NEP-2020 A ROAD MAP FOR FUTURE A SPECIAL REFERENCE TO RESEARCH AND HIGHER EDUCATION

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ABSTRACT

The New Education Policy announced by Government of India (NEP 2020) was a welcoming change and fresh news amidst all the negativities surrounding the world due to the challenges posed by Covid-19 pandemic. The announcement of NEP 2020 was purely unexpected by many. The changes that NEP 2020 has recommended were something that many educationists never saw coming. Though the education policy has impacted school and college education equally, this article mainly focuses on NEP 2020 and its impact on Higher Education. This paper also outlines the salient features of NEP and analyses how they affect the existing education system. In Higher Education, NEP, 2020 provides valuable insights and recommendations on various aspects of education that include moving towards multidisciplinary and holistic education, institutional autonomy, promotion of quality research through establishment of National Research Foundation, continuous professional. It focus on mainly ECCE, GER and also focus on research and higher education.

Keywords: NEP, Professional Enrollment, Collegiate, GER Etc.

I.   INTRODUCTION

NEP-2020 aims at creating a conducive ecosystem to catalyse and energize research and innovation in HEIs. The special focus is on seeding and nurturing the culture of research and innovation at universities and colleges through funding support, guidelines/policies and establishing innovation and research centres.

The Indian government's New Education Policy (NEP 2020) is a positive development in this Covid-19 pandemic. The first NEP for India occurred in 1968, followed by NEPs in 1986 and 2020 under Narendra Modi. India passed the NEP 2020 on July 29, 2020. It aspires to reform education and make the nation more educated. K Kasturirangan, the former head of ISRO, led the NEP 2020 policy committee. The ruling BJP pledged to modernize Indian education in its election manifesto (Saha Mushkan, 2020). NEP 2020 was a fulfilled promise.

NEP 2020 A ROAD MAP FOR FUTURE:

National Education Policy 2020 has been announced on 29.07.2020. The National Education Policy 2020 proposes various reforms in school education as well as higher education including technical education. A number of action points/activities for implementation in school education as well as higher education are mentioned in the National Education Policy 2020. Details of the salient features of NEP 2020 are as follows-

Ensuring Universal Access at All Levels of schooling from pre-primary school to Grade 12;

Ensuring quality early childhood care and education for all children between 3-6 years;

New Curricular and Pedagogical Structure (5+3+3+4);

No hard separations between arts and sciences, between curricular and extra-curricular activities, between vocational and academic streams;

Establishing National Mission on Foundational Literacy and Numeracy;

Emphasis on promoting multilingualism and Indian languages; The medium of instruction until at least Grade 5, but preferably till Grade 8 and beyond, will be the home language/mother tongue/local language/regional language.

Assessment reforms - Board Exams on up to two occasions during any given school year, one main examination and one for improvement, if desired;

Setting up of a new National Assessment Centre, PARAKH (Performance Assessment, Review, and Analysis of Knowledge for Holistic Development);

Equitable and inclusive education - Special emphasis given on Socially and Economically Disadvantaged Groups (SEDGs);

A separate Gender Inclusion fund and Special Education Zones for disadvantaged regions and groups;

Robust and transparent processes for recruitment of teachers and merit based performance;

Ensuring availability of all resources through school complexes and clusters;

Setting up of State School Standards Authority (SSSA);

Exposure of vocational education in school and higher education system;

Increasing GER in higher education to 50%;

Holistic and Multidisciplinary Education with multiple entry/exit options;

NTA to offer Common Entrance Exam for Admission to HEIs;

Establishment of Academic Bank of Credit;

Setting up of Multidisciplinary Education and Research Universities (MERUs);

Setting up of National Research Foundation (NRF);

'Light but Tight' regulation;

Single overarching umbrella body for promotion of higher education sector including teacher education and excluding medical and legal education- the Higher Education Commission of India (HECI)-with independent bodies for standard setting- the General Education Council; funding-Higher Education Grants Council (HEGC); accreditation- National Accreditation Council (NAC); and regulation- National Higher Education Regulatory Council (NHERC);

Expansion of open and distance learning to increase Gross Enrolment Ratio (GER).

