Reformation Of Indian Education System – A Critical Review

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Abstract.
Since time immemorial India has made rich and commendable contributions to the field of education. Modern education system was introduced by Macaulay in the 20th century and since then, Indian education followed his propositions. Any reforms or amendments made in education policy were based on Macaulay’s system only. The National Education Policy, 2020 attempts to reform the whole system of education right from early childhood education to research studies. A radical shift in the education system is the need-of-the-hour, especially when the world is transforming into a digital world dominated by technology. Moreover, the disparity observed in the performance of premier institutions with respect to other institutions and the position of Indian universities in world ranking necessitates the reformation of the education system. This paper attempts to critically analyse all the components of the National Education Policy, 2020 and its projected impact on the system of education in India.

Keywords: Indian Education System, Education policy, Multilingual education, Academic credit bank, Higher education

1. INTRODUCTION
Since time immemorial India has made rich and commendable contributions to the field of education. Education system in ancient India dates back to Vedic period (1700 – 700 B.C.) where the Gurukul system was followed. In this period, teachers enjoyed high esteem and special status and had freedom to choose their disciples (Chand, 2015). In the Buddhist period of education (600 B.C.), a new doctrine of religious education was practiced. Monasteries were the place of education and overall development of children, i.e., physical, mental and emotional development, was focused as the prime most important factor (Cabezon, 1995). Education system has seen many changes during the medieval period spanning from 10th century A.D. to the middle of the 18th century (Maheshwari, 2012). Though religion dominated, the period has seen many reforms such as establishment of schools and universities, complete authority to the institutions, emphasis on discipline, plethora of subjects - mathematics, astronomy, grammar, polity and politics, arts and literature, vocational
education etc. The modern education system was introduced by Macaulay in the 20th century. Since then, the Indian education system has followed the propositions of the Macaulay system of education (Pandya, 2015).

In this paper, an attempt is made to elaborately review the various components of the National Education Policy, 2020. The paper is organized in 5 sections excluding introduction, viz., review of literature, need for new education policy, NEP 2020 proposals for school education, NEP proposals for college education and major challenges for its implementation.

2. REVIEW OF LITERATURE

National education policy is the policy of Government of India aimed at regulating education system.

2.1 Education System and Policies in Independent India

During British rule, education was for the elitist group. The leaders of independent India have envisaged the need for reconstructing and reforming the education system which led to the formation of University Education Commission in 1948-49 and Secondary Education Commission in 1952-53. With these commissions’ recommendations, development and research on science and technology gained significance (National Education Policy, 2020). A comprehensive review of the education system commenced at the end of the 3rd five-year plan and an education commission, popularly known as Kothari Commission, was constituted in 1964 (Right to Education, 2009). Some of the recommendations of Kothari Commission include:

- Free and compulsory education
- Uniform Educational structure with 10+2+3 pattern
- Teacher education, academic freedom, status and emoluments
- Language development – regional languages, three language formula, development of Hindi and Sanskrit and study of English and other international languages
- Equalization of educational opportunities irrespective of region, gender and caste.
- Enhancing quality of education
- Science education and research
- Education for agriculture and industry
- Establishment of universities
- Introduction of distance education
- Emphasis on extracurricular activities
- University autonomy

Based on these recommendations, national policy on education was passed during 1968. But the policy suffered serious setbacks in its implementation due to lack of financial and organizational support (Ruble, 2003). In 1986, with the 21st century approaching, the need for radical transformation in the educational system was felt and a new national education policy was proposed and adopted. NPE 1986, was referred to as the Magna-Carta of education which laid special emphasis on the removal of disparities and to equalize education opportunity. Its salient features are (National policy of Education, 1986):

- Education for all irrespective of caste, creed, sex or location
- Child -centered primary education
- National curriculum framework with common core to teach values such as India’s cultural heritage, Indian history, environment etc.
- Inter-regional mobility for technical students
Strengthening of institutions such as UGC, ICAR, AICTE, IMC, NCERT, National council of teacher education and the national institute of adult education
Incentives, scholarships, hostels and other resources to SC/ST students
Incentives for infrastructure development in rural and remote areas
Recruitment of teachers from Scheduled communities
Measures for imparting education to the physically challenged and adults
Empowerment of women through education
Universal enrolment and retention of children up to 14 years of age
Non-formal education for school drop-outs, children of non-school areas and working children and girls
Modern technological teaching tools
Vocationalisation of education
Autonomy to institutions
Open universities

