NEP 2020: An Effort Towards Transforming India's Education Landscape

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Abstract: For any developing country, education is one of the most vital needs. For India too, ranked at 33rd position for its education system in the world as of 2020, education is of the utmost priority. With the dynamicity of technology and the world around with developments such as COVID-19 and expanded globalization, the future of work in all spheres is transforming and the education models too need to be reassessed to keep up with the global needs. According to an estimate, India will have the highest population of students between the ages of 18 to 22 in the world by 2025. This further calls for the need to revamp the education system. With the objective of creating a nation which is more productive and cohesive, the government of India announced the newest National Education Policy (NEP 2020) as a landmark reform in July 2020. Through this paper, the background of the policy and the various transformations introduced at different educational stages has been elaborated. This is followed by a discussion on the key initiatives of the policy towards addressing the challenges for women in education and a critical review of the implementation of NEP-2020.

Keywords: Education, NEP-2020, Pedagogy, Policy, Research, Teaching

1. INTRODUCTION

The educational institutes of any country have the responsibility to empower and liberate its citizens and education therefore serves as a critical instrument towards bringing about social change [1]. For India to live up to its rich history and education culture, and to rise as a knowledge hub in the present world, it is further needed to strengthen innovation and quality research in the established educational institutes.

Since 2015, efforts have been ongoing for a new education policy in India. After multiple consultations from all education sector's stakeholders on the draft NEP of 2019, the National Education Policy was unveiled by the Ministry of Human Resource Development (MHRD) on 29th July 2020. It has resulted from the democratic exercise of taking in suggestions from lakhs of villages, districts and all the states and union territories in a bottom up approach [2]. After 34 years of the last policy being implemented, this is India's first education policy that was introduced in this century and the third policy since our independence. The need and relevance of NEP-2020 can be assessed from this very fact [3].

The released NEP document of 66 pages covers all the aspects of education and is very inclusive in its approach. The coverage is impressively wide, well in time and very futuristic, having the potential of transforming India's education landscape [4]. In keeping with Indian government's national programs like Skill India, Make in India, Atma-Nirbhar (self-reliant) India, NEP-2020 also addresses India's need for robust solutions for its economic growth and development [3]. Under NEP-2020, the emphasis is on developing essential 21st century skills of problem solving, creative and critical thinking, digital literacy, experimental learning and encouraging competency among students such that they become ready to actively contribute to the society and the industry [2].

2. MAJOR INTERVENTIONS

Some of the major changes introduced in NEP-2020 are:

- MHRD, the Ministry of Human Resource Development is renamed to Ministry of Education in India, for directing the focus towards education alone, instead of considering it merely as human resource development's next step.

- Establishing Higher Education Commission of India (HECI) as a single central academic regulator and accreditor for HEIs (higher education institutes), instead of having separate AICTE (All India Council for Technical Education) and UGC (University Grant Commission) bodies [3].

- As shown in figure 1, the educational stages from school to higher education have also been revised in NEP-2020. Schools' education structure of '10+2' has been replaced

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with the '5 +3+3+4' design, drawing more focus on hands-on learning and improving the teaching learning outcome quality by introducing vocational education in the form of internship to teach skills from an early phase in life for a holistic development of the student [5].

