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

### **RAJYA SABHA**

## STARRED QUESTION NO. 337 ANSWERED ON 02.04.2025

### Education Modernization - Curriculum Updates, Flexibility & Skill Development

#### 337 Shri Sanjay Raut:

Will the Minister of *Education* be pleased to state:

(a) the steps Government is taking to ensure that school and university curricula remain updated and relevant to global trends;

(b) the manner in which Government plans to introduce more flexibility in subject selection for students across all educational boards;

(c) the measures that are being taken to include skill-based learning as a core component of the curriculum;

(d) the steps being taken to integrate vocational education into mainstream education to make students job-ready; and

(e) whether there is any plan to expand internship and apprenticeship opportunities for students at the school and college levels?

#### ANSWER

# MINISTER OF EDUCATION (SHRI DHARMENDRA PRADHAN)

(a) to (e): A statement is laid on the Table of the House.

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## STATEMENT REFERRED TO IN REPLY OF THE RAJYA SABHA STARRED QUESTION NO. 337 ANSWERED ON 02.04.2025 ASKED BY SHRI SANJAY RAUT, HON'BLE MP (RS) REGARDING 'EDUCATION MODERNIZATION - CURRICULUM UPDATES, FLEXIBILITY & SKILL DEVELOPMENT'.

(a) & (b): The National Education Policy (NEP) 2020 seeks to overhaul India's education system to better align with the needs of the 21st century, fostering a more inclusive and forward-thinking approach. NEP 2020, inter-alia, also provides for holistic development of students and integration of practical exposure, skill courses with regular programs and advocates 4-year undergraduate programmes with holistic and multidisciplinary education and a focus on research. These reforms are aligned with global trends.

The National Curriculum Framework for School Education (NCF-SE) recognises that the world is undergoing rapid changes in the knowledge landscape. With various dramatic scientific and technological advances, the need for a workforce with deep human capacities, including those involving multidisciplinary capacities across languages, mathematics, sciences, social sciences, vocational education, and art, will be in increasingly greater demand. Accordingly, the NCF-SE provides a curricular framework which will be able to respond to these trends and requirements.

Curriculum bodies and universities are now working with industries to design programmes and curricula that reflect current job market demands. There is an increasing focus on science, technology, engineering, math (STEM), digital literacy, Artificial Intelligence, Coding, Cybersecurity, etc. to match global economic and employment shifts. Coding is now part of the school curriculum from Grade 6 onwards, per NEP 2020 guidelines. The National and State Education Boards periodically revise curricula to reflect new knowledge and skills need to meet the demands of global developments.

The National Credit Framework (NCrF) has been launched to make subject selection more flexible by creating a common credit framework across all educational boards. NCrF is a comprehensive credit framework encompassing elementary, school, higher, and vocational education & training, integrating creditisation of learning on the -axis i.e. academics, vocational skills and Experiential learning including relevant experience and professional levels acquired.

The Central Board of Secondary Education (CBSE) conducts annual curriculum reviews to align with global trends such as competency-based learning and interdisciplinary approaches. To stay competitive internationally, CBSE has been emphasizing Science, Technology, Engineering and Mathematics (STEM) education and has introduced subjects like Coding, Data Science, and Artificial Intelligence. As per NEP 2020, CBSE allows students to choose interdisciplinary subjects (e.g., a science student can take Psychology or Economics or skill-based subject). There are no strict streams (Science/Commerce/Arts/Skill) till Class 12, enabling multidisciplinary combinations.

The National Education Policy (NEP) 2020 advocates a 4-year undergraduate programmes with holistic and multidisciplinary education and a focus on research. These reforms are aligned with global trends. To achieve holistic and multidisciplinary education, the NEP 2020 recommends a 4-year multidisciplinary Bachelor's programme as the preferred option since it allows the opportunity to experience multiple subjects with a focus on the chosen major and minors as per the choices of the student. Based on the recommendations of National Education Policy 2020, UGC has notified the Curriculum and Credit Framework for UG programmes, which provides for a 4-year UG programme, multidisciplinary education and introduced a research component. A student who chooses 4-year UG programme with research will be awarded a bachelor's degree (Honours with Research). In addition, to ensure holistic education courses in the areas of vocational education, internship with local industry, businesses, artists, craftspersons, apprenticeship, community engagement and service, environmental education, and value-based education are also included in the UG curriculum.

The Curriculum and Credit Framework for UG programmes provides flexibility to students. The UG curriculum framework allows students to choose courses not undergone at the higher secondary level (12th class) so that they will get exposed to more subjects in the first year of UG programme and decide on the major and minors at the end of 1st year. In the 4th year of UG programme, students will have a choice to opt either for UG (Honours) or UG (Honours with Research). As per the UG framework, students have to secure a minimum of 50% of total credits

in a subject to earn a major in that subject. The remaining 50% of credits can be earned from multidisciplinary subjects, internships, apprenticeships, etc.

The Curriculum and Credit Framework for Postgraduate Programmes provides more flexibility to students. Accordingly, a student is eligible for a PG programme in a discipline corresponding to either major or minor(s) discipline in the UG programme. In this case, the University can admit the students in the PG programme based on the student's performance in the UG programme or through an entrance examination. However, irrespective of the major or minor disciplines chosen by a student in a UG programme, a student is eligible for admission in any discipline of PG programmes if the student qualifies the National level or University level entrance examination in the discipline of the PG programme.

