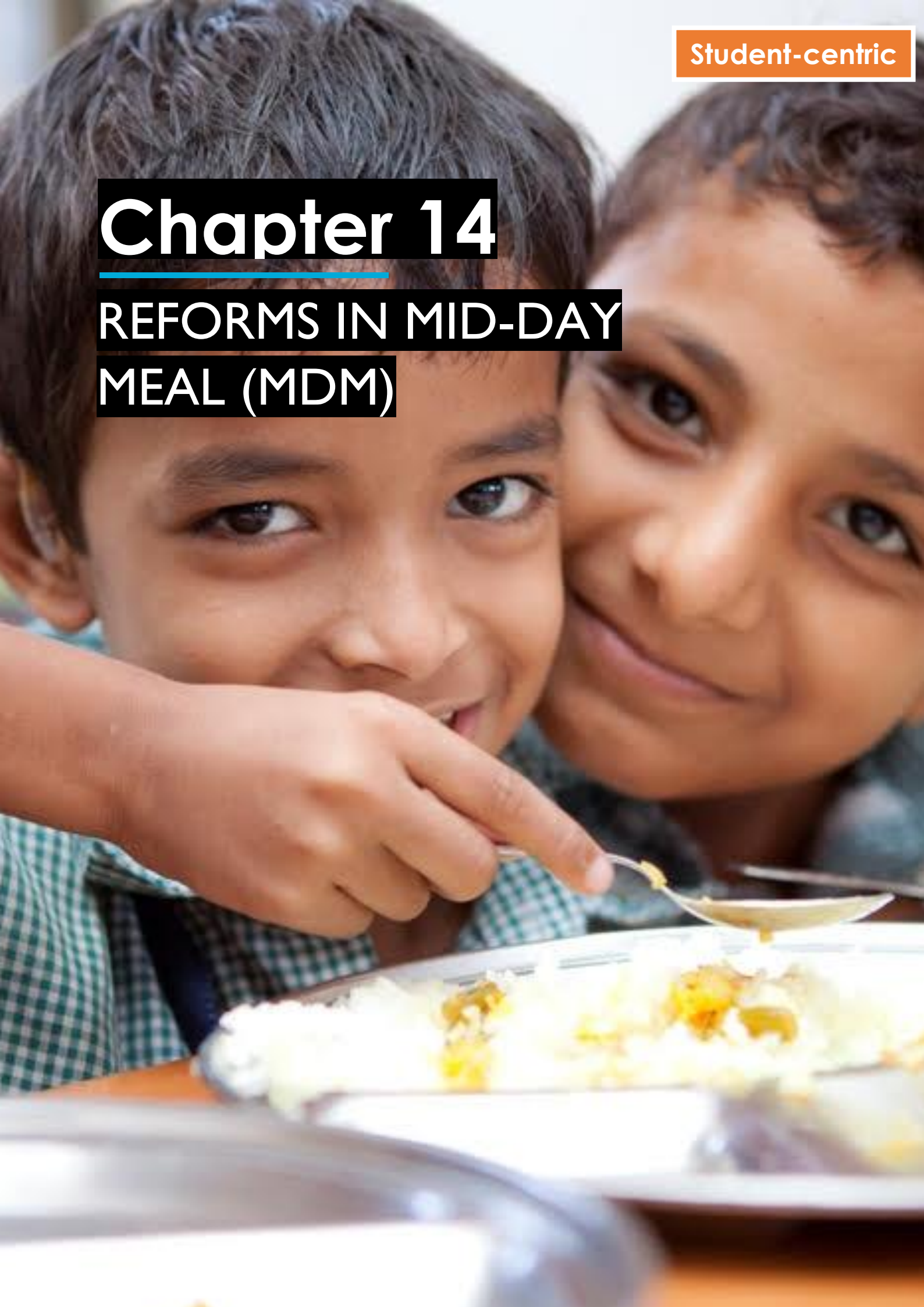


## Future Impact

- The newly launched Samagra Shiksha scheme in 2018-19 made provision for earmarking at least 10% of the Annual Composite School Grant towards Swachhta Action Plan, for ensuring maintenance of hygiene and sanitation in schools.
- This Department is in the process of re-launching the next round of Swachh Vidyalaya Puraskar (SVP).
- The guidelines for SVP were finalized in consultation with UNICEF. However, due to the COVID-19 pandemic, certain modifications are being carried out in the guidelines to ensure that the schools are following safety protocols related to COVID 19.
- NIC is developing the web-app and mobile app.
- The SVP has helped in generating awareness and a movement among the schools for following Swachhta related behaviour.

# Chapter 14

## REFORMS IN MID-DAY MEAL (MDM)



## Need for the Reform:

- Mid-Day Meal Scheme is a right-based program under National Food Security Act, 2013 and is also a Centrally Sponsored Scheme which covers all the 11.59 crore school children of Classes I-VIII in all the 11.34 lakh Government and Government-Aided schools.
- The scheme is universal i.e., food and nutrition norms are the same for all children across the country in primary and upper primary classes, respectively.
- However, unfortunately, as per the National Family Health Survey - IV, a large number of children are still found anemic and fall under the Severely Acute Malnutrition (SAM) and Moderately Acute Malnutrition (MAM) category.
- Moreover, children living in aspirational districts and tribal districts are nutritionally challenged. There is a perceptible need to provide extra nutrition to these children over and above the regular meals under MDM.
- To address this need, **Flexibility for provision of Supplementary nutrition and School Nutrition Gardens under Mid-Day Meal Scheme has been introduced** with the approval of Cabinet Committee on Economic Affairs (CCEA) on 19<sup>th</sup> February 2019.

## Approach and Present Impact:

- Program Approval Board-Mid Day Meal approved the proposals from the States and UTs for new interventions viz. setting up of School Nutrition Gardens, providing supplementary nutrition to the school children in tribal areas, aspirational districts, and areas where children are affected by severe anaemia through Flexi funds to improve the effectiveness of the scheme by addressing the gaps.
- The Ministry of Education has approved Rs 668 crore for interventions under supplementary nutrition and Rs 151 crore for school nutrition gardens.
- Schools Nutrition Gardens have been developed in over 3 lakh schools during 2019-20 and it is a continuing process.
- The produce of these nutrition gardens is being used in preparing Mid-Day Meals.
- This has helped in providing much-needed micronutrients i.e., calcium, phosphorus, iron, etc.
- States have also started providing supplementary nutrition items such as sukhadi, chana sprouts, ragi laddu, soya milk, banana, and other seasonal fruits, etc.