- By strengthening the infrastructure facilities across all dimensions, NEP-2020 envisions the access level of education to all, as measured in gross enrolment ratio (GER), to increase from the current 28% at school level and 5% in higher and professional education to 50% and 20% respectively by 2030 [6].
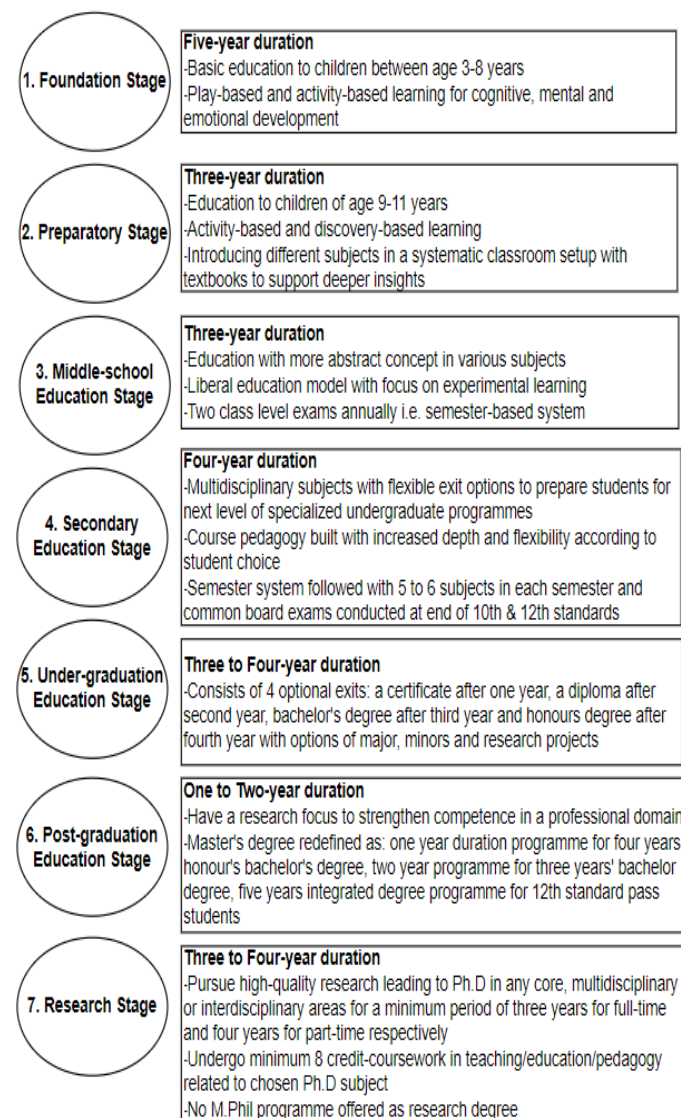
1. Foundation Stage
Five-year duration
-Basic education to children between age 3-8 years
-Play-based and activity-based learning for cognitive, mental and emotional development

2. Preparatory Stage
Three-year duration
-Education to children of age 9-11 years
-Activity-based and discovery-based learning
-Introducing different subjects in a systematic classroom setup with textbooks to support deeper insights

3. Middle-school Education Stage
Three-year duration
-Education with more abstract concept in various subjects
-Liberal education model with focus on experimental learning
-Two class level exams annually i.e. semester-based system

4. Secondary Education Stage
Four-year duration
-Multidisciplinary subjects with flexible exit options to prepare students for next level of specialized undergraduate programmes
-Course pedagogy built with increased depth and flexibility according to student choice
-Semester system followed with 5 to 6 subjects in each semester and common board exams conducted at end of 10th & 12th standards

5. Under-graduation Education Stage
Three to Four-year duration
-Consists of 4 optional exits: a certificate after one year, a diploma after second year, bachelor's degree after third year and honours degree after fourth year with options of major, minors and research projects

6. Post-graduation Education Stage
One to Two-year duration
-Have a research focus to strengthen competence in a professional domain
-Master's degree redefined as: one year duration programme for four years honour's bachelor's degree, two year programme for three years' bachelor degree, five years integrated degree programme for 12th standard pass students

7. Research Stage
Three to Four-year duration
-Pursue high-quality research leading to Ph.D in any core, multidisciplinary or interdisciplinary areas for a minimum period of three years for full-time and four years for part-time respectively
-Undergo minimum 8 credit-coursework in teaching/education/pedagogy related to chosen Ph.D subject
-No M.Phil programme offered as research degree

Fig. 1. Educational Stages in NEP-2020 [5]

3. SCHOOL EDUCATION SYSTEM

Besides introducing changes in the structure of school education as discussed in previous section, the pedagogy and curriculum have also been updated in NEP-2020 [5]:

- Generation of digital or electronic contents (e-contents) is promoted.

- Remote access to labs i.e. setting up of virtual labs for computer-based experimentation of practicals.

- Encourage participation in sports and related physical activities.

- Push for more involvement in conduction and participation of co-curricular and extra-curricular activities.

