

Research Paper

## Integrating Vocational Education and Skill Development in Higher Education Under NEP-2020: Pathways and Prospects

Dr. Moomin Jan<sup>1\*</sup>, Dr. Shafeeqa Khurshid<sup>2</sup>

### ABSTRACT

By incorporating vocational education into the regular curriculum from elementary school through higher education, the National Education Policy (NEP) 2020 represents a revolutionary change in India's educational system. NEP 2020 seeks to improve employability, promote holistic development, and give students industry-relevant competencies by emphasizing the integration of theoretical knowledge and practical skills. By 2025, the policy aims to provide at least 50% of students with exposure to the workforce through programs like industry partnerships, apprenticeships, skill labs, and incubation centers. To fill skill gaps and support Aatmanirbhar Bharat's mission, it encourages subject-choice flexibility, interdisciplinary learning, and collaborations with regional businesses. The policy faces obstacles such as inadequate infrastructure, societal prejudice against vocational training, a lack of qualified trainers, and little industry-academia collaboration, despite providing substantial opportunities for innovation, entrepreneurship, and inclusivity. Strong stakeholder collaboration, better training facilities, and changes in societal attitudes are necessary for effective implementation. If properly implemented, NEP 2020 could produce a workforce that is self-sufficient and competitive on a global scale, establishing vocational education as a key component of India's socioeconomic development.

**Keywords:** *Aatmanirbhar Bharat, Industry Collaboration, Vocational Education, Skill Development, and NEP 2020*

This initiative is regarded as a watershed moment in the educational reforms of the country. It seeks to overhaul and revamp all the aspects of education, right from its structure to regulation as well as its governance. It is considered a comprehensive framework for transforming the education system in India, with the objective of addressing the evolving needs and challenges of the country's educational landscape. The policy encompasses various reforms and initiatives that aim to promote holistic development, equitable access, and quality. Policy has been formulated on five foundational pillars like access, quality, equity, affordability, and accountability. NEP-2020 emphasizes exposing 50% of students to the vocational training with practical skills, thereby ensuring students' careers and readiness for the real-life challenges. NEP-2020 targets integrating vocational education into mainstream education, as students can pursue at least one vocation and be

<sup>1</sup>Sr. Assistant Professor, Department of Education, South Campus, University of Kashmir

<sup>2</sup>Assistant professor, Department of Political Science, GCOE Canal Road Jammu

\*Corresponding Author

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exposed to several others by using a variety of strategies such as facilitating collaboration with local industries, establishing incubation centers or skill labs, and offering shorter-term certificate courses. The vocational education will be integrated into all school and higher education institutions in a phased manner over the next decade. Focus areas for vocational education will be chosen based on skills gap analysis and mapping of local opportunities. NEP 2020 emphasizes the importance of apprenticeships and internships to provide hands-on experience and industry exposure to students. This approach allows learners to apply theoretical knowledge in real-world settings, fostering practical skills development and enhancing employability. It aims to develop all-round capacities of the learner through an integrated education.

### ***NEP 2020's Vocational Education and Skill Development***

To bridge the gap between theoretical knowledge and practical skills, NEP 2020 places a high priority on vocational education and skill development. The NEP 2020 suggests a paradigm shift to eliminate the division and allow students to investigate career options in various subject areas by combining vocational education with general education at all levels. Depending on their interests and abilities, the students will select vocational courses. Developing specialized skills in a variety of fields, including engineering, information and communication technology, and health care, is the goal of this individualized approach. The NEP 2020 aims to expose at least half of all students in school and higher education systems to vocational education by 2025, according to Parvanda. In this regard, NEP 2020 emphasizes the importance of progressively integrating vocational education into mainstream training for all educational institutions through several tactics, including fostering collaboration with local industries and establishing incubation centers or skills labs offering both short-term and long-term certificate courses.

In order to coordinate curriculum development and student internships, NEP 2020 promotes collaboration between academic institutions and businesses. In keeping with the goal of Aatmanirbhar Bharat (self-reliant India), the NEP 2020 seeks to develop a skilled labor force. For NEP 2020 to be implemented, difficult problems like curriculum development, teacher preparation, and industry collaborations need to be fixed. Therefore, its successful implementation could create a generation of skilled and employed youth who will make a substantial contribution to Aatmanirbhar Bharat (self-reliant India).