- The finding of an independent evaluation study conducted by NITI AAYOG also corroborates the fact that nutritional levels among students availing MDM have improved.



## Future Impact

This positive intervention would effectively address the pressing problems of malnutrition among the school-going children in nutritionally challenged districts thereby reducing the burden of disease and also enhancing the potential of future generations, who play a pivotal role in building a stronger economy for realising the Government's dream of \$ 5 trillion economy

Student-centric

# Chapter 15

DHRUV



## Need for the Reform

- Approximately 3–5% of India's population of children and youth, are likely to be gifted in domains of science, humanities, sports, music, and performing arts, and without a guiding national framework for Gifted children and their education, many are left unattended (a percentage that National Association for Gifted Children refers to as gifted).
- In a situation where formal identification and recognition of talent and its nurturance is limited to only a small fraction of its population, talents remain untapped due to a classroom environment that does not prioritize the need for enriching and talent facilitating or providing adequate support to nurture strengths.
- The indigenous talents in rural areas remain mostly unidentified and on the other hand, students displaying intense curiosity, fertile imagination, and a questioning attitude do not find a creative outlet in a society, where examination scores are still a predominant indicator of ability.

## Approach and Present Impact

- The [Pradhan Mantri Innovative Learning Programmes- DHRUV](#) was initiated by the [Ministry of Education](#), Government of India in 2019, to mentor and nurture talented children to enrich their skills and knowledge so that they can realise their full potential and contribute to society.
- The need to nurture and promote gifted/talented students is also articulated in the National Education Policy 2020, which has specific provisions for the support for Gifted Students/Students with Special Talents.
- Phase-I of the DHRUV program was launched as a pilot by the Department of School Education & Literacy from Indian Space Research Organisation (ISRO), Bangalore, and implemented during October 2019.
- Sixty outstandingly talented students were selected in the phase-I of the DHRUV program.
- The Selection of 30 students of Science group and 30 students of Performing Arts group was made by an Advisory Committee headed by the Principal Scientific Advisor in consultation with the Department of Science and Technology, Atal Innovation Mission, NITI Aayog and National Council for Education Research and Training (NCERT), Centre for Cultural Resources and Training (CCRT) and Sangeet Natak Akademi, Ministry of Culture.
- All the 60 students were achievers in various competitions/examinations i.e., National Talent Search Examination (NTSE), Innovation in Science Pursuit for *Inspired* Research (INSPIRE)- Manak, Kishore Vaigyanik Protsahan Yojana (KVPY), Science Olympiad, Mathematics Olympiad, Kala Utsav, and Cultural Talent Search Scholarship Scheme, etc.





- The program was conducted for 14 days.
- During the programs, structured activities were carried out for students of the Performing Arts group at National Bal Bhavan, New Delhi, and students of the Science group at IIT-Delhi, and during evenings, combined activities for both groups were organised.
- The students were mentored and nurtured by renowned mentors from IIT- Delhi, Atal Innovation Mission, NCERT, CCRT, etc.

### Student Mentoring

- The science group students were mentored by experts from IIT- Delhi, IIT Gandhinagar, Agastya Foundation, Atal Innovation Mission, etc. under the guidance of Principal Scientific Advisor to Government. of India.
- The students were mentored to make 3 projects on themes like climate change, global warming, etc.
- Live models of these projects were displayed during the Valedictory function.
- The projects were as under:
  - ✓ MEA-assisted carbon dioxide sequestration as a demonstrable method of ameliorating atmospheric CO<sub>2</sub> concentrations and staying within the 2-degree Celsius temperature limit to prevent catastrophic climate change
  - ✓ Design and fabrication of nanoscale devices using modern nanofabrication techniques. This project exposed the young students to the huge potential of innovation in climate engineering, medicine, medical diagnostics, defence, security, and other areas using modern nanotechnology
  - ✓ Design and fabrication of Novel and affordable particulate matter (PM<sub>2.5</sub>) and carbon dioxide sensors to quantify the concentrations of these agents at various locations across the country.
- Apart from these hands-on projects, the students also learned from lectures delivered by world-renowned experts at IIT Delhi in areas ranging from air pollution and global warming to nanotechnology and cryptography.



### Student Mentoring

- Shri Subhash Ghai, renowned Filmmaker and Chairman of Media and Entertainment Skills Council,
- Ustad Faiyaz Wasifuddin Dagar (Padma Sri), the Indian classical singer of the dhrupad genre, who represents the 20th generation of an unbroken chain of dhrupad singers and Veena players.
- Shri Hansraj Hans, Sufi, and non-folk Punjabi music singer and a recipient of the civilian honour of Padma Shri met the students and had an enlightening interactive session about Sufi music and
- Shri Sivamani, commonly known by his stage name Drums Sivamani, an Indian percussionist; played many instruments including drums, octoban, darbuka, udukai, ghatam, and kanjira. He talked to students about his journey as a percussionist in India.
- The students also had a music and dance session at the National Gallery of Modern Arts,



- To undertake the new NEP aligned PMILP program, the constitution of a National Steering Committee is contemplated for the Identification and Nurturance of Talented and Gifted Children at a national level.
- The Steering Committee will consist of educationists, national and international experts drawn from various subject areas, including sciences, maths, arts, and sports, under the chairmanship of the Principal Scientific Advisor.
- The guidelines for national level nurturance programs or the [Pradhan Mantri Innovative Learning Programmes- DHRUV](#) aligned to NEP 2020, are being finalized by this Department along with inputs and suggestions from Atal Innovation Mission, NITI Aayog, NCERT, Innovation in Science Pursuit for Inspired Research (INSPIRE) – Manak, CCRT under the guidance of Principal Scientific Advisor.
- Under this program, gifted children will be mentored and nurtured in centres of excellence across the country by renowned experts drawn from different areas, so that these children can reach their full potential.
- High-quality national residential programs will be held through a national level effort, particularly for identified students of classes 9 to 12, drawn from various subjects.
- A rigorous merit-based but equitable selection process will be formulated for these camps to attract the absolute best students and teachers to these programs from across the country, including from socio-economically disadvantaged groups.
- The learning experiences in the nurturance component can be in multiple formats like remote online learning, residential camp, assigning of an expert mentor to each child, subsequent local contact experiences.