- Providing counselling to students for imparting valuable life lessons and help them work through personal or academic problems.

- Training sessions for teachers of over 50 hours in use of technology aids for teaching-learning and pedagogy.

- Training of parents to better understand and deal with the students' needs.

- Maintaining not more than 25:1 pupil to teacher ratio for effective teaching-learning.

- Specialized educators for teaching divyangs (students with disabilities).

- Arrangement for providing breakfast along with the on-going mid-day meal scheme.

4. HIGHER EDUCATION SYSTEM

Presently, the higher education system is very fragmented, having a strict separation among disciplines, narrowing down the students' study areas according to their specialization, early on in life. There is also low emphasis on learning outcomes and cognitive skills' development for students. The faculty has unsatisfactory mechanisms for career progression and encounter lack in proper research funding. HEIs too face issues like having limited autonomy, suboptimal leadership and regulatory system. Some highlights from NEP 2020 in this regard are [7]:

- Renewing the curriculum, teaching pedagogy and methods of assessment.

  ➢ Making flexible-structured degree programmes offering different designs and durations.

  ➢ Following a graded accreditation system to support and encourage colleges in a transparent manner.

- ➤ Focusing on establishing innovative technology development centers and incubation centers providing more links between industry and academics.

- ➤ Making available counseling and support centers for ensuring emotional and mental well-being of students.

- Setting up multi-disciplinary institutes and universities for providing increased access, more inclusion and supporting cross-disciplinary research.

  - ➤ Phasing out single stream HEIs over time and all HEIs to become multi-disciplinary by 2040.

  - ➤ Increasing GER in HEIs, having exposure to vocational education, to 50% by 2035.

  - ➤ Incorporating STEM i.e. science, technology, engineering and mathematics with arts and humanities for a holistic development in undergraduate education.

  - ➤ Running HEIs as ODL (Open Distance Learning) or in a blended mode, optionally.

  - ➤ Extending financial aids and merit incentives to needy students.

- Giving autonomy to institutes with a single regulator and independent boards governing the HEIs.

  - ➤ Outlining and stating of the curriculum framework with the help from the four verticals of HECI (the autonomous umbrella body); and functioning of HECI in the manner of transparent public disclosure [8].

  - ➤ Replacing the complex nomenclature of HEIs like 'affiliating technical university' or 'deemed to be university' by simply 'university', if criteria is fulfilled according to the set norms.

  - ➤ Moving gradually towards full administrative as well as academic autonomy.

- Awarding faculty promotions and appointments based on teaching merit, research work and service records.

  - ➤ Providing basic facilities like sufficient teaching supplies, proper labs, latest educational tools and technologies to enable better teaching-learning outcomes.

  - ➤ Providing online training to teachers through technology platforms and offering mentoring through creation of a large pool of exemplary senior faculty members.

  - ➤ Granting autonomy along with accountability.

  - ➤ Offering positions of leadership, and not letting them remain vacant.

- Increasing inclusion and equity in the higher education system.

  - ➤ Promoting and preserving India's cultural wealth, offering cultural identity to students right from young age by using Indian local languages as the programmes' instruction medium.

  - ➤ Offering cultural identity

  - ➤ Conducting outreach programs for various scholarships and higher education opportunities.

  - ➤ Ensuring gender-sensitization and enforcing no discrimination rules.

  - ➤ Developing bridge courses for students who fall behind because of disadvantaged background.

- Providing funding for peer-reviewed research and pushing for active research initiatives to be taken up in colleges and universities.

  - ➤ Recognizing outstanding contributions and progress in research work and mentoring institutes in all disciplines of research.

- Controlling the rise in commercialization of education

  - ➤ Encouraging private HEIs to adopt fee determination systems having a progressive structure.

  - ➤ Urging private HEIs to offer more scholarships.

  - ➤ Developing transparent methods of determining fee for institutes and fixing upper limits too, based on the institute type and accreditations.

- Internationalization

  - ➤ Getting more international students to enroll and study in Indian institutes and universities.

  - ➤ Encouraging high ranking universities from India to establish their campuses in other countries, and also facilitate high performing universities of the world to in India.