Internationalization of Education

Professional Education will be an integral part of the higher education system. Stand-alone technical universities, health science universities, legal and agricultural universities, or institutions in these or other fields, will aim to become multi-disciplinary institutions.

Teacher Education - 4-year integrated stage-specific, subject- specific Bachelor of Education

Establishing a National Mission for Mentoring.

Creation of an autonomous body, the National Educational Technology Forum (NETF) to provide a platform for the free exchange of ideas on the use of technology to enhance learning, assessment, planning, administration. Appropriate integration of technology into all levels of education.

Achieving 100% youth and adult literacy.

Multiple mechanisms with checks and balances will combat and stop the commercialization of higher education.

All education institutions will be held to similar standards of audit and disclosure as a 'not for profit' entity.

The Centre and the States will work together to increase the public investment in Education sector to reach 6% of GDP at the earliest.

Strengthening of the Central Advisory Board of Education to ensure coordination to bring overall focus on quality education.

NEP, 2020 aim to increase the GER to 100% in preschool to secondary level by 2030 whereas GER in Higher Education including vocational education from 26.3% (2018) to 50% by 2035.

The Central Sector Scheme Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT) was launched in 2014 to address comprehensively all issues related to Teacher Training/ Capacity Building and Professional Development of Teachers. Under the components, the total 95 Centres were established throughout the country through which faculties/Teachers have been trained. Currently, The Standing Finance Committee has appraised the Scheme and recommended for continuation till 2025-2026 with the total outlay of Rs. 493.68 crore. Under the PMMMNMTT Scheme Centres are established on the basis of the proposals received from education institutions, their screening by Screening Committee and approval by Project Approval Board.

NEP 2020 A SPECIAL REFFERENCE TO RESEARCH AND HIGHER EDUCATION :-

The importance of research is to increase human knowledge, enrich science, generate progress, improve quality of life, promote innovation, and share scientific findings with the public.NEP-2020 aims at creating a conducive

ecosystem to catalyse and energize research and innovation in HEIs. The special focus is on seeding and nurturing the culture of research and innovation at universities and colleges through funding support, guidelines/policies and establishing innovation and research centres.

In Higher Education, NEP, 2020 provides valuable insights and recommendations on various aspects of education that include moving towards multidisciplinary and holistic education, institutional autonomy, promotion of quality research through establishment of National Research Foundation, continuous professional ...NEP 2020 promotes skill-based education, fostering critical thinking and problem-solving. Inclusivity is a key focus, offering equal opportunities for diverse learners. Emphasis on local languages and cultures provides a global perspective. Improved teacher training and increased funding for better infrastructure. The National Education Policy (NEP) of 2020 has established a specific objective of introducing skilling and vocational education to 50% of school students by the year 2025, with the intention of extending this exposure to nearly all students by the year 2030.With the quickly changing employment landscape and global ecosystem, it is becoming increasingly critical that children not only learn but more importantly learn how to learn. Education thus, must move towards less content, and more towards learning about how to think critically and solve problems, how to be creative and multidisciplinary, and how to innovate, adapt, and absorb new material in novel and changing fields. Education must develop the foundational capacities 'of literacy and numeracy and 'higher-order' cognitive capacities, such as critical thinking and problem-solving – but also social, ethical, and emotional capacities and dispositions. Providing such foundational learning in the early years ensures that all children, regardless of their socio-economic background, are given equal opportunity to perform well in schools and are better prepared to improve their academic achievements and quality of life. This warrants a system that will deliver the foundational skills that will allow youngsters to embrace changes and orient them towards the future world of work.

In a parallel context, rethinking lifelong learning is equally essential in the context of ongoing changes. The frontloading of skills through initial training for a single lifetime qualification may no longer be sufficient in the context of rapidly changing skill needs. The value of introducing lifelong learning is implicit in achieving the targets of Sustainable Development Goals (SDGs), particularly those relating to education, economic growth, and inequality. Also, the future of work warrants the need for formal recognition of a universal entitlement to lifelong learning and the establishment of an effective lifelong learning system. For lifelong learning to be an entitlement, governments must broaden and reconfigure institutions such as skills development policies, employment services, and training systems to provide workers with the time and financial support they need to learn.