Later in 1990 and 1991, Acharya Ramamurti Committee and Janardhana Reddy Committee were constituted respectively to review the policy. Based on their recommendations, the Central Advisory Board of Education (CABE) 1992 has incorporated a few amendments in National Policy on Education (NPE) 1986. One of the major inclusions in NPE 1992 is the introduction of common entrance examinations for admissions to technical institutions such as JEE (Joint Entrance Examination), AIEEE (All India Engineering Entrance Examinations) and SLEEE (State Level Engineering Entrance Examinations). It was also promised to ensure provision of professional education to all, irrespective of their financial background.

The education policies have helped Indian education system significantly to increase the Gross Enrollment Ratio (GER), establishment of schools, colleges and universities and growth in technical education. Some of the significant achievements of these education policies are:

- India has grown into the third largest higher education system
- Since independence, literacy rate has increased from 12% to 74.37% with men outperforming (82.37%) than women at 65.79% (Statista, 2021).
- Number of universities increased from 28 in 1950-51 to 993 in 2018 (CEICDATA, 2018) [11].
- Enrolment ratio in schools is above 97.2% (ASER, 2018) and only 2.8% of children are out of school.
- Total Enrolment in higher education has increased from 0.17 million in 1950-51 to 37.4 million in 2018-19 (AISHE, 2018).
- Basic numeracy and literacy skills have enhanced since 2010 (ASER, 2018)

But the implementation of the recommendations faced a few issues and challenges. Allocation of 6% GDP for education promised in NPE 1968 was reiterated in 1986 and in 1992 but remains unfulfilled (Tilak, 2004). Though the emphasis on quality education to all was promised, a three tiered school system still exists, that is, government schools, government aided schools and private schools. While the elite population goes to private schools, the deprived class is still dependent on the government schools (Cheney et al., 2005). The skill gap of children with reading, writing and arithmetic skills in private and government schools has widened. Though, numeracy and literacy skill indicators have shown marginal improvement, more than 50% of the children showed sub-standard performance in these skills. Similarly, the standard of schools shows extreme disparities among the states (ASER,
School dropout rate is at 30% in secondary school education and the dropout rates show wider differences among the states and communities (Radhakrishnan, 2019). Since 1986, the emphasis of the Government of India was more on school education and a slump in the higher education sector was observed. Consequently, enrollment in higher education is increased by the establishment of private institutions in the country (Sen, 2016; Sharma and Sharma, 2015) and more than 60% of the higher education institutions are run by private sector (Sheikh, 2017). Sharma and Sharma (2015) analyzed and listed the various challenges faced by Indian higher education system, such as lack of quality research work, inadequate infrastructure, industry participation in academia and lack of well qualified faculty. Further, India Skills Report (2020) projects the employability of graduates in India to be only 46.2%. The report further indicates a decline in employability of engineering, technology and computer related courses. Very importantly, the unprecedented expansion of higher education sector in India is characterized by “Islands of excellence in the sea of mediocrity”, i.e., while the premier institutions such as IITs, IIMs and central universities garnered international recognition for their quality of education, other regional and local universities fail to make a mark in the national / international education scenario (Philip and Mathews, 2019).

Progressive education necessitates the system to learn from the past and the present, integrate them in future planning. National Education Policy, 2020 has considered these lacunae in the education system and emphasizes on enhancing the quality of education in India.

3. NEED FOR A NEW NATIONAL EDUCATION POLICY

The 21st century is defined as the period of intense transformation in education in view of ubiquitous ICT tools, globalization of businesses, emerging technologies, skills for 21st century job markets, rise of gig economy etc. It is observed that the Indian education system is plagued by rote learning which is based on the testing of theoretical knowledge with abysmal practical content. The practice prevails in all domains of education, even in higher education institutions providing technical education where experiential learning is crucial (Wipro, 2011). According to a nationwide survey conducted by EzVidya (Times of India, 2012), an education provider, reported that more than 70% of the heads of the schools believed that rote learning suppresses creative thinking and rote learning leads to poor performance of the students.

