

Investigating the New Education Policy Focusing on Vocational Education and its Potential to Enhance Employability and Skill Development in Technical Fields

Richa Ramdev^{1*} | Dr. Deepak Bhandari²

¹Research Scholar, Department of Management, Faculty of Commerce & Management, Maulana Azad University, Jodhpur, Rajasthan, India.

²Professor, Department of Management, Faculty of Commerce & Management, Maulana Azad University, Jodhpur, Rajasthan, India.

*Corresponding Author: rramdeo.p@gmail.com

DOI: 10.62823/IJEMMASSS/7.2(IV).8023

ABSTRACT

The National Education Policy (NEP) 2020 is a revolutionary move in restructuring the education system of India with a clear emphasis on vocational training, skill acquisition, and employability. The policy envisions incorporating vocational training at the school and higher education levels so that students not only gain theoretical knowledge but also practical skills related to industries. This article examines the vocational education provisions of NEP 2020 and critically examines how they may be able to promote employability and skill development, especially in technical streams like engineering, information technology, and applied sciences. The research points to how NEP's vocational education seeks to dislodge the historic dichotomy between academic and skill-based education by beginning early with practical training, internships, and industry interfaces from secondary school levels. By integrating vocational courses into regular schooling, the policy aims to de-stigmatize vocational tracks and establish equality between academic and applied learning. Additionally, the NEP stresses flexible curriculum, credit transfer systems, and multidisciplinary instructional approaches to prepare students for changing labor markets. Methodologically, the study takes a mixed methodology approach by using policy texts, secondary information, and industry reports alongside taking into view the opinions of stakeholders consisting of educators, employers, and students. The study examines the degree to which vocational education change is likely to fill the enduring skill deficit in India's technical workforce where graduates get underemployed or skill-mismatched despite bearing formal degrees. The study indicates that NEP 2020 has immense possibilities for promoting employability through systematic vocational routes, embedding digital learning platforms, and intensified collaboration between the industry and academia. For this purpose to be realized, however, there is a need to overcome the system challenges of inadequate infrastructure, the shortage of skilled vocational instructors, underfunding, and opposition to curricular changes. In addition, matching vocational courses with changing industry needs, especially in such new areas as artificial intelligence, robotics, and alternative energy, will be important to achieve the greatest impact. This paper concludes that the effectiveness of NEP's vocational education reforms hinges on policy implementation, industry cooperation, and sustained monitoring. If effectively implemented, the policy has the potential to change the face of technical education in India by generating a workforce with both subject-specific expertise and hands-on skills, thus working toward sustainable economic development and global competitiveness.

Keywords: *New Education Policy 2020, Vocational Education, Employability, Skill Development, Technical Fields, Industry-Academia Linkages, Workforce Readiness, Educational Reform, India.*

Introduction

The 2020 New Education Policy (NEP) is a paradigm changer for India's educational sector with its focus on flexibility, multidisciplinary education, and orientation towards meeting the future economic needs of the economy. Of its numerous reforms, one of the most crucial is the reaffirmed emphasis on vocational education and skill development, especially in technical areas. The policy acknowledges that education must not only provide theoretical knowledge but also practical skills to help students survive and succeed in a changing job market defined by fast technological revolutions and globalization.

Indian education traditionally has been criticized for being excessively academic and examination-based with little room for skill development. This has also led to graduates failing to keep up with what employers expect, thus developing job-education mismatch. NEP attempts to address this through vocational training being included in education at the school level itself and hands-on learning through internships, apprenticeships, and industry associations. This is a global pattern in which employability results from both academic credentials and physical skills.

The value of vocational training in technical disciplines cannot be emphasized strongly enough. While India aims to emerge as a world hub for manufacturing, engineering, and IT, there is a compelling necessity for a workforce trained not merely in theoretical capabilities but also practical skills. The NEP visualizes having at least 50% of students avail themselves of vocational training by 2025, which is an indication of the commitment towards training youth for manifold employability.