## Future impact

The agenda of the present Government. is envisioned in their manifesto of 2019, which proclaims:



*“We consider it our duty to provide a conducive environment for talented children in our country to facilitate them to unleash their talent. For this, we will initiate a ‘Prime Minister Innovative Learning Programme’ to bring together such children for a certain period in a year in one place from all over the country and provide them with facilities and resources for them to excel. This would instil a culture of lateral thinking and innovation among them.”*

Moreover, the National Education Policy 2020 seeks to address this long-perceived need for identifying and nurturing the unique talents of all children and particularly the gifted ones. Indeed, it is long overdue that our country creates a conducive environment where opportunities are provided for all children despite being blessed with a youth-driven demographic dividend. Talented individuals seek out opportunities to grow and, if provided, they will reach the pinnacle and excel in multiple fields, thereby contributing to the wider transformation of society.

### **Following are some of the areas of impact of these programs in the future:**

- Identification of talent will be initiated in different areas at a very early stage of school education.
- Fostering and encouraging special talents in all domains will be systematically undertaken.
- Special tools to be developed for the identification of talents in students.
- Planning and execution of advanced/differentiated curriculum and enrichment activities in a formal way, maintaining high quality and standard, both, through face-to-face and online programs.
- Availability of additional resources and opportunities to interact with expert teachers for Talented/gifted students, development of best practices and knowledge repositories for learning strategies, assessment, interventions for diverse groups in our country’s context.
- Opportunities to work in more challenging environments for talented/gifted students, which they may not be getting in their schools or learning centres.
- Sensitization of the teachers, parents, school administrators, and community who will play their significant role in identifying talent and nurturing it under the guidance and supervision of experts regularly.
- Department of Higher Education through the AICTE and UGC will lead the efforts in making fast-tracked admissions possible for gifted students, in consultation with the Department of School Education and Literacy.
- Research around the identification and nurturance of gifted/talented students in India will receive attention in different dimensions.
- Strengthening of the capacity building programs for in-service teachers and teacher education programs for pre-service teachers with specialization on identification and education of gifted children.
- Institutions and centres of excellence for education programs for gifted students may newly be established as well as existing centres will be developed as resource centres for organizing nurturance programs for gifted students

Student-centric

# Chapter 16

## SCHOOL BAG POLICY





*The National Education Policy has been formulated in such a way so as to reduce the syllabus and focus on fundamental things. A National Curriculum Framework will be developed to make learning integrated, interdisciplinary, fun based with complete experience.*

## Need for the Reform

- Heavy School Bags have a severe, adverse physical effect on the growing children which can cause damage to their vertebral column and knees and it also causes anxiety in them. A related issue is the curriculum load on the children.
- Homework is also an issue, which makes both students and parents stressed because as a general practice it needs to be completed by night and reported in the school the next morning. This practice snatches the playtime of the child, parents' quality time with the child, activities leading to socialisation with the family. Moreover, it is often observed, mechanical kind of homework is being given to students.
- To minimize the burden of the children, a Policy on School Bag, 2020 has been framed as per recommendations and suggestions of Expert Group constituted in this regard and circulated by this Department vide letter no. I-4/2018-IS-3, dated 24.11.2020, to all the States and UTs for compliance.

## Approach and Present Impact

- The Policy not only gives recommendations for addressing the issues but also gives detailed guidelines for implementation and role of different stakeholders such as school heads, teachers, parents, education departments, Publishers, teacher education institutions, and the students themselves.
- Based on research studies conducted in this area, recommendations of international agencies about the standard weight of school bags, and the survey conducted by the Committee, the following recommendations have been given to reduce the weight of school bags, curriculum load, and homework to make learning a joyful experience for every child.
- Total study time that is expected from students in both face-to-face and self-study or homework needs to be accounted for while planning the syllabus or course of study for students, especially as they are going to the higher grade.

## School Bags

All schools follow the universally accepted ratio of weight for school bags as 10% of the bodyweight of the student across Classes I to X and give weight range for each level to make it convenient to implement.

The school bag needs to be lightweight with proper compartments and contain two padded and adjustable straps that can squarely fit on both the shoulders. Wheeled carriers should not be allowed as it may hurt children while climbing stairs.

Schools need to ensure that the facilities which are mandated for schools to provide, such as, mid-day meals, potable drinking water, etc., are adequate and of good quality so that children need not carry items, such as, lunch boxes, water bottle to school.



The school or class timetable needs to be made flexible providing adequate space for sports and physical education, reading of books available in the school other than textbooks, arts, and crafts, etc.

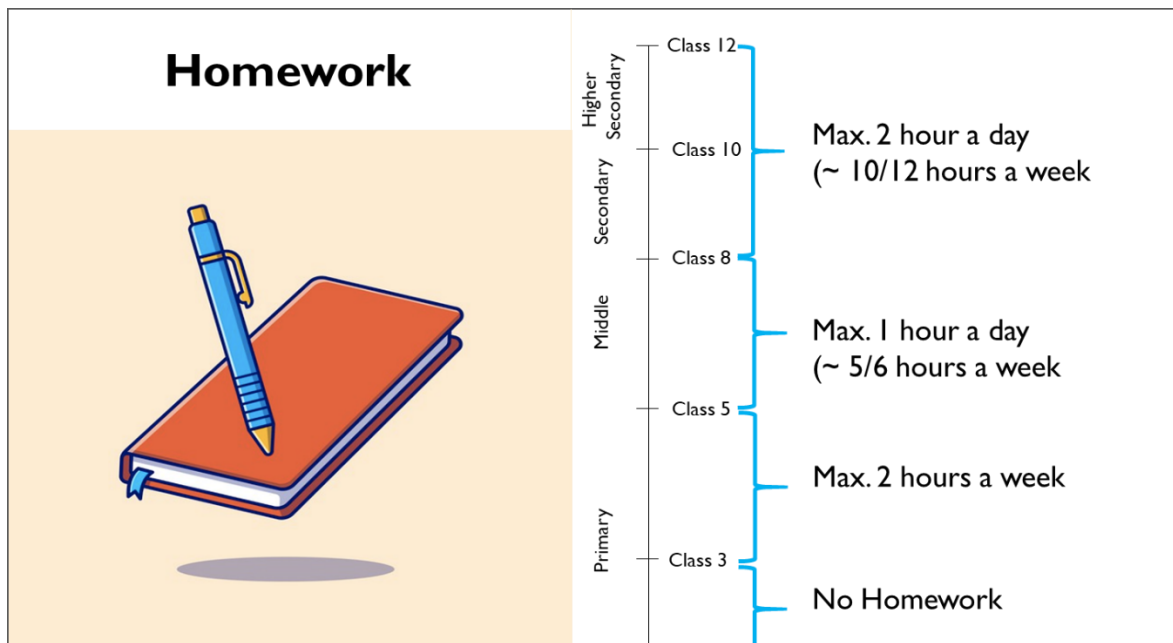
For selecting a textbook for children, the criterion of weight should be taken into consideration. The weight of each textbook may be printed on the textbook by the publishers, along with the Grams per Square Meter (GSM).