There is now a growing realization of the need to educate and train people with the necessary skills for the future of work, the importance of opportunities to re-and upskill throughout their working lives, and assist them to successfully adapt to change.

This would involve:

Building capacity for promoting multiple and flexible pathways into lifelong education and training that enhance the linkage and transition between all levels of education, including school education, TVET as well and higher education.

Designing education programs and learning experiences that help students acquire and demonstrate competencies required to adapt to the future of work and respond to the fast pace of technological developments and innovations such as Artificial Intelligence, Big Data analytics, machine learning, Internet of Things, etc. that demand renewal of curricula and pedagogy. The emergence of AI presents both challenges and opportunities of an unprecedented kind. As per the report of the G20 Education Working Group, top-ranking countries in PIACC have only between 21-25 % of workers with high literacy skills needed to outperform AI of today. One can imagine how this would impact the global workforce in the future and it also determines the ask of upskilling systems all over the world.

As per UDISE data of 2021-22, there are currently 14.89 lakh schools in India, catering to the education of 26.52 crore students. Out of these, only 0.13 lakh schools are providing vocational education under NSQF in secondary and higher secondary grades to 17.84 lakh students per year.

Challenges of implementation of vocational education in schools

These challenges encompass various dimensions and require comprehensive solutions to ensure the successful integration of vocational education into the Indian education system.

A significant challenge lies in altering the prevailing mindset that predominantly favors traditional academic pathways over vocational education. There exists a deep-seated societal bias towards certain professions and a misconception that vocational education is inferior to mainstream academic pursuits.

Integrating vocational education seamlessly into the existing curriculum poses a challenge due to the need to strike a balance between core academic subjects and vocational training. Ensuring that vocational courses are relevant, up-to-date, and aligned with industry demands is crucial.

Maintaining a consistent and high-quality standard of vocational training across diverse regions and institutions is a formidable challenge. Ensuring that instructors possess the requisite industry experience and teaching skills is essential for providing students with valuable practical knowledge.

Establishing and maintaining well-equipped vocational training facilities demands significant investment in infrastructure, equipment, and resources. Many educational institutions, especially in rural areas, may lack the necessary resources to offer effective vocational training.

Adequately training teachers to deliver vocational education requires specialized programs that equip them with both subject knowledge and pedagogical skills. This necessitates a comprehensive teacher development framework tailored to vocational education.

Developing standardized assessment and certification methods that accurately evaluate vocational skills is challenging. Ensuring that certifications are widely recognized and valued by employers and higher education institutions is crucial for the scheme's success.

Ensuring the sustainability of the vocational education scheme over the long term requires consistent policy support, funding allocation, and monitoring mechanisms to track outcomes and make necessary adjustments.

What can be done?

The National Education Policy (NEP) of 2020 has established a specific objective of introducing skilling and vocational education to 50% of school students by the year 2025, with the intention of extending this exposure to nearly all students by the year 2030. Currently, the enrollment figure for the Vocationalization of School Education (VSE) stands at 15 lakhs.

In pursuit of this goal, it is imperative to provide students with training not only in technical skills but also in foundational and transversal skills. To achieve this vision, a thorough reconsideration of the rationalization of school education is required. This entails a process of experimentation with various models, which may involve a blend of digital and physical instructional approaches. The aim of this hybrid approach is to ensure both accessibility and quality.

In order to realize this transformation, the formulation of a comprehensive program becomes essential.

Within the framework of this program, several key components are envisaged:

Capacity Building of Policy Implementers

In Collaboration with State Skill Development Missions and District Skill Committees.

Presenting Skill Gap Findings at District Skill Committee Meeting, Porbandar.

Initiating the capacity-building process requires active involvement from state leadership to ensure that plans are created to meet their unique resources and requirements.

Allocating resources to establish and upgrade dedicated infrastructure within schools for the effective delivery of skill training.

Identifying the best fit of vocational education courses/skills based on demand and mapping local resources that can facilitate industry exposure and bag-less days for students. Collaborations with nearby industries, vocational training centers, and community organizations can be leveraged.