(c) to (e): Under NEP 2020, the fundamental principles that will guide both the education system at large, as well as the individual institutions within it are: **flexibility**, so that learners have the ability to choose their learning trajectories and programmes, and thereby choose their own paths in life according to their talents and interests; no hard separations between arts and sciences, between curricular and extra-curricular activities, between vocational and academic streams, etc. in order to eliminate harmful hierarchies among, and silos between different areas of learning; **multidisciplinarity** and a **holistic education** across the sciences, social sciences, arts, humanities, and sports for a multidisciplinary world in order to ensure the unity and integrity of all knowledge. NEP, inter-alia, also provides for integration of vocational education programmes into mainstream education in all education institutions in a phased manner. It also lays down that in the Foundational and Preparatory Stages, multiple capacities will be developed through play and other activities, which will subsequently be useful in vocations. These capacities are termed prevocational capacities. In the Middle Stage, exposure to a wide range of work will be given to students. This will equip them to achieve capacities (including specific skills) in a vocation of their choice in the Secondary Stage and help them progress towards gainful employment and contribute meaningfully to the economy.

The Government provides financial assistance to States for giving exposure to Vocational Education to students of Grades VI to VIII and introduction of vocational courses from Grades IX

to XII. Assistance is also provided for the introduction of Vocational Education in schools, capacity building of Vocational Education teachers/skill trainers, development of competency-based curriculum and teaching learning material, development of management information system for monitoring and evaluation, and taking up innovative programmes under Vocational Education. Employability Skill modules have been made a mandatory part of skill subject under Samagra Shiksha Scheme.

CBSE offers 34 Skill Modules from middle school level onwards, 22 Skill Subjects at Secondary level and 42 Skill Subjects at Senior Secondary level. At the Secondary and Senior Secondary level, CBSE offers a variety of competency-based subjects under National Skill Qualification Framework (NSQF). The Skill Subjects being offered by CBSE from class IX onwards are mapped to specific NSQF levels (level 1-4), each corresponding to a defined job role and a required number of study hours.

The University Grants Commission (UGC) had facilitated Higher Education Institutions (HEIs) across the country to provide skill-based education under National Skill Qualification Framework (NSQF) in Colleges and Universities through its scheme of Community Colleges, B.Voc Degree Programmes and Deen Dayal Upadhyay Centres for Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood (DDU KAUSHAL). HEIs had been allowed to offer full-time, credit-based programmes at the level of Certificate, Diploma, Advanced Diploma, B.Voc, P.G. Diploma, M.Voc and Research with multiple entry and exit options. The curriculum in each of the semester/years of the programme(s) was a suitable mix of general education and skill development components.

UGC had introduced the Guidelines for Higher Education Institutions to offer Internship / Apprenticeship Embedded Degree Programme in July, 2020 in all disciplines as specified by the UGC under the UGC Act to embed apprenticeship/internship into the degree. While UGC's progammes for skill-based education emphasized on developing skilled workforce with vocational education, this emphasis on Internship / Apprenticeship is to improve the employability of students in the general stream.

UGC had introduced 'Guidelines for Internship/Research Internship for Under Graduate Students, in February, 2024 which were aimed to improve employability skills and could help in generating competency, capability, professional working skills, expertise, and confidence among the students for employability and developing interest/passion for research.

Moreover, UGC has also introduced the "UGC Guidelines for Apprenticeship Embedded Degree Programme (AEDP), 2025," aiming to bridge the gap between academic learning and industry requirements. This innovative initiative is expected to integrate apprenticeships into undergraduate courses across higher educational institutions (HEIs), enhancing students' employability and preparing them for real-world job roles.

The Apprenticeship Embedded Degree Programme aligns with the vision of the NEP 2020, which emphasises holistic and practical learning. By combining academic knowledge with hands-on industry experience, the AEDP is expected to create a more job-ready workforce. The programme not only equips students with industry-relevant skills but also fosters greater collaboration between the educational and industrial sectors, reducing the education-to-employment gap.

The All-India Council of Technical Education (AICTE) has made internship a mandatory component of model curriculum approved by AICTE. AICTE has developed guidelines for implementation of apprenticeship embedded Degree/Diploma programmes. These programs have apprenticeship component embedded therein to make the students industry ready and to enhance employability of students.

The Ministry of Education in collaboration with IIT Madras and eminent Industry Partners have launched SWAYAM Plus platform on 27th February 2024, expanding its offerings to identify and include courses aligned with industry needs and to enhance learners' employability. The platform provides high-quality learning and certification programs from the leading industry and academia to the students/ learners which can help them in reskilling and upskilling and making them employment ready.

The Ministry of Education provides apprenticeship through "National Apprenticeship Training Scheme (NATS)", which is a flagship scheme of Government of India, for on-the-job training and skilling of Indian youth. It is implemented by the Ministry of Education through four regional Boards of Apprenticeship Training/Practical Training (BoATs/BoPT) located at Mumbai, Kanpur, Chennai and Kolkata. Under the Scheme, apprenticeship and training is provided to fresh graduates, diploma holders and degree apprentices.

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