Children with Special Needs (CWSN) can be provided a double set of textbooks, through book banks in schools, and lockers in classes may be installed for students with disabilities for storing and retrieving books and other items.

School Bag Awareness Programmes need to be held at the beginning of every academic session, wherein parents and students are oriented on this issue.

The school shall offer subjects as prescribed by the National/State Curriculum Framework only. Additional subjects, such as Computer Studies, Moral Education, and General Knowledge, life skills, need to be infused across subject areas and other activities in the school without additional textbooks. Health and Physical Education, work experience and Sports and Arts Education are the areas which help in the all-round development of children. These need to be given adequate space in the timetable without the need for any textbook for these areas.

- Primary: No homework up to Class II and a maximum of two hours a week from Classes III-V.
  - Middle School (from Classes VI-VIII): A maximum of one hour a day (about five to six hours a week).
  - Secondary and Higher Secondary: A maximum of two hours a day (about 10 to 12 hours a week).
- Teachers need to work together to plan and rationalise the amount of homework that they give.



- The issues related to heavy school bag need to be included in the pre-service and in-service teacher education curriculum
- All the States and UTs have been requested to adopt the relevant suggestions of the School Bag Policy and NEP, 2020, and ensure their implementation in their jurisdiction.

## Future Impact

- As per the National Education Policy, 2020 (para-4.33), concerted efforts, through suitable changes in curriculum and pedagogy, will be made by NCERT, SCERTs, schools, and educators to significantly reduce the weight of school bags and textbooks.
- The policy further recommends designing textbooks with less information and more space for experiential learning.
- As per NEP, all students will also participate in a 10-day bagless period sometime during Grades 6-8 where they intern with local vocational experts such as carpenters, gardeners, potters, artists, etc. Bagless days will be encouraged throughout the year for various types of enrichment activities involving arts, quizzes, sports, and vocational crafts.
- The children are the future of the Nation. Students' healthy and strong development along with intellectual growth is important. The effective compliance of Policy on School Bag, 2020 is likely to make the students stress free and create an enjoyable learning system. Their good health and stress-free mind will contribute to Nation-building.



# Chapter 17

## INNOVATIVE LEARNING DURING COVID



## The need and context

- Sometime in the second week of March, state Governments across the country began shutting down schools temporarily as a measure to contain the spread of the novel coronavirus. This was a crucial time for the education sector—board examinations, nursery school admissions, entrance tests of various universities, and competitive examinations, among others, are all held during this period.
- As the days passed by with no immediate solution to stop the outbreak of COVID 19, school closures did not only have a short-term impact on the continuity of learning for more than 24.8 crores young learners in India but also engendered far-reaching economic and societal consequences.



- The structure of schooling and learning, including teaching and assessment methodologies, was the first to be affected by these closures. Not all schools could adopt online teaching methods. The low-income private and Government schools in remote areas with affordability issues for their learners were particularly severely affected.
- Based on a quick assessment undertaken by states, it was clear, that online education cannot be the mode of education for 100% of children.
- A series of new methods and a new system of curricular transactions was evolved, some of which were almost unheard of, so far.
- In this context, certain guidelines were prepared and a new methodology – Alternative Academic Calendar – was developed. Several other formats of teaching-learning were identified for adoption/adaptation by the states/UTs following their local context.

## Approach and Present Impact

### Discussions and consultations

- During COVID-19 Pandemic, the Ministry of Education has held consultations with the states and UTs at various levels.
- Hon'ble Education Minister held a meeting with Ministers and Secretaries of School Education Department of all States and UTs through Video Conference (VC) on 28th April 2020 to discuss the issues relating to the education of children during Covid-19 situation. Hon'ble Education Minister informed the States and UTs that the National Council of Educational Research and Training (NCERT) has developed an Academic calendar for class I to VIII. The States/UTs may also adopt/ adapt the same as per their local conditions.
- Project Approval Board (PAB) meetings were held individually with each state/UT from 29th April 2020 to 25th June 2020 by Secretary SE&L, where planning for implementation of the Samagra Shiksha and MDM scheme for the year 2020-21 was discussed in the background of the pandemic.
- Further, a Video Conference meeting was convened by Secretary (SE&L) with States and UTs on 17, 18, and 19th August 2020. The following points were discussed in the VC meeting:
  - Details of students having access and no access to any digital device for learning.
  - The process followed by the state to reach to students who do not have any digital device and step taken for such student.
  - The process of assessment of students.
  - Any innovative activity planned for such children during the pandemic.
- VC was also held by Secretary SE&L on 1st July 2020 to discuss online education draft guidelines and Continuous Learning Plan and Best Practise on 17-19th August 2020.
- On 1st October 2020, Secretary SE&L held a VC with all states/UTs regarding how to plan and report a communication campaign for health and safety precautions in the wake of the pandemic.
- During these series of meetings, and through continuous correspondence, States and UTs were advised to use Alternative Academic Calendar, Pragyata Guidelines, Guidelines for Children of Migrant Labourers, Manodarpan program, DIKSHA (Digital Infrastructure for Knowledge Sharing, Safe online Guidelines), Vidyadaan portal for crowdsourcing of e-content, NISHTHA (National Initiative for School Heads' and Teachers' Holistic Advancement), Learning Enhancement Guidelines, CBSE Shiksha Vani (Podcast) during the Covid-19 period.
- NCTE also organized a Consultation Meet of Education Secretaries and other Heads of the Department of Higher/ School Education of States/UTs on 27th & 28th August 2020, about the way forward during the pandemic.