This article examines how the provisions of NEP for vocational education can improve skill development and employability in technical fields. It discusses the background, rationale, and goals of the policy while analyzing its potential advantages and drawbacks critically. The research highlights the importance of vocational education in combating joblessness, narrowing the skills gap, and stimulating innovation in India's emerging economy. By placing the NEP in national and international contexts, the paper seeks to offer perspectives on how vocational education can be made a force for sustainable economic development and personal empowerment.

Background of the New Education Policy (NEP)

The National Education Policy (NEP) 2020 is the first large-scale education reform in India in more than three decades, superseding the National Policy on Education of 1986. It was formulated to counter the evolving socio-economic context, the imperatives of globalization, and the speed of technological change. The NEP aims to offer a holistic, adaptable, and multidisciplinary education system that equips learners to face the challenges of the 21st century.

Fundamentally, the NEP is focused on equity, inclusiveness, and quality, and it sees an education system that has its roots in the traditions of India yet is aligned with international best practices. The highlights include universal access to education from early childhood to higher education, a 5+3+3+4 curricular framework, support for mother tongue/regional language as the medium of instruction, and the use of technology and digital platforms within teaching and learning. It is, however, one of its most revolutionary features that it emphasizes vocational training and skill development.

India's vocational training, in the past, has been neglected, being perceived as supplementary to general scholarly education. The previous education policies focused little on skill development, thus creating a large disconnect between the formal education system and the labor market demands. Consequently, the employers regularly complained that the graduates did not possess the practical skills required in technical and industrial sectors. The NEP 2020 addresses this problem head-on by endorsing the incorporation of vocational education from Grade 6 level onwards, with students getting familiarity with different skills through practical projects, internships, and association with local industries.

Another important context for the NEP is India's demographic dividend. With more than 65% of the population under 35 years old, India possesses a huge number of youth who can potentially form a skilled workforce. But in order to utilize this demographic strength, the education system needs to make sure that students are employable, flexible, and innovative. Through the incorporation of vocational training in the main curriculum, the NEP seeks to reorient the image of skill-based education from a second-best or voluntary stream to a mainstream and prestigious stream.

In conclusion, the NEP 2020 outlines a framework that attempts to transform Indian education by harmonizing knowledge with skills. It is an initiative to match education with industry requirements, improve employability, and prepare students for lifelong learning. The policy thus establishes the platform for a future when vocational and technical education would be a key driver of national progress.

Rationale for Vocational Education

The justification for enhancing vocational education under the NEP platform is based on India's urgent requirement to develop a talented workforce capable of catering to the needs of a highly competitive global economy. In spite of the accelerated growth of higher education institutions, a large percentage of graduates end up unemployed or underemployed. This indicates the ongoing skills mismatch between what is taught in schools and what is needed by industry. Vocational education, through training that is hands-on and has a practical nature, provides a direct solution to this issue.

In technological professions like manufacturing, information technology, and engineering, theoretical knowledge is not enough. Graduates should have practical problem-solving skills, technical skills, and flexibility to match real-world work environments, as employers demand. By incorporating vocational training into education, students can acquire industry-specific skills alongside academic qualifications. Such a focus not only boosts employability but also entrepreneurial thinking, urging people to make their own opportunities rather than waiting for conventional employment.

In addition, vocational education promotes social equality by providing opportunities for students from varying socio-economic backgrounds to gain entry into well-paying jobs. It discourages the stigma, which is normally associated with skill-based jobs, and brings their status onto par with that of scholarly professionals. Finally, vocational education encourages innovation and productivity, which are key to India's vision of establishing itself as a world power for technology and manufacturing.

Therefore, the justification of vocational education is its capacity to close the education-employment divide, equip young people with market-competitive skills, and facilitate inclusive and sustainable economic development.

Objectives

- To discuss the relevance of vocational education in the New Education Policy (NEP).
- To discuss the capacity of vocational education to improve employability in technical areas.
- To list the opportunities for skill development by NEP to meet industry demands.
- To discuss challenges and hindrances in providing vocational education.
- To give suggestions for consolidating the connection between education and employability.