As determined by states and local communities and as mapped by local skilling needs, "In Grades 6–8, every student will take an enjoyable course that gives a survey and hands-on experience of a sampling of important vocational crafts, such as carpentry, electric work, metal work, gardening, pottery making, etc According to the 12th Five-Year Plan (2012–2017), less than 5% of Indian workers between the ages of 19 and 24 had formal vocational training, compared to 52% in the USA, 75% in Germany, and up to 96% in South Korea. These figures only serve to highlight how urgent it is to accelerate the expansion of vocational education in India. NEP 2020 mandates that at least 50% of students receive vocational education during their school and college years. The mainstream of education. NEP 2020 also set up four independent verticals through the Higher Education Commission of India (HECI) to carry on the task of regulation, accreditation, managing funding and financing, and framing the expected learning outcomes for higher educational programs. Higher education institutions will offer vocational education either on their own or in partnership with industry and other institutions. With NEP 2020, students are encouraged to choose subjects based on their interests and aptitudes. The program allows students to select

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vocational courses according to their passions. It also aims to develop specialized skills among students in a variety of fields, such as finance, healthcare tourism, engineering, and more.

### ***Vocational Education: A Perspective on the Future of Work***

Vocational education in India is a new educational system that has attempted to give young people the skills they need to enter the new job market as part of NEP 2020. The goal of NEP 2020 is to equip our students with contemporary, 21st-century skills. Students will have the chance to skillfully get ready to take on the challenge of industrial improvement in this setting. Giving students the skills they need to adjust to the quick changes in technology and innovations is essential for the successful implementation of NEP 2020. This calls for a modern educational system to update its antiquated pedagogy and curricula. Employers' demands for skills will significantly change as a result of the changes suggested by NEP 2020, especially as the workplace becomes more technological and skill-based. A systematic curriculum change backed by strong skills—which are crucial in both current and future work environments—is necessary to meet the demands of the modern workforce.

### ***NEP-2020's recommendations for skill development and vocational training.***

1. Students enrolled in all bachelor's degree programs, including four-year holistic bachelor's programs, should have access to vocational courses.
2. Short-term certificate programs in various skills, including soft skills, will also be permitted at higher education institutions.
3. Institutions of higher learning will establish incubation centers in collaboration with businesses.
4. Vocational education will be provided by higher education institutions, either independently or in collaboration with businesses.
5. Technical and vocational education will be a component of a broader holistic education model, and focus areas will be selected based on skills gap analysis and mapping of local opportunities.
6. By incorporating "Lokvidya" knowledge into vocational education programs, students will have access to it.
7. In addition to industry participation, the Ministry of Education will establish a National Committee for the Integration of Vocational Education (NCIVE) to supervise this endeavor and should allocate funds to further this integration.
8. A General Education Program (GEP), also known as "graduate attributes," will be established to outline the expected learning outcomes for higher education programs.

By establishing interdisciplinary research centers, including those for the humanities and social sciences, startup incubation centers, centers for frontier research, technology development centers, and centers for industry-academic linkage, higher education institutions must concentrate on certain innovations and research. To improve students' learning experiences, all higher education institutions must have certain basic infrastructure and facilities, such as labs, libraries, clean drinking water, blackboards, clean restrooms, offices, and adequate teaching supplies. Additionally, each classroom must have enough space and access to the newest educational technology. The NCIVE has encouraged information sharing between institutions (through NCIVE-established protocols) to broaden the reach of VE. Instead of focusing on rote learning and dense content, NEP promoted experiential and skill-based learning, allowing students to learn holistically. The goal of the policy is to eliminate the hierarchy of social status and incorporate vocational education

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programs into regular schooling. To maintain quality, vocational education should start early in middle and secondary school and flow smoothly into higher education.

### ***Importance of Vocational Education:***

- Accompany their degree with extra skills.  
There is a way to achieve sustainability and generate jobs.
- Foster virtues and values such as the dignity of work.
- Encourage students to participate in their education. Instill both academic knowledge and life skills.
- Improve employment prospects.
- Encourage students to work for themselves.
- They choose a profession according to their passions.

### ***Important Things to Think About for Stakeholders***

NEP 2020 acknowledges the necessity of offering students vocational training and places a strong emphasis on holistic education in all schools and higher education establishments. A small number of policies focused on integrating vocational education, developing a hybrid vocational ecosystem, integrating vocational education into higher education, and making vocational education more market-oriented. Important factors to take into account for different stakeholders:

#### **1. Students**

- Numerous points of entry and departure to enable students to pursue vocational education in search of a career.
- Promoting diversity and inclusivity is crucial to boost the nation's potential.