## Guidelines as enablers

It was decided to prepare a series of guidelines for the states/UTs to follow to prepare an enabling environment for implementing innovative methods of teaching and learning. The following guidelines were prepared and disseminated:

### a) PRAGYATA guidelines on digital education

- PRAGYATA guidelines have been developed with a focus on the methodology, time spent, etc. for online/blended/digital education for students who are presently at home due to the closure of schools.
- The guidelines recommend screen time for different categories of students.
- It also provides sufficient Dos and Don'ts regarding ergonomics and cyber safety.
- There are infographics on how to use devices and have proper posture during the online classes.
- The guidelines can be accessed at:

[https://mhrd.gov.in/sites/upload\\_files/mhrd/files/pragyata-guidelines\\_0.pdf](https://mhrd.gov.in/sites/upload_files/mhrd/files/pragyata-guidelines_0.pdf)

### b) Learning enhancement guidelines for continuous learning

- During the pandemic, formal learning that takes place in schools in the form of face-to-face interaction between teachers and students as well as among fellow learners has been replaced using various alternative modes, such as – online, TV, mobile, radio, textbooks, etc.
- The alternative modes, though praiseworthy, have certain limitations. The alternative modes do not ensure equitable quality learning for all students due to various factors such as the unequal distribution of time of teachers, students having differential access to technological devices, and lack of support for learning at homes in several cases. As a result, the closure of schools is likely to lead to the loss of learning and deficiencies in the achievement of students' learning outcomes.
- States/UTs and MoE have been making efforts for providing education to children at their homes through alternate means of delivery such as the distribution of textbooks at homes of learners, telephonic guidance by teachers, online and digital content through TV and radio, activity-based learning through the Alternate Academic Calendar released by NCERT, etc.
- To address the issues related to gaps and/or loss of learning among students, during and after the lockdown, the MoE entrusted NCERT with the task of constituting a Committee, comprising of academic and curricular experts drawn from NCERT, NIEPA, CBSE, KVS, and NVS.
- The Committee conducted a survey in KVS, NVS, and CBSE schools for collecting information about various digital modes being used by students to receive online education and their concerns regarding children not having digital devices. Further, discussions were held with SCERTs (on 22.06.2020) to gather information about the initiatives taken up by them in their state/UT. Meanwhile, DoSEL collected a report from the states/UTs on their Continuous Learning Plans, particularly regarding learners who have no access to any mode of digital devices.



- The ensuing guidelines for Learning Enhancement (LE) during the challenging times of the COVID-19 pandemic were prepared based on the recommendations of the aforementioned committee and the reports of states/UTs for the following:
  - Learning Enhancement during COVID-19 for students without digital devices
  - Learning Enhancement during COVID-19 for students with limited access to digital devices
  - Learning Enhancement during COVID-19 for students with digital devices
- The guidelines can be accessed at:
 

[https://ncert.nic.in/pdf/announcement/Learning\\_%20Enhancement\\_Guidelines.pdf](https://ncert.nic.in/pdf/announcement/Learning_%20Enhancement_Guidelines.pdf)
- In respect of JNV students not having digital devices, resource materials like printed content, question & answers, Alternative Academic Calendar (AAC), Assignments, etc were personally handed over to the parents/ students. Besides, a daily contact system is in place by JNVs to maintain a connection with each student about mental well-being, health, and academics.
- As far as CBSE schools are concerned, the Board, vide Circular No. Acad-63/2020 dated September 2, 2020, has advised all its affiliated schools to adopt these guidelines for addressing the learning gaps in their students and optimise their learning achievement.

### **c) Guidelines for children of migrant labourers**

- Guidelines for Children of Migrant Labours focuses on providing admission to the in-migrant children in the nearby Government schools without the requirement of submitting any document except an identity card.
- As per these guidelines, the residential school students should also be provided temporary admission in schools near their homes, as they may not go back to their residential schools during COVID19.
- These guidelines can be accessed at:
 

[https://www.mhrd.gov.in/sites/upload\\_files/mhrd/files/Migrant%20labour%20guideline.pdf](https://www.mhrd.gov.in/sites/upload_files/mhrd/files/Migrant%20labour%20guideline.pdf)

#### d) Covid-19 related health and safety sop/guidelines for school re-opening

- After the issue of MHA guidelines for unlock-5, on 5th October 2020, this Department has issued detailed SOP/guidelines regarding health and safety precautions for reopening of schools.
- Part I of these guidelines refers to the health and safety aspects of reopening schools. These are based on the prevailing instructions of the Ministry of Home Affairs, Ministry of Health and Family Welfare, and Ministry of Education regarding health and safety protocols and are to be implemented by adopting/adapting per the local situation in all states/UTs.
- These guidelines can be accessed at  
[https://www.mhrd.gov.in/sites/upload\\_files/mhrd/files/SOP\\_Guidelines\\_for\\_reopening\\_schools.pdf](https://www.mhrd.gov.in/sites/upload_files/mhrd/files/SOP_Guidelines_for_reopening_schools.pdf)
- The Department along with NVS has also developed an SOP for re-opening residential schools incorporating the residential components in alignment with the SOP of MoE and guidelines of MHA.
- These guidelines are available at:  
<https://drive.google.com/file/d/1LAc4iKQTqTJkNVDGc5gIEDsrDGdAXwC8/view>

#### e) Guidelines for school reopening on learning with social distancing

- Part-II of the Guidelines mentioned at Serial number 7 above refers to learning with physical/social distancing and the academic aspects that are to be taken care of regarding the delivery of education, such as, curriculum transactions, instructional load, timetables, assessment, etc. after schools reopen.
- These are advisory. States/UTs are expected to use these in the manner deemed fit to prepare their guidelines.
- These guidelines can be accessed at:  
[https://www.mhrd.gov.in/sites/upload\\_files/mhrd/files/SOP\\_Guidelines\\_for\\_reopening\\_schools.pdf](https://www.mhrd.gov.in/sites/upload_files/mhrd/files/SOP_Guidelines_for_reopening_schools.pdf)

**Simultaneously with the development of these guidelines and a framework encouraging non-formal education in innovative ways, the ALTERNATIVE ACADEMIC CALENDAR (AAC) was developed:**

- The Alternative Academic Calendar is a method of education that is activity-based and uses common resources available at the home of the students.
- **For the first time**, this system of learning is based entirely on learning outcomes and is not necessarily co-terminus with textbooks. It aims to develop competencies/skills in learners through experiential learning.
- A week-wise plan for grades I to 12 has been developed in three languages by NCERT, keeping in view the choice of availability of tools with the teachers and students. This has been initially developed for 12 weeks.
- The week-wise plan consists of interesting activities and challenges, regarding chapter/theme from the textbook. The activities are suggestive, not prescriptive, nor is the sequence mandatory.