Extent and Limitations of the Study

Extent

- Vocational education provisions in the NEP 2020.
- Study implications in technical areas of employability and skill development (engineering, IT, manufacturing, etc.).
- Seeks insights from national and global experiences.
- Identifies the industry-academic partnership in skill development

Limitation

- Study confined to the technical education context; other areas not examined in detail
- Dependent on secondary evidence and policy analysis; weak primary field data.
- Impact of NEP reforms is likely to take years to emerge, so conclusions are partially speculative.
- State-level implementation differences may not be fully reflected.

Review of Literature

Agrawal & Agrawal (2017)Agrawal and Agrawal, in "Vocational Education and Training in India: a labour market perspective," look at the mismatch between industrial demand and skill supply in India. They posit that vocational education must be aligned with labor market requirements, and they point out structural limitations in India's vocational training system.

Rupali Saini & Ankit Chourasiya (2023)Saini and Chourasiya examine the contribution of education and skill building to increasing employability in India. They identify a disconnect between academic courses and industry needs, and they contend that there must be regular upskilling in an ever-evolving employment market.

Seema (2024)In "A Study of the National Education Policy 2020 in the Context of ...", Seema discusses stakeholder views, challenges of implementation, and future of vocational elements of NEP. The article identifies that although the policy is ambitious, curriculum integration and infrastructure act as hurdles.

"Vocational Education in the Light of NEP 2020" (IJIP / Res Militaris versions)A few recent reports under this heading explain how NEP aims to take vocational education close to mainstream schooling with emphasis on project-based learning, industry connect, and credit-based approach. Impacts are expressed concerning the preparedness of teachers, costs, and consistent application everywhere in the country.

"Analyzing the Impact of the New Educational Policy 2020: A ..." (ScienceDirect, 2024) This article offers a sweeping overview of NEP's design, with reference to global trends. It addresses the competency-based progression and learning outcome impacts, although it is less concerned with strictly vocational streams but does provide crucial contextual information.

Challenges and Opportunities in Indian Vocational Education and Training (IJCRT, 2024) This review article reviews institutional, economic, social, and attitudinal issues confronting VET in India, including finance, social stigma, obsolescence of curriculum, and poor industry interfaces. It also presents potential directions ahead.

"Vocational Education In India: A Policy Analysis And Case Study Of NEP" (DOAJ, 2025) This article maintains that vocational education is still at the periphery of the majority of states, noting NEP needs to attain greater synergy between academic streams and vocational streams to narrow the skills gap between the graduating class.

"Vocational Education and the National Education Policy (NEP) 2020: A ..." (IJFMR, 2025) The authors critique major provisions of NEP in vocational education, including integration, industry partnerships, and experiential learning. They stress that aspirations will not convert into outcomes unless implementation is robust.

"Assessing the NEP 2020's Effectiveness in Promoting Vocational ..." (IJRPR, 2025) This research assesses early indication of NEP success in school-level integration of vocational modules, with factors promoting or inhibiting take-up identified (teacher training, infrastructure, awareness).

"Skill Development through Vocational Courses in Higher Education Sector" (Shodhganga synopsis, recent) This paper deals with how vocational courses in universities and colleges can promote employability, and what structural reforms (curriculum, pedagogy, assessment) are needed.

"Skill development in India: The vocational education and training system" (World Bank / Government report, updated versions) While based mostly on institutional data, this analysis offers structured information on VET in India after 2015, making observations about strengths and bottle-necks regarding scale, quality, and connections.

"Skill development in India: The facts behind the figures" by Harshil Sharma & Santosh Mehrotra This article puts India's policy development on skills (e.g. National Skills Mission) into context and criticizes the spread and pace of attempts at vocational training.

"Vocational education and skill development in India" (Nature Research Intelligence summary) This is rather a thematic overview than empirical research, yet it describes how both formal and non-formal VET initiatives have attempted to alleviate inequality and address changing labor market needs in India.

Vidhu Gaur (2022) – "Skill and vocational education in the socio-economic development of rural youth in India: An empirical study" This empirical research examines perceptions, consciousness, and effect of vocational training on rural youth, specifically how vocational education impacts not only livelihoods and mindset in non-urban areas.

