Government of India

Ministry of Education

Department of School Education and Literacy

LOK SABHA UNSTARRED QUESTION NO. 14

ANSWERED ON 03/02/2025

Vocational Education and Skill Based Learning

14. Shri P C Mohan:

Will the Minister of EDUCATION be pleased to state:

- (a) the steps being taken by the Government to integrate vocational education and skill-based learning in schools and higher education institutions under the New Education Policy (NEP) in urban areas across the country;
- (b) whether the NEP has introduced measures to enhance the digital readiness of students in urban centers; and
- (c) the initiatives taken by the Government to promote inter-disciplinary learning and research among students?

ANSWER

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

(a): National Education Policy 2020 has envisaged a complete re-imagination of how skill education is offered to students. This policy recommends integrating skill education programmes into mainstream education in all education institutions in a phased manner. Focus areas for Skill education are chosen based on skill gap analysis and mapping of local opportunities.

Under the Skill Education component of the Centrally Sponsored Scheme 'Samagra Shiksha', financial assistance is provided to States/UTs for giving exposure to Skill Education to students of Grades VI to VIII and introduction of Skill courses from Grades IX to XII, which are aligned with National Skills Qualifications Framework (NSQF). At the Secondary level i.e., Class IX and X, skill modules are offered to the students as an additional subject. At Sr. Secondary level, i.e., Class XI and XII, skill courses are offered as a compulsory (elective)

subject. The exposure of vocational education at upper primary level is imparted to school students by implementing 10 bagless days and internships. So far 138 Job Roles (JRs) / Skill subjects have been approved to be offered to class 9 to class 12 school students. Employability Skill module has been included in the curriculum of JRs which includes Communication Skills, Self-Management Skills, Information and Communication Technology Skills, Entrepreneurship Skills, and Green Skills. For instance, Kendriya Vidyalaya Sangathan (KVS) has implemented Artificial Intelligence as a skill course which was introduced in Class VIII from 2020-21 onwards and extended up to Class XI including VI and VII from 2024-25 session as skill modules as offered by Central Board of Secondary Education (CBSE). KVS has also taken up pre-vocational skills such as carpentry, pottery, electrical work etc. from the year 2022-23 onwards as fun course for the student of Classes VI to VIII and is implementing skill subjects from Class IX to XII as per the guidelines by CBSE. In 2023-24, 350 KVs have already been onboarded for providing Skill training to In-School/Out of school youth under Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 4.0 for promoting skill development in schools, aiming to equip students for the demands of 21st century knowledge economy. So far, 10249 candidates have been registered and being trained for PMKVY 4.0.

The Government has formulated the National Credit framework (NCrF), a single framework for seamlessly integrating the credits earned through learning in its all dimensions, such as from school education, higher education and skill education. This framework enables establishing equivalence and mobility between general education and skill education so that lifelong learning, recognition of prior learning, multiple entry and exit, and continuous professional development are encouraged in the system. Students can earn credits for skill education training, allowing them for transition between skill and general education through Bachelor in Vocation (B. Voc.) programmes. NCrF integrates skill and formal education, allowing students to earn academic credits for skill-based learning. Universities and colleges have introduced skill-based certificate, diploma and degree courses in areas such as AI, Robotics, Green Energy, and Digital Technologies. Partnerships with industries, start-ups, and research organizations, especially by the Skill Universities, enable students to engage in real-world problem-solving.

(b): In pursuance to enhance the digital readiness of the students, National Digital Education Architecture (NDEAR) which is a comprehensive framework supporting digital infrastructure, e-learning content, and assessment systems, is being implemented. Online courses and educational TV channels catering to skill development are being offered on platforms, like Digital Infrastructure for Knowledge Sharing (DIKSHA), Study Webs of Active Learning for

Young Aspiring Minds (SWAYAM), and NDEAR for teachers and students. The National Initiative for School Heads and Teachers' Holistic Advancement (NISHTHA) provides digital training for teachers to integrate technology into classrooms.

Schools and colleges are equipped with state-of-the-art digital infrastructure for skill-based learning. They are equipped with interactive smartboards, AI-based learning tools, and virtual labs to promote technology-driven learning. For instance, 3095 Jawahar Navodaya Vidyalayas (JNVs) have been converted into smart classrooms. Furthermore, KVS has also integrated smart classrooms, Information and Communication Technology (ICT) labs, language labs, Atal Tinkering Labs (ATL) and digital resources to enhance students' technological readiness in schools, ensuring equitable access to quality education.

(c): The Government of India, under the New Education Policy (NEP) 2020, has taken several steps to promote interdisciplinary learning and research at both school and higher education levels. These initiatives encourage students to integrate multiple disciplines, fostering creativity, innovation, and problem-solving skills.

Higher education institutions (HEIs) now offer flexible undergraduate courses with multiple entry-exit options and an emphasis on interdisciplinary research. The Academic Bank of Credits (ABC) allows students to accumulate and transfer credits across different courses and institutions, supporting interdisciplinary mobility.

Universities are now encouraged to become multidisciplinary institutions offering courses that integrate science, arts, humanities, and vocational subjects. Programmes, like Atal Tinkering Labs (ATL) in schools and Fellowships in Colleges and Universities encourage students to work on STEM, social sciences, and humanities research. Institutions are also encouraged to collaborate across disciplines, forming research hubs focused on emerging areas like AI, sustainability, and biotechnology.

The University Grants Commission (UGC) facilitates the students to pursue interdisciplinary courses remotely in line with the guidelines on Open and Distance Learning (ODL). The guidelines are available at https://deb.ugc.ac.in/Home/Regulations?Year=2020.