- Teachers and parents may opt to do the activities that the student shows interest in, irrespective of the sequence. In the case of children in the same family studying in different classes, siblings may jointly be involved in the same activity; if the activities cater to different cognitive levels, the elder sibling can guide the younger.
- Most importantly, it maps the themes with the learning outcomes.
- The purpose of mapping of themes with learning outcomes is to facilitate teachers/parents to assess the progress in students' learning. This may be done in a variety of ways i.e., asking questions, encouraging interaction, suggesting another activity of a similar kind, observing children's interest and participation in the activity, etc.
- Further, teachers may design activities on more themes (if required) based on the given learning outcomes. However, the focus remains on learning, rather than testing for scores.
- Links for e-resources have been provided along with the activities. Yet, if students cannot access these resources, the teacher may guide them through tele-contact to other reference sources such as a dictionary, atlas, news headlines, storybooks, etc.
- A daily six-hour live telecast was organised on the academic activities provided in the Alternative Academic Calendar on SWAYAM PRABHA DTH TV Channel "Kishore Manch" which was carried by DD Free Dish, Private Cable Operators, and Jio TV mobile app to supplement and complement AAC
- The Alternative Academic Calendars for classes 1 to 12 are available at <https://ncert.nic.in/alternative-academic-calendar.php>
- CBSE had organised online orientation programs on the Alternative Academic Calendar on 17th July 2020 for its effective usage by the teachers. This program was live-streamed and viewed by around 2,55,000 teachers and principals.
- This Calendar has been adopted/adapted by almost all states, and all it requires is for teachers to give few instructions (telephonically) once every week to the learners or their parents for implementing this calendar.

## Future Impact

- The NEP 2020 focuses on the achievement of learning Outcomes by every child at every level.
- So far, the chalk and board pedagogy has not led to the achievement of these outcomes as envisaged. The methodology of imbibing knowledge to learn requires a complete shift in the manner we teach and learn.
- **The Alternative Academic Calendar is the first of its kind intervention showing the way the above can be achieved.** There is no single way of involving and engaging children in joyful learning, however, the Alternative Academic Calendar is a great beginning.
- The pandemic situation has found that teaching and learning are simpler and much more effective through the Alternative Academic Calendar. This could be the harbinger of multifarious other TLM being developed for ensuring joyful and holistic imbibing of knowledge and skills.

Re-engineering  
of processes

# Chapter 18

## EASE OF DOING BUSINESS





## Need for the Reform

- To bring transparency in the procedures and automate the processes in the school education system, all the Autonomous Bodies under the Department of School Education and Literacy have initiated reforms and re-engineering of processes to make them more user-friendly in several areas such as admissions, student management information system, examination system, teacher recruitment, teacher transfer policies, etc.
- A majority of the reforms have been undertaken since 2017 onwards, before which all the processes were manual, which were not only cumbersome for the students, teachers, and school administration but also very time-consuming.
- **Reforms in admission procedures:** With regard to admissions, there has been an increase in the number of applications every year for entry into Kendriya Vidyalayas (KVs), Jawahar Navodaya Vidyalayas (JNVs), and in National Institute of Open Schooling (NIOS). Processing them without error and declaring the admission list within the given time frame was becoming a big challenge for these organisations. Moreover, the defence and paramilitary personnel posted in various field stations and forward areas had difficulties in collecting, filling up, and physically submitted the forms. Therefore, a need was felt by KVS, NVS, and NIOS for re-engineering all processes involved in the admission of students by moving away from the physical mode to the online mode.
- **Reforms in examination related submissions:** About examinations, both CBSE and NIOS recognised the need for introducing efficiency in the examination processes and making them student-friendly. In earlier times, the students used to get the information about the public exams through the study centres of NIOS and the NIOS website only, after which they were able to pay the exam fee through Demand Draft or study centres. In such a scenario, many of the students were not able to get the correct information in time and hence were not able to appear in the exams on time. Exam Centre Allocation in NIOS also needed major reform.
- **Reforms in the teacher recruitment process:** Further, the number of applications for teachers' recruitment and transfers was increasing with every passing year in both KVs and JNVs. Receiving applications physically and processing them further was becoming difficult without involving additional manpower. The amount of time required to complete this process was getting longer. Moreover, the selection process involved a written exam, and the correction of papers was taking a long time. Hence, a need was felt to automate the whole process of teachers' recruitment and transfer process.
- **Reforms in the school affiliation process:** The main mandate of CBSE is to affiliate schools for conducting Secondary and Senior Secondary Examinations. Presently 24445 schools are affiliated with the Board in India along with 26 countries. Till 2017, the Affiliation process was offline, time-consuming, requiring a lot of certificates, offline Inspection Report with more than 300 pages, loss of file enclosures in the transaction, communication of deficiency and receipt of compliance, and the entire process was taking 12- 18 months for a final decision. It was necessary to re-engineer the process and make it online to attain the goal of minimum Government maximum governance, reduce compliances, enable data-driven decisions, achieve transparency, bring accountability in the entire systemic processes, avoid data redundancy, collection, and analysis of data through a single source, achieve quick and time-bound disposal of all applications.
- **Reforms by NCTE:** For teacher education, earlier there were multiple independent degree/diploma courses for Teacher Education being offered in the country. These were mainly being held in standalone institutions which were lacking exposure to multiple disciplines. Furthermore, students had to undergo various entrance examinations for the courses all having different standards. Hence, there was a need to standardize teacher education programs and

conducting entrance exam for teachers online Accordingly, reforms were required to be initiated by NCTE to ensure the availability of quality teachers in schools. NCTE Act, under Section 18, envisages provision for Appeal on the orders passed under Section 14, 15, and 17 of the NCTE Act. The appeal is filed online by the appellants. However, the hearing of the Appeal Committee was being conducted through physical mode. Under this system, the Appellants, as well as the Appeal Committee Members, had to physically travel for attending the meetings, and therefore, disposal of appeals was a time-consuming process warranting reforms for speedy disposal of appeals.