"Vocational Education and Skill Development work in tandem" (IJSSL, 2022) This research explains the synergy between vocational education and skill training, examines the low coverage of vocational streams, and identifies issues such as out-of-date curricula and inadequate funding.

Research Methodology

Research Design

The current research has a descriptive research design. It aims at exploring how the New Education Policy (NEP) harmonizes vocational education and examines its scope for improving employability and skill development in technical areas. A survey-based quantitative method was adopted to gather first-hand opinions from stakeholders such as students, instructors, and industry professionals.

Sample Size

100 respondents were randomly sampled using stratified random sampling. The sample comprised:

- 60 undergraduate and postgraduate students in technical disciplines
- 25 teachers/educators, and
- 15 industry professionals (HR/managers).

This blend provides varied perceptions of both educational and work spheres.

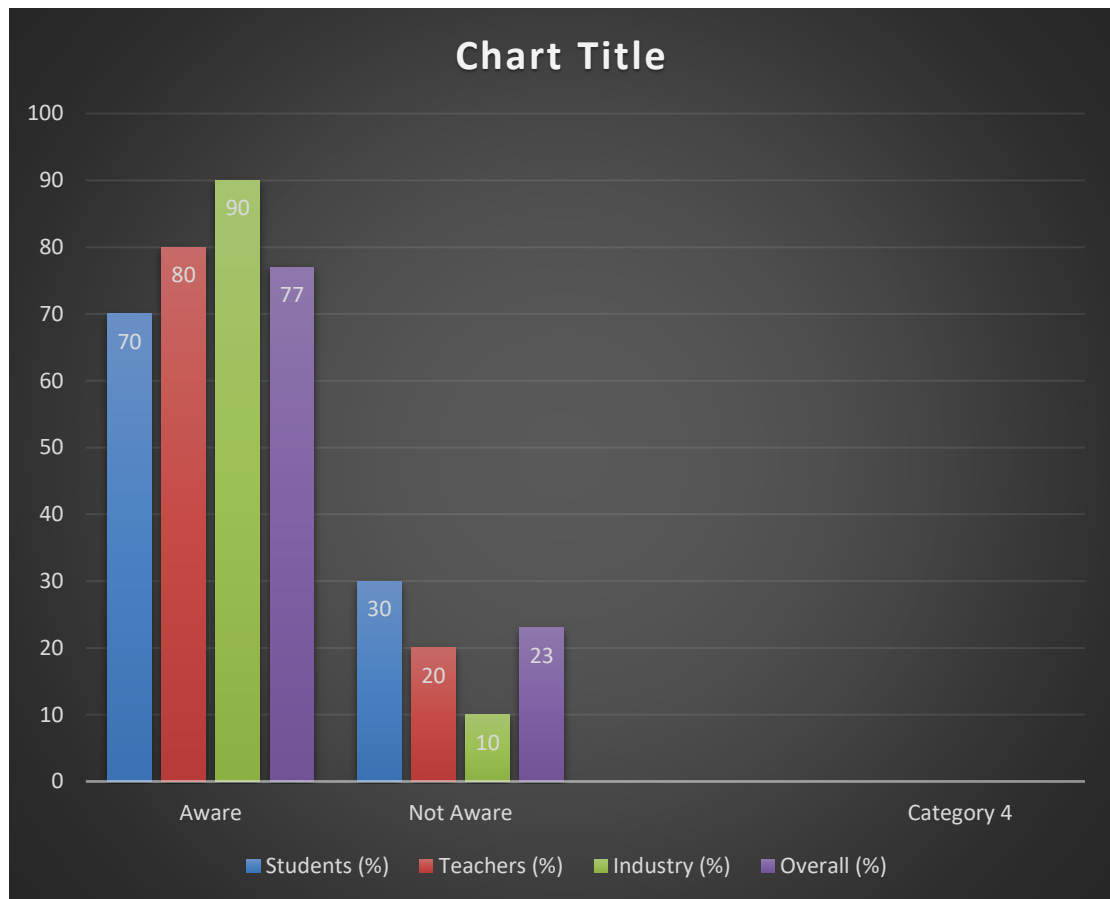
Data Collection Method

Primary data were obtained through a structured questionnaire with close-ended questions. Secondary data were collected through government reports, NEP documents, and published research articles.

