

**GOVERNMENT OF INDIA
MINISTRY OF EDUCATION
DEPARTMENT OF SCHOOL EDUCATION & LITERACY**

**RAJYA SABHA
UNSTARRED QUESTION NO. 1805
ANSWERED ON 07th AUGUST, 2024**

AI Integration in Education

1805. Shri S Niranjan Reddy:

Will the Minister of EDUCATION be pleased to state:

- (a) the current teacher-student ratio in the country along with the steps being taken to improve this ratio;
- (b) whether Government has a national strategy/policy to use AI to enhance the quality and delivery of education in the country, if not, the reasons therefor;
- (c) whether there are plans to use AI to provide personalized learning experiences catering to individual needs, if so, the details thereof;
- (d) the measures to integrate AI and emerging technologies in curriculum development and teacher training; and
- (e) the steps to collaborate with State Governments and initiate public-private partnerships to adopt best practices in AI for education?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF EDUCATION
(SHRI JAYANT CHAUDHARY)

(a) : The RTE Act, 2009 in its Schedule lays down Pupil-Teacher Ratio (PTR) for both primary and upper primary schools. At primary level, the PTR norm is 30:1 and at the upper primary level it is 35:1. As per the Unified District Information System For Education Plus (UDISE+) 2021-22, the PTR for Government schools is 28:1, 24:1 and 26:1 at primary, upper primary and Elementary level respectively. Education is in the concurrent list of the Constitution. The recruitment, service conditions and deployment of teachers come under the purview of the respective State and Union Territory (UT) Government. The recruitment of teachers in schools is a continuous process and the vacancies keep arising due to retirement, resignation and additional requirements on

account of enhanced students' strength/new schools. However, Ministry of Education requests the States and UT Governments for filling-up the vacant posts of teachers and their rational deployment, through Review meetings and advisories from time to time. Further, the Central Government through the Centrally Sponsored Scheme of Samagra Shiksha, provides assistance to the States and UTs for deployment of additional teachers to maintain appropriate Pupil Teacher Ratio as per the prescribed norms for various levels of schooling.

(b) and (c) : The National Education Policy (NEP) 2020 recognizes the transformative potential of Artificial Intelligence (AI) and remote learning platforms as critical components in achieving key goals of the NEP such as enhancing academic excellence and skill development across all segments of the students. By embracing AI and remote learning, NEP 2020 aims to equip students with 21st-century skills, fostering innovation, critical thinking, and problem-solving abilities essential for their academic and professional success in a rapidly evolving world. The NEP 2020 has highlighted Artificial Intelligence and remote platforms as important technological tools:

- To create a skilled workforce, particularly involving mathematics, computer science, and data science, in conjunction with multidisciplinary abilities across the sciences, social sciences, and humanities, in order to match the future demands of the economy.
- For curricular and pedagogical initiatives at relevant stages, to develop the various important skills in students at all levels.
- For India's future and India's leadership role in the numerous upcoming fields and professions that will involve mathematics and computational thinking.
- For creating a robust ecosystem of research in order to again become a leading knowledge society in the coming years.
- To take the lead in preparing professionals in cutting-edge areas that are fast gaining prominence.
- For student development, and other forms of educational software and hardware that will not just change what students learn in the classroom but how they learn.
- To reach students in remote areas, address learning needs to Divyang, and teacher training by integrating multi-modal tools such as SWAYAM/DIKSHA/SWAYAM PRABHA.
- To provide equal access to quality content to all learners in their regional languages.

NEP 2020 highlights the importance of focusing on student learning outcomes and making quality education accessible, affordable, equitable and inclusive. Every student or learner is unique in their areas of interest and analytical abilities and Artificial Intelligence and Machine Learning capabilities in pedagogy and course curation are essential in achieving NEP objectives and in making education delivery efficient and inclusive.

(d) and (e) : NEP 2020 (Para 4.24) has recommended concerted curricular and pedagogical initiatives, including the introduction of contemporary subjects such as Artificial Intelligence, Design Thinking, Holistic Health, Organic Living, Environmental Education, Global Citizenship Education (GCED), etc. at relevant stages.

Central Board of Secondary Education (CBSE) had introduced 'Artificial Intelligence' in its affiliated schools in the year 2019. The objective of the AI curriculum is to develop a readiness for understanding and appreciating Artificial Intelligence and its application in our lives. Artificial Intelligence is offered as a 12 hour module in class VIII and as a skill subject in classes IX to XII.

CBSE has collaborated with several organizations such as Intel, IBM, Microsoft, Private Schools, etc. for designing the curriculum and textbook material of the Subject. Also 41 training programmes on Artificial Intelligence have been conducted in schools affiliated with CBSE at various parts of the country in which 1690 participants (principals and teachers) have been trained. Artificial Intelligence has been introduced in classes VIII, IX, X & XI in schools affiliated with CBSE.