## Approach and Present Impact

In the process of various interventions required under Ease of Doing Business (EoDB) and minimizing regulatory compliance burden for various stakeholders, all the Autonomous Bodies viz. NVS, KVS, NIOS, CBSE, NCERT, NCTE, have initiated the following students and teacher-centric reforms:

| Name of the autonomous body | Reforms undertaken                  | Present impact  |
|-----------------------------|-------------------------------------|---|
| <b>NVS</b>                  | Online Admissions in JNVs           | <ul style="list-style-type: none"> <li>✓ Parents can upload the applications directly through the online portal.</li> <li>✓ The faceless admission process has resulted in more fairness and transparency.</li> <li>✓ Minimized human errors and duplication of applications.</li> </ul>  |
|                             | Online Teacher Transfers in JNVs    | <ul style="list-style-type: none"> <li>✓ The online process of teacher transfers has resulted in time saving and impartial employee satisfaction.</li> <li>✓ Accuracy of data collection, scrutiny, and implementation of transfer.</li> <li>✓ Higher-level transparency and fairness.</li> <li>✓ Complies with the Digital India Initiative of GOI.</li> </ul>   |
|                             | Online Teacher Recruitment Process  | <ul style="list-style-type: none"> <li>✓ NVS adopted an online recruitment system from the year 2014 which enabled online application from candidates followed by online data processing and generation of admit cards.</li> <li>✓ In the second phase of reforms from 2017 onwards, the recruitment process has been made completely online from inviting applications online to the issuance of offer of appointment.</li> <li>✓ The present process is highly efficient, time-saving, transparent, error-free with minimal human interface.</li> </ul> |
| <b>KVS</b>                  | Online Admission Process in Class I | <ul style="list-style-type: none"> <li>✓ The parents are not required to visit the KVs physically for collecting blank forms and submitting the duly filled up forms.</li> </ul>  |

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|             |   | <ul style="list-style-type: none"> <li>✓ Parents especially serving in Defence and paramilitary units posted in forwarding/field areas have been immensely benefitted.</li> <li>✓ Computer processing of data of the applicants has led to an error-free admission list.</li> <li>✓ It has also significantly reduced the time between the last date for submission of application and the declaration of admission list.</li> </ul>   |
|             | Online Teacher Transfer Process   | <ul style="list-style-type: none"> <li>✓ The transfer lists generated by the system ensure fairness, transparency, error-free process.</li> </ul>  |
|             | Online Teacher Recruitment Process  | <ul style="list-style-type: none"> <li>✓ The period of the process of recruitment has become very short.</li> </ul>  |
| <b>NIOS</b> | Online admissions   | <ul style="list-style-type: none"> <li>✓ The entire admission process is 100% online and does not require even a single paper/form.</li> <li>✓ The registration fee payment is also 100% online which has brought transparency in the procedures for students seeking admission in various Academic (Secondary and Sr. Secondary), Vocational (Skill oriented), and Open Basic Education (OBE) courses.</li> </ul>   |
|             | Reforms in examination system: Online Exam Fee payment, Exam Centre Acceptance, and Online Exam Centre Allocation system through the dedicated web portal | <ul style="list-style-type: none"> <li>✓ Development and implementation of 100% online Exam Fee payment, Exam Centre Acceptance, and Online Exam Centre Allocation system through the dedicated web portal by NIOS has transformed the Public Exam Centre Allocation process.</li> <li>✓ The Exam Centre allocation is done by the online software based on the list of exam centres registered through the exam centre portal, verified and confirmed by the Regional Centre on the portal.</li> <li>✓ Through the Exam Centre Allocation System, the Students of the study centre are distributed to multiple exam centres in the same district. If only one exam centre is available in the district, then all the students from the study centre are allotted the same study centre.</li> <li>✓ Use of GeoCoordinates ensures that the students are allotted the nearest exam centre based on the distance between the study centre and the exam centres available in the district.</li> </ul> |
|             |   |  |

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|-------------|--|--|
|             | <p>Creation of a dashboard on the Student portal of NIOS: e-Services for correction in basic details of the students and other student services</p>  | <ul style="list-style-type: none"> <li>✓ The web portal introduced by the Institute has been able to meet all the requirements of the students.</li> <li>✓ The students can get all types of information online starting from the registration for the course to the filling up of examination form.</li> <li>✓ The course material for various courses is also being provided online.</li> <li>✓ Link to use SWAYAM, e-Library, Digital Resources of NIOS, Digi-Locker, and e-services for correction in basic data is available in the student's dashboard.</li> <li>✓ The system developed by NIOS is presently benefitting approximately 25 Lakh students and will keep on benefitting throughout their entire student life cycle of 5 years in NIOS.</li> <li>✓ Apart from these students, approximately 40 lakh archived students are getting benefits from the NIOS Digi Locker.</li> </ul> |
| <b>CBSE</b> | <p>Affiliation and inspection of schools:</p> <ul style="list-style-type: none"> <li>● Submission of application &amp; fees to final disposal of application has been made online.</li> <li>● Rule-based automatic and random appointment of inspection committee &amp; online submission of the Inspection report.</li> <li>● Automatic communication of deficiencies, if any, and compliance submission online.</li> <li>● Availability of affiliation application status on a real-time basis.</li> <li>● Introduction of Virtual Inspection of schools.</li> </ul> | <ul style="list-style-type: none"> <li>✓ More than 24000 CBSE affiliated schools in India and abroad applying for an extension of affiliation, upgradation, additional subjects, etc. will benefit from the affiliation and inspection process re-engineering.</li> </ul>  |
|             | <p>Reforms in the examination system: Board Exams and Competitive Exams have been completely digitalized and made online.</p>  | <ul style="list-style-type: none"> <li>✓ A comprehensive one-stop portal has been implemented since 2015 for online registration of students including fee payment and online post-exam data collection such as grades, practical, and theory marks. Total online data collection is approximately 10 crore including Pre and Post Exam data.</li> <li>✓ Exam Centre Locator (ECL) App has been developed to facilitate CBSE examinees to locate their centres on google maps giving roll no., thereby helping students to know the shortest route and</li> </ul>  |