Identifying and repurposing existing vocational infrastructure within districts to supplement the vocational education framework.

Selection of schools based on factors such as management, geographical location, student demographics, and available resources allows for systematic testing and adaptation of the program.

Conduct orientation programs for school leadership, including principals, administrators, and teachers. This training should emphasize the significance of integrating vocational skills with academic learning, fostering a holistic educational approach.

Standardizing processes and systems is crucial for the smooth delivery of vocational education. This involves creating comprehensive guidelines for curriculum integration, student assessment, industry collaboration, and practical training incorporation. Establishing well-defined pathways that seamlessly connect vocational education to higher education and industry is essential. Collaborative ties with institutions like ITIs, polytechnics, and BVoc programs facilitate a cohesive educational journey for vocational learners.

Creating a cadre of trainers for schools

In Collaboration with Foundations, Teaching Institutions, PSSCIVE and NCERT.

Conducting Capacity Building Session of School Principals in Gujarat.

Develop a structured training curriculum that encompasses both pedagogical techniques and the latest technological advancements in vocational education, including AR-VR methods of teaching.

Conduct intensive training sessions for vocational trainers, focusing on instructional strategies, industry alignment, skill development, and classroom management.

Upon successful completion of the training program, trainers should receive a special certification that recognizes their proficiency in delivering vocational education using advanced teaching methodologies.

Institute a performance assessment mechanism to evaluate the effectiveness of vocational trainers. Assessments should encompass teaching skills, curriculum delivery, industry integration, and student engagement.

Trainers who demonstrate exceptional performance in assessments should be given preference in selecting their project locations. This ensures that high-performing trainers are strategically placed in positions where their impact can be maximized.

Establish a compensation framework that offers market-competitive salaries to vocational trainers. This not only attracts skilled educators but also recognizes their critical role in the project's success.

Provide trainers with exposure opportunities to relevant industries and vocational institutions. This exposure enriches their understanding of industry practices, thereby enhancing their ability to impart practical knowledge to students.

Update the training curriculum to incorporate the latest advancements in vocational education technology, including augmented reality (AR) and virtual reality (VR) methods. Offer specialized training modules to familiarize trainers with AR-VR tools, enabling them to create immersive and interactive learning experiences for students.

Equip trainers with the skills needed to set up vocational training labs within schools. This involves understanding technical requirements, safety measures, and the efficient utilization of lab equipment.

Provide training on fair and effective assessment methods, ensuring trainers are proficient in evaluating students' vocational skills accurately and objectively.

Train vocational trainers to effectively communicate the benefits of vocational education to school leadership, parents, and the community. This involves highlighting the practical relevance and career prospects associated with vocational skills.

Equip trainers with the skills to interact with school leadership, advocating for the integration of vocational education into the broader academic curriculum.

Ecosystem Enablement and Digitization

Digital Storytelling in Classrooms

In Collaboration with the Government, CSR, NGOs, and Ed Techs

(1) Physical Infrastructure

Establish vocational training labs within schools, equipped with modern tools and equipment relevant to

different vocational domains. Creation of a knowledge bank of sector-specific lab specifications that can be set up under various combinations to suit different budgets. Tech-enablement through simulators and AR-VR-based training.

(2) Content and Curriculum

Develop comprehensive textbooks tailored to specific vocational domains, providing a blend of theoretical knowledge and practical applications. Create digital content, including interactive simulations, videos, augmented reality (AR), and virtual reality (VR) modules, enhancing student engagement and comprehension. Ensure content is accessible in multiple Indian languages to cater to diverse learners.

(3) Supporting School-to-Work Transition and Pathways

Offer career guidance services to help students align their vocational choices with their strengths and interests.

Provide psychometric tests to assist students in identifying their aptitudes and making informed vocational decisions.

Establish clear pathways for students transitioning from school to work, offering options such as internships, apprenticeships, and higher education.

Organize industry visits, and invite guest lecturers, to expose students to real-world environments, industry insights, and practical skill applications.

(4) Quality Assurance through Monitoring, Evaluation, and Learning Practices

Combination of human and tech-enabled systems to ensure compliance.

Implement a robust monitoring and evaluation framework to track the progress and outcomes of programs and individual students.

