

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

LOK SABHA
UNSTARRED QUESTION NO. 229
ANSWERED ON 03.02.2025

STEM Education

229. Dr. Amar Singh:

Will the Minister of EDUCATION be pleased to state:

- (a) whether the Government is aware that storytelling can serve as a powerful tool to demystify complex STEM (Science, Technology, Engineering and Mathematics) concepts, foster critical thinking and ignite a passion for discovery;
- (b) if so, the details thereof; and
- (c) the initiatives proposed to be taken by the Government to integrate storytelling into STEM education keeping in mind that narrative techniques help children better understand and retain scientific information, making abstract ideas tangible and relatable?

ANSWER

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

(a) to (c) The Government recognizes the effectiveness of storytelling in making children understanding the complex concepts and fostering critical thinking as a part of the STEM (Science, Technology, Engineering and Mathematics) Education. The National Education Policy (NEP) 2020 provides that assessments of educational approaches in undergraduate education that integrate the humanities and arts with Science, Technology, Engineering and Mathematics (STEM) have consistently showed positive learning outcomes, including increased creativity and innovation, critical thinking and higher-order thinking capacities, problem-solving abilities, teamwork, communication skills, more in-depth learning and mastery of curricula across fields, increases in social and moral awareness, etc., besides general engagement and enjoyment of learning. Research is also improved and enhanced through a holistic and multidisciplinary education approach.

The National Curriculum Framework for School Education (NCF-SE) 2023 states that stories are a particularly good medium for learning about social relationships, ethical choices, understanding and experiencing emotions, and becoming aware of life skills. While listening to stories, children learn new words, thus expanding their vocabulary, and learn sentence structure and problem-solving skills. Children with very short attention spans concentrate for a longer time when engrossed in a story. Through culturally contextual stories, we can acquaint children with their culture and social norms and create awareness about their surroundings. NCERT uses storytelling pedagogy in almost every subject area including science and mathematics for creating interesting narratives for children. The vision to create a joyful and expressive learning environment, contributing to the overall development of students and society has led to introduction of Traditional Story telling in the 10th National Kala Utsava, a flagship programme of the Department of School Education and Literacy (DSE&L), Ministry of Education (MoE), in 2024. In textbooks developed as a follow-up of the NCF-SE 2023, storytelling pedagogy has been integrated. The Science textbook for Grade 6, namely, ‘Curiosity’, and its Hindi version ‘Jigyasa’, presents concept using storytelling mode.

Web link of textbooks: Curiosity: <https://ncert.nic.in/textbook.php?fecu1=0-12>

Jigyasa: <https://ncert.nic.in/textbook.php?fhcu1=0-12>