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|              |   | <p>time required to reach the centre.</p> <ul style="list-style-type: none"> <li>✓ A Confidential Material Tracking and Monitoring (CMTM) App has been developed for tracking movement of question paper packets, and timings of opening seal and packing the answer sheets. This is a geo-tagged and time-tagged app and it played an important role in ensuring the security of the 2019 Board exams.</li> </ul>                                       |
|              | <p>Digi-lockers have been operationalised to facilitate anytime anywhere accessibility of credentials to students</p>   | <ul style="list-style-type: none"> <li>✓ CBSE has provided documents of around 4 crore students in their Digilockers.</li> <li>✓ Face Matching Technology has been introduced to download Digital Academic Documents in respect of students of foreign countries.</li> <li>✓ Due to the availability of digital academic documents, the students need not run for duplicates required for admission/employment.</li> </ul>                               |
| <b>NCERT</b> | <p>Process of admission to various courses of NCERT has been made online:</p> <ol style="list-style-type: none"> <li>a. Pre-service teacher education programs (B.Ed., B.Sc. B.Ed., Integrated B.Sc. Ed., M.Sc.Ed.)</li> <li>b. Admission of students in the Demonstration Multipurpose Schools.</li> </ol> | <ul style="list-style-type: none"> <li>✓ The online admission process has resulted in a declaration of results in a short duration of time and has led to fairness and transparency.</li> <li>✓ Minimized human errors and duplication of applications.</li> </ul>   |
|              | <p>The National Talent Search Examination (NTSE) is conducted online.</p>   | <ul style="list-style-type: none"> <li>✓ Activities like registration, admit card generation, scoring, declaration of results, delivery of scholarship is done online.</li> </ul>  |
| <b>NCTE</b>  | <p>Online Teacher Pupil Registration Management System (OTPRMS) for validation of certificate for teacher education's degree granted to students by colleges/institutes. OTPRMS certificates have also been linked with Digi-Locker</p>   | <ul style="list-style-type: none"> <li>✓ The information management system will facilitate the candidates who have passed out of NCTE recognized institutions with the help of OTPRMS by verification of recognition of the degree/diploma certificate.</li> <li>✓ It will facilitate applicants in getting their certificates at the click of a button. From now onwards, OTPRMS certificates will be directly made available on Digi-Locker</li> </ul> |
|              | <p>4 Year Integrated B. Ed Programme (ITEP):<br/>Multiple independent degree/diploma courses for Teacher Education offered in the country have been merged into a single 4-year integrated B.Ed. Programme for which online</p>   | <ul style="list-style-type: none"> <li>✓ The online National Common Entrance Examination will standardize the entrance exam and help in maintaining uniform standards for Teacher Education in the context of admission to the Pre-Service Teacher Education.</li> <li>✓ The candidates may opt for teaching as</li> </ul>   |

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|  | <p>National Common Entrance Test (NCET) will be conducted from 2021 onwards.</p>  | <p>their career after Secondary level schooling unlike after graduation or post-graduation, as has been the case before this reform.</p> <p>✓ A rigorous program of this kind is expected to give a thorough grounding in the skills required for becoming an effective teacher. In line with NEP 2020, a suggestive curriculum for the 4 Year ITEP is being finalised which will be introduced in shortlisted Government TEIs on a pilot basis in the academic year 2021-22.</p> <p>✓ It will be the initial step for the implementation of the 4 Year ITEP as mandated by NEP 2020.</p> |
|  | <p>Processing of Appeals: Online meetings of the Appeal Committee for the hearing of the appeal are being conducted, except the cases where physical presence is requested by the appellants.</p> | <p>✓ Though the online meetings started as a follow-up to Covid-19 guidelines, NCTE has decided to continue with it further, subject to amendment in regulation with approval of the Ministry of Education.</p> <p>✓ The reduced direct interface between the appellants and the Appeal Committee has brought greater transparency and also reduced the time taken in disposal of appeals.</p>  |

## Future Impact

- The reforms initiated by JNVs/KVs for online admissions and fee collection will create awareness about digital activity among rural parents and students and will make the process transparent, thereby enabling the eligible students to get a fair opportunity to study in JNVs/KVs.
- Reforms relating to online teacher recruitment/transfer policy will make the processes faster and bring transparency to the system. Staff grievance is expected to come down due to transparency in the system.
- The online processes initiated by NIOS regarding examination, admission, and fee collection will be very helpful to the students and also to the administrator as verification of data will become easier and online processing will also help in resolving the queries of students in the shortest possible time. Further, with the online availability of course material and e-resources in audio, video, and Indian Sign Language formats for various courses by NIOS, the students will be able to access the material at any point of time as per his/her convenience.
- The online admission process of teachers for training, feedback system, and availability of teacher learning materials has resulted in more fairness and transparency and has minimized human errors and duplication of application.
- The online mode for processing of applications of schools for affiliation by CBSE will result in efficiency in their disposal. With a greater emphasis on public disclosure and self-certification, the affiliation process will ensure “light” but “tight” regulation.

- The initiative of CBSE for having a Digi-locker for all the students for issuing certificates, mark sheets, and other documents will be environment friendly.
- Easy availability of Mark Sheets, Pass Certificates, Migration Certificates, Duplicate Certificates to students of CBSE and NIOS through a digital repository.
- Linking of Online Teacher Pupil Registration Management System (OTPRMS) with Digi-locker by NCTE will facilitate applicants in getting their certificates at the click of a button. It will make the prospective teachers of the country digitally empowered. This is also necessary for easy accessibility and dissemination of information.
- The National Common Entrance Test which would be conducted by NCTE would reflect the relative performance level of the candidate for merit-based selection to secure admission. It will maintain uniform standards for Teacher Education in the context of admission to the Pre-Service Teacher Education program as mandated in NEP 2020. It will send a positive signal to all stakeholders about the initiative of the Government for laying special emphasis on teacher quality.
- Online mode for processing of appeals by NCTE will facilitate the smooth and efficient conduct of proceedings. This will also facilitate the appellants in easy accessibility of hearings along with greater transparency in the system with a reduced direct interface between the appellant and the Appeal Committee.



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