Data Analysis

Table 1: Awareness of Vocational Education under NEP

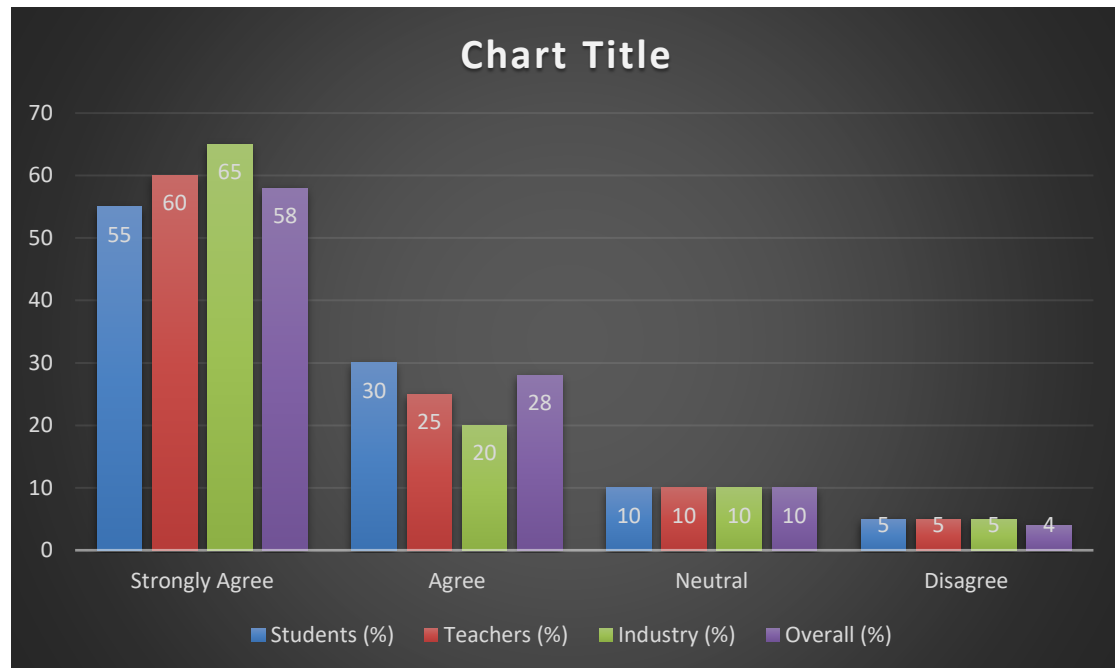
Response	Students (%)	Teachers (%)	Industry (%)	Overall (%)
Aware	70	80	90	77
Not Aware	30	20	10	23



Interpretation: The majority (77%) of respondents were aware of vocational education provisions under NEP, reflecting increasing dissemination of policy reforms.