#### **2. Teachers:**

- Raise the demand for qualified vocational instructors: NEP requires schools to have a sufficient number of teachers in all subject areas, but especially in vocational education. Additionally, schools will hire community members with expertise in vocational fields.
- A greater availability of highly qualified instructors

#### **3. Educational Technology (Edtech) players:**

- Companies will have the chance to work with educational institutions to offer courses that teach students fundamental skills.
- Higher education institutions that offer vocational programs will also work with Edtech players to offer joint degree or certificate programs.
- Additionally, players will have the opportunity to help with language-appropriate materials and technological tools.

#### **4. ITI, Polytechnics, and industries:**

- To collaborate schools and institutions of higher learning.

### ***Challenges***

Incorporate skill-based education into the higher education sector, the Indian government has launched a number of significant initiatives. However, the following section covers a number of issues that demand further attention. There is a lack of communication between employers' insights and employer, the educatee, and the educator—remain disconnected from

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each other. The teaching staff and trainers are receiving insufficient and delayed quality training perception bias regarding skill-based and vocational education still exists in India.

Another issue is inadequate architecture and infrastructure. Machinery, tools, equipment, skill-appropriate curricula in collaboration with industry experts, and other support systems are all lacking, as are sufficient and high-quality skill labs and laboratories.

The number of skill universities and other institutions is out of proportion to the size of the Indian diaspora's population.

The successful implementation of NEP 2020 necessitates a substantial investment in infrastructure, equipment, and resources for well-equipped vocational training facilities. It's possible that many educational institutions, particularly those in rural areas, lack the resources needed to provide quality vocational training.

There is also an Insufficient number of experienced educators: Due to the fact that only a small portion of students engage in technical education As a result of the education system, there are fewer skilled educators available to support the large number of students who wish to continue their education As a result, competent individuals are scarce in institutions. By luring talented people to serve as a teachers at technical and vocational schools, the government could resolve this problem. Teachers should be fairly compensated, and the builders of these mechanism should be valued by society.

Technically skilled individuals are not being hired for high-paying positions. The majority of students are therefore uninterested in vocational education. In India, the caste system was founded on labor or work. Our culture is deeply ingrained with the roots of work division, which date back thousands of years to the caste system. Individuals who earn a living through manual labor and other handicrafts are not valued.

Lack of vertical mobility: students with vocational qualifications are not allowed to enroll in higher education.

Vocational education is still viewed as inferior to mainstream education because of all these issues.

And NEP 2020 seeks to gradually incorporate vocational education programs into regular education in all educational institutions to address this issue and eliminate social status hierarchy.

### ***Consequences and Suggestions***

To address these issues in the Indian context, the following implications and recommendations have been put forth for academic institutions, legislators, regulators, and other relevant stakeholders to consider and implement.

All-Government, business, and academia must engage in all-encompassing cooperation. develop, and execute the strategies within the current educational system, these stakeholders must consciously collaborate in three different ways.

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Through -integrated learning activities, experiential learning, internships, and industrial mentoring programs can strengthen and sustain industry-institute engagement, resulting in a strong industry-academia connection. To increase the capacity for skill development, it is necessary to place a strong emphasis on cooperative, complementary, and creative models like the Public-Private Partnerships (PPP) model. This will allow the public and private sectors to play a larger role.

It is imperative for educational institutions to guarantee that all of their teaching staff members have the necessary credentials and work experience, have received training prior to teaching, and have been pursuing ongoing education. In this sense, India should establish a significant number of teaching - training institutions.

Increased efforts should be made to make multidisciplinary education and training systems more flexible. This means that in order to develop transferable skills among students, study and work should be integrated into mainstream education.

The government ought to play a major role in increasing awareness of skill and vocational education. Additionally, by raising awareness and consciousness among the general public, society can change its mindset and traditional perception of skills and vocational education. The higher education system's skill-based education and training system should be significantly strengthened, and adequate funding will be provided to support the training architecture and infrastructure.

India's higher education system is incorporating and expanding skill education and training based on a "dual system".

### **CONCLUSION**

Although the aforementioned discussion suggests that vocational development programs have been crucial to their economic growth, they have not been particularly effective in developing nations like India. Despite increased government attention to this sector recently, the results remain subpar. quality of the institutions and the absence of connections between industries and vocational development providers are two of the main issues facing the program. Programs for vocational development could help achieve this goal by giving people employable skills. Finding, creating, and developing vocational courses that satisfy the common standards and skill requirements established at the national level will improve the quality of vocational education. Higher levels should be included in NSQF and NHEQF, and the government should support this by establishing mechanisms for acknowledging them. The NEP 2020 correctly recognizes the importance of achieving the objectives of lifelong learning and access. However, to guarantee the holistic development of learners, it must be backed by strong structural changes. As originally intended by the NSQF, this will subsequently increase the likelihood of skilled human capital moving both domestically and internationally.

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