  - ➤ Permitting the credits earned in foreign universities to be counted towards awarding a degree in an Indian HEI [1].

5. PROFESSIONAL EDUCATION

Highlights of professional education stage in India as per NEP 2020 are:

- Institutes offering general or professional courses are to gradually grow into universities/clusters by 2030.

- Reviving agricultural education with associated disciplines in order to revive enrolment in agricultural universities.

- Setting up technology parks and promoting technology's use and integration, as education and technology share a bidirectional relationship.

- Boosting innovative research by linking academics with industry/market. Fostering such closer collaboration in technical education fields of architecture, engineering, hotel management etc. for building skilled graduates and technicians.

- Offering bilingual law education in English and the state's regional language for future advocates and judges to embrace best practices and technologies.

- Integrating healthcare educational programmes with the role requirements and aiming at both preventive as well as community medicine.

- Using school campuses and public library spaces after working hours and on weekends/ days off to educate non-enrolled adults. Community members who are qualified can volunteer at such AECs (adult education centres).

- Focussing on teaching-learning crucial life skills like healthcare awareness, financial literacy, some vocational skills and engaging in holistic development at AECs.

- Expansion of institutes/universities that put in efforts towards preservation and study of classical Indian literature and languages. Digitally documenting all Indian languages and associated culture and arts and offering scholarships to people studying arts and culture.

- Developing e-content in regional language and uploading on online platforms creating digital repositories accessible to all students. Adapting to and incorporating new technologies including AI (artificial intelligence), smart boards, educational hardware and software tools etc., i.e. teaching initiatives based on ICT (information and communication technologies).

- Coordinating rigorous trainings on effective pedagogy and online content creation, and use of online examination tools encompassing rubrics and standard assessments [5].

6. WOMEN AND EDUCATION

Improving the literacy levels in females has been known to have extensive impacts on their health and economic independence. This furthers enhances the whole community's prospects since research has shown that women invest their income more towards their family, educated women can communicate better about their domestic life and health conditions, and also show more civic participation. Decrease in population growth, that significantly leads to addressing of environmental issues, can also be attributed to educating women, who constitute nearly half of the country's population. Because of these far-reaching effects of women's education, neglecting their education, and empowerment in general, does

not bode well for any nation's development, and that is why India also needs to stress more on alleviating the gender inequalities in the education sector and ensure the provision of quality education for all.

A. Current Predicaments

In India, a higher percentage of girls as compared to boys do not attend any educational institute because they are engaged in either household duties or begging or are dependents who aren't working. Following are the main barriers to women's education and thus their development and empowerment in India [9]:

- Lack of proper infrastructure and no toilets in schools-the poor state of sanitary facilities is unfavorable for girls' school attendance as open defecation poses psychological and physical challenges.

- Economic constraints- poor financial conditions force females to drop out of education institutes.

- Gender stereotyping- deep rooted societal barriers based on gender profiling and segregation, and biased curriculum which is inclined for women to take up programmes relating to their domestic roles instead of more scientific and productive roles.

- Other traditional taboos- parents are reluctant in sending their daughters to school, particularly considering the shortage of female teachers, and some pull them out of school early to have a helping hand in household chores or to marry them away young or simply because of societal norms which suggest that investing in a girl's education doesn't earn them any returns.

The literacy rates across the country are not uniform and there is a severe discrepancy in access levels to education for men and women amongst rural and urban areas also. In recent years, through the government initiatives of RTE (Right to Education) and Samagra Shiksha Abhiyan, India has improved its elementary education enrolment rates. However, it fails to address the primary issue of young girls dropping out to be engaged in unpaid household or agricultural work, as there are no provisions in the law banning this. McKinsey's 2018 report on gender parity [10] presented that a massive 770 billion USD can be added to India's GDP by 2025 by promoting females' education and participation in the workforce. Education will aid women in paving their own path and to contribute more towards the economy and the society as a whole, curbing the vicious cycle of negative typecasting. Towards this, NEP 2020 puts forward the following solutions:

B. Solutions offered by NEP 2020

- Undertaking initiatives to limit the dropout rates, bring back dropped out children back into the education system