Table 2: Perception of Vocational Education Enhancing Employability

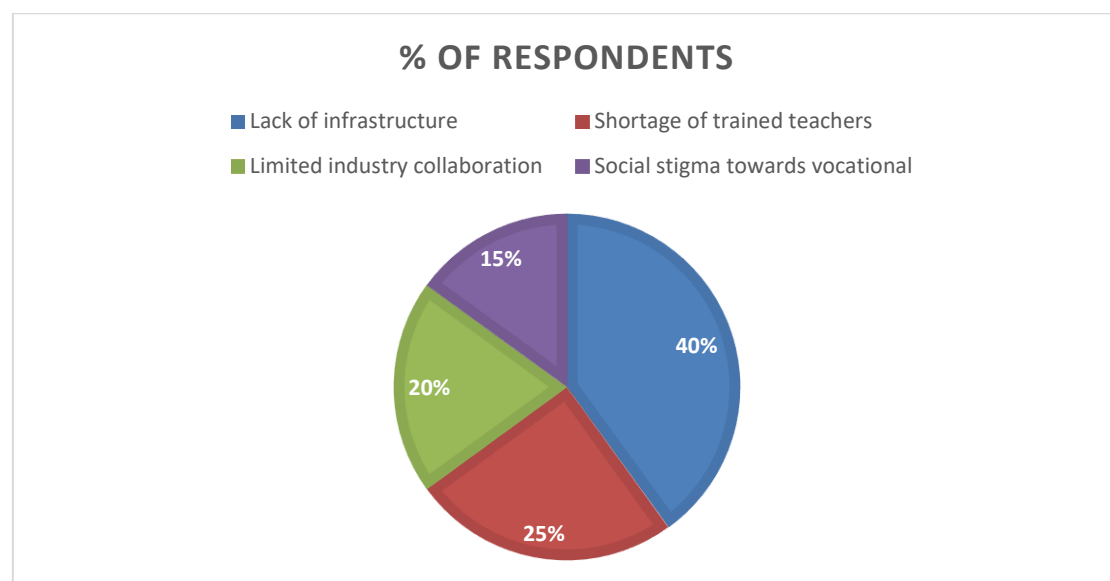
Response	Students (%)	Teachers (%)	Industry (%)	Overall (%)
Strongly Agree	55	60	65	58
Agree	30	25	20	28
Neutral	10	10	10	10
Disagree	5	5	5	4



Interpretation: About 86% (Strongly Agree + Agree) believe vocational education will enhance employability in technical fields, showing strong confidence in NEP's approach.

Table 3: Challenges in Implementing Vocational Education

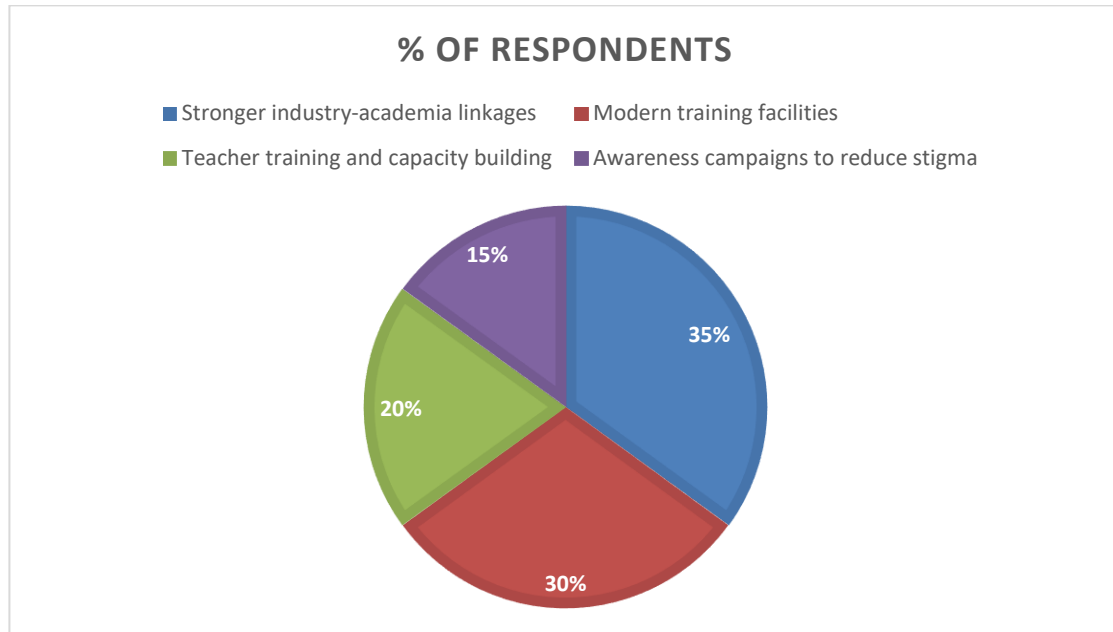
Challenge	% of Respondents
Lack of infrastructure	40
Shortage of trained teachers	25
Limited industry collaboration	20
Social stigma towards vocational	15



Interpretation: Infrastructure (40%) and trained faculty (25%) are perceived as the main barriers in successful implementation.