Regularly assess the effectiveness of vocational labs, curriculum delivery, content engagement, and assessments.

Use data-driven insights from assessments to make informed improvements and refinements to the curriculum and processes.

Child tracking over a period of five years to assess the impact of the program.

(5) Perception and Mindset

Launch targeted outreach campaigns to raise awareness about the benefits of vocational education among students, parents, educators, and the community.

Advocate for vocational education as a pathway to lucrative and fulfilling careers, emphasizing its alignment with industry demands and the potential for entrepreneurship.

Rebrand vocational education by highlighting success stories of individuals who have excelled in their careers through vocational training.

Gamify skill training by incorporating interactive elements and challenges into the curriculum, making learning engaging and enjoyable for students.

Encourage participation in skill competitions, starting from local school-level contests and progressing to regional, national, and international competitions such as India Skills and WorldSkills.

Promote recognition of excellence among vocational students through such competitions.

Collaborate with influencers, including successful vocational education graduates, industry professionals, and public figures, to endorse the value of vocational education.

Leverage social media platforms, webinars, and workshops featuring influencers to inspire students and debunk misconceptions surrounding vocational education.

Utilize influencers to showcase the practical and aspirational aspects of vocational careers.

Inclusion

Gender inclusion in vocational education is pivotal for creating a workforce that reflects equality and diversity. Traditionally, certain vocational fields have been dominated by one gender, perpetuating stereotypes and limiting opportunities. Embracing gender inclusion means breaking these barriers, and encouraging both men and women to explore diverse career paths.

In the future of work, gender-inclusive vocational education is not just a goal; it's a pathway to building a fair and thriving professional landscape for everyone, regardless of gender identity.

Public Private Partnerships and Innovative Financing

Foster collaborations between government bodies, educational institutions, and private industry players to share resources, expertise, and responsibilities.

Engage private sector partners to provide financial support, infrastructure development, curriculum design, and industry exposure, enhancing the quality and relevance of vocational education.

Leverage private sector expertise to align curriculum with industry needs, ensuring that graduates are well-equipped for the job market.

Explore innovative financing models such as impact investing, social bonds, and corporate philanthropy to secure funding for vocational education.

Encourage private companies to allocate a portion of their CSR funds to support vocational education initiatives, creating a positive societal impact while aligning with business goals.

Collaborate with corporate partners to establish vocational training centers, fund scholarships, or sponsor skill competitions.

Establish skill development funds in partnership with industries, where a portion of industry revenue is allocated toward vocational education and skill enhancement programs.

To make this vision a reality requires collective action. Policymakers, educators, industry leaders, and communities must collaborate to implement and strengthen vocational education initiatives. We need to build a future where every individual has the tools to contribute meaningfully to the workforce, ensuring a prosperous and inclusive society for generations to work space

II.   SUGGESTIONS

It was found that one of the main objectives of NEP 2020 is to increase student's enrollment in all educational institutions such as elementary school, professional and higher education by 2030. To achieve that it has suggested progressive reform in the existing education and governance systems. Key recommendations of the NEP include: (i) redesigning the structure of school curriculum to incorporate early childhood care and education, (ii) curtailing dropouts for ensuring universal access to education, (iii) increasing gross enrolment in higher education to 50 percent by 2035, and (iv) improving research in

So above these should be completed on time and there is no child can free from these facilities

III.   CONCLUSION

New era in the Indian education system, focusing on holistic development, multidisciplinary learning, flexibility, technology integration, teacher empowerment, and assessment reforms. higher education in India is a complex and diverse landscape, with each state facing its unique challenges. While some states have made significant progress, there is still a need for reform and improvement in the higher education sector across the Country. policy is successful, it will be important to monitor its implementation and evaluate its impact over time. The New Education Policy (NEP) 2020 marks a significant turning point in the history of education in India. The policy aims to transform the education system in India to make it more inclusive, learner-centered, and accessible to all. NEP 2020 emphasizes the importance of interdisciplinary and multidisciplinary education, pedagogical reforms, and improved governance in higher education institutions. The policy has the potential to significantly improve the quality of education in India and provide students with 2020, and researches.

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