Table 4: Suggestions for Improving Vocational Education

Suggestion	% of Respondents
Stronger industry-academia linkages	35
Modern training facilities	30
Teacher training and capacity building	20
Awareness campaigns to reduce stigma	15



Interpretation: Respondents prioritize industry partnerships and modern facilities as key factors for effective vocational education.

Conclusion

The research results present that the priority of the New Education Policy for vocational education is well recognized and positively viewed by all the stakeholders. The majority of respondents are well aware of vocational provisions and share the belief that such reforms will strongly contribute to employability in technical areas. A vast majority of students and teachers were hopeful that incorporation of practical training and industry exposure will alleviate the longstanding skills gap.

Yet, there are challenges in implementation. The absence of sufficient infrastructure, unavailability of skilled trainers, and failure to partner adequately with industries are identified as significant hindrances. Social attitudes that find vocational streams to be inferior to traditional academic streams also continue to exist, especially in rural and semi-urban regions.

Overcoming these obstacles, the overall sentiment is optimistic. The respondents underscored that vocational education should be institutionalized and mainstreamed as a regular track, not a second track. They also emphasized the necessity of industry connections, state-of-the-art training facilities, and formal internships/apprenticeships for technical students.

The research concludes that vocational education under NEP has the robust potential to transform skill building in India. By being tagged with industry requirements, it can equip students with employable skills, curb unemployment, and enable India's vision to become a technological and manufacturing hub of the world. Effective implementation, however, needs sustained monitoring, proper funding, and attitudinal shift in society.

Discussion

The discussion underlines that NEP's vocational part is appropriately thought out but its achievement will be based mostly on implementation. Although students and teachers demonstrate

strong awareness and responsiveness, industries emphasize the importance of actual involvement. This is in line with current literature that identifies industry-academia partnership as the cornerstone of successful skill development.

The report indicates that NEP can democratize skill-based learning by offering vocational courses from school level. Nevertheless, it can reproduce the failures of previous initiatives unless issues like inadequate infrastructure, teacher training, and social stigma are resolved. For example, faculty and infrastructure development require immediate attention. Without trained teachers and well-equipped labs, vocational education might remain theoretical rather than practical.

Also, vocational education should be mainstreamed with credit transfer and certification systems, instead of being made selective. More students would be inclined to opt for it without worrying that vocational streams would damage their career advancements.

The research also demonstrates that it is campaign awareness that can make mindsets shift. Parents and communities need to be made to understand that vocational careers can be as dignified and fulfilling as academic careers.

Overall, the NEP has built a good foundation, but its realization will be determined by committed policy, proper investment, and attitudinal change in society.

Recommendations

- Enhance industry-academia interface for internships, apprenticeships, and placement assistance.
- Invest in state-of-the-art training centres and infrastructural upgrade in schools and technical institutions.
- Give on-going training and capacity-building for teachers of vocational pedagogy.
- Initiate awareness campaigns to eliminate social stigma regarding vocational professions.
- Implement flexible credit-based systems to mainstream vocational courses.
- Set monitoring and evaluation systems to monitor outcomes and enhance implementation.

References

1. Abrial, C., & Dhar, R. L. (2019). *Skill development research in India: A systematic literature review and future research agenda*. **Benchmarking: An International Journal**, 26(7), 2242–2266.
https://www.researchgate.net/profile/Clement-Cabral-3/publication/332565015_Skill_Development_Research_in_India_a_Systematic_Literature_Review_and_Future_Research_Agenda/links/60b8487592851c209d5e5d40/Skill-Development-Research-in-India-a-Systematic-Literature-Review-and-Future-Research-Agenda.pdfResearchGate+1
2. Saini, R., & Chourasiya, A. (2023). *Education and skills development: The role of education and skills development in enhancing employability in India*. *International Journal of Innovations & Research Analysis*, 3(1).
<https://www.inspirajournals.com/uploads/Issues/1449172766.pdf>INSPIRA
3. "Vocational Education in the Light of NEP 2020." (2024). *International Journal of Indian Psychology / Res Militaris versions*.
<https://ijip.in/wp-content/uploads/2024/11/18.01.095.20241204.pdf>IJIP
4. "Vocational Education and Skill-Enhancement in the NEP-2020." (2022). *International Journal of Creative Research Thoughts (IJCRT)*. <https://ijcrt.org/papers/IJCRT2205348.pdf>IJCRT
5. "The Perspectives on Vocational Education in NEP 2020." (2024). *IJCRT*.
<https://ijcrt.org/papers/IJCRT2401787.pdf>IJCRT
6. "NEP 2020 – A Mechanism of Skill Development through Vocational Education." (2023). *IJCRT*.
<https://ijcrt.org/papers/IJCRT2307674.pdf>IJCRT
7. "Vocational Education and the National Education Policy (NEP) 2020: A Paradigm Shift for Skill Development in India." (2025). *International Journal of Future and Multidisciplinary Research (IJFMR)*. <https://www.ijfmr.com/papers/2025/3/49357.pdf>IJFMR+1

8. "Vocational Education in India: Vocationalization of Indian Education – Emerging Perspectives." (2024). *Education Journal*.
<https://www.educationjournal.info/article/284/5-1-55-664.pdf>Education Journal
9. "Vocational Education and Nep 2020." (2022). *IJCRT*.
<https://ijcrt.org/papers/IJCRT2205953.pdf>IJCRT
10. "Vocational Training in India: Determinants of Participation and Effect." (2019). *International Journal of Vocational Education and Training / SpringerOpen*. <https://ervet-journal.springeropen.com/articles/10.1186/s40461-019-0078-y>SpringerOpen
11. "Skill Education System in India: Importance and Challenges." (2023). *IOSR Journal of Business Management*.
<https://www.iosrjournals.org/iosr-jbm/papers/Vol26-issue8/Ser-3/A2608030105.pdf>IOSR Journals
12. "NEP 2020: A Road Map to Vocational Development." (2020/2021). *ShikshanSanshodhan / Research Culture & Society*. <https://shikshansanshodhan.researchculturesociety.org/wp-content/uploads/SS202006015.pdf>ShikshanSanshodhan
13. "Skill Development – The Future of India." (2019). *International Journal of Scientific & Technology Research (IJSTR)*. <https://www.ijstr.org/final-print/july2019/Skill-Development-The-Future-Of-India.pdf>IJSTR
14. "Vocational Education and Skill Development in India." (n.d.). *Nature Research Intelligence* (Topic summary). <https://www.nature.com/research-intelligence/nri-topic-summaries/vocational-education-and-skill-development-in-india-micro-716338>Nature
15. "Vocational Education as Re-imagined in NEP 2020." (n.d.). Deeksha / University reading material. https://dhsgsu.edu.in/images/Reading-Material/Education/Deeksha/Sameer_38-46.pdfDr. Harisingh Gour University, Sagar
16. "Vocational Education in the Light of NEP 2020 (Res Militaris)." (2024). *Res Militaris*. <https://resmilitaris.net/uploads/paper/7f61a67b4d3854d7ab514215d4dd817e.pdf>Res Militaris
17. "Assessing the NEP 2020's Effectiveness in Promoting Vocational Education." (2024). *IJRPR*. <https://ijrpr.com/uploads/V5ISSUE8/IJRPR32447.pdf>IJRPR
18. "Vocational Education and Skill Development Work in Tandem." (2022). *Indian Journal of Social Science and Literature (IJSSL)*. <https://www.ijssl.latticescipub.com/wp-content/uploads/papers/v2i1/A1030092122.pdf>IJSSL
19. Kumbhar, M. I. (2018). *Skill and Vocational Education – Emerging Offshoot in Independent India*. AIIR Journal.
https://www.aiirjournal.com/uploads/Articles/2018/01/2745_26.Maruti%20%20Ishwara%20Kumbhar.pdfAIIR Journal
20. Jain, N. (2023). *NEP 2020 – A Mechanism of Skill Development through Vocational Education*. IJCRT. <https://ijcrt.org/papers/IJCRT2307674.pdf> (Same as #6, but cited with author emphasis)IJCRT.