International education is moving towards a “learner centric” approach from “teacher centric” approaches. But in India, traditional teaching practices still prevail in spite of various initiatives on teacher training. Teacher-centered paradigm in India is rooted in its cultural mindset and cultural attitudes based on gender, caste, social equality and religion, and impedes the implementation of learner-centric approach (Brinkmann, 2015). Regressive trend in science and arts streams is observed and these studies are losing out to professional courses in India (Varghese, 2008), especially engineering and medicine.

Another important point of concern in the ranking of Indian universities relative to that of the international universities, albeit Indian education system being the 3rd largest system. 63 universities have gained position in Times Higher Education, UK based world ranking of universities but only two universities appear in top 400 (Prashanth K, 2020). Moreover, India has adopted a vision, pertaining to education, to “ensure equitable and quality education and promote lifelong learning opportunities for all” as part of 2030 agenda of Sustainable Development Goals (goal 4) on education. This is possible only when 360° revamping of Indian education system takes place. Thus, began the genesis of National Education Policy 2020.
4. NATIONAL EDUCATION POLICY, 2020

Ministry of Human Resources Development (renamed as Ministry of Education) constituted a committee chaired by Dr. N. Kasturirangan in 2017 for providing recommendations to reform Indian Education System from early childhood education to Research. The committee submitted its report in 2019 and is discussed in detail.

The policy is built on five important foundational pillars of education namely access, affordability, equity, quality and accountability. The policy starts with renaming the Ministry of Human Resource and Development as Ministry of Education to denote the larger focus on education.

The NEP 2020 is presented in four parts, viz., school education, higher education, other areas of focus such as adult education, language studies, technology usage etc., and financing and implementation strategies.

4.1 Salient features of NEP 2020 - School Education

Prime Minister Narendra Modi reinstated that NEP 2020 would bring radical change in the school education where more emphasis will be on 21st century skills comprising creativity, communication, critical thinking, collaboration and curiosity. Further, he emphasized the need for learner centric pedagogies and experiential learning (Deepika, 2020). The policy is formulated with a broader vision of universalization of school education aiming to achieve a GER of 100% by 2025.

a) A 5+3+3+4 structure will be introduced, replacing the 10+2 structure of school education (Kanika, 2020): The number of years spent by a student in school remains the same, 12 years with additional 3 years of pre-schooling. Instead of K12 (kindergarten and 12 years of study), the new policy divides the schooling as foundation stage (3 years to 8 years of age), preparatory stage (8-11 years of age), middle age (11-14 years of age) and secondary stage (14-18 years of age). Scholars believe that the reform is based on a scientific approach and the system proposed would enhance cognitive development (Rustagi, 2009).

A study by UNICEF, conforms to this insight and reported that early schooling, even if it is for one year, enhances the school readiness of children. The study further stated that those early ages, below 8 years, is a crucial period of child development that lays a solid foundation for the child’s later education leading to better learning outcomes UNICEF.

Interestingly, a study by Stanford university reported not early schooling but kids who commence their schooling at later stages (6 years and not at 5 years) fare better in examinations and pose a better self-control. Further it was reported that a delay of one-year reduced inattention and hyperactivity (Anderson, 2015). Melbourne Child Psychology & School Psychology Services, reported that early schooling may prepare the child intellectually ready but not emotionally (Melbourne Child Psychology & School Psychology Services, 2019). The study also reported the results of another study in New Zealand, revealing that those who start formal education at early stages displayed less positive attitude towards reading and comprehension.

b) Play and activity-based learning from 3-6 years and interactive classroom teaching beginning only from the 6th year is a welcome sign. Practice of kindergarten and preschooling is widely known and practiced in urban India but the rural India sends their
children to Anganwadi centers whose primary responsibility is to monitor the growth of children and reduce malnutrition (Sachdev and Dasgupta, 2001). These Anganwadi workers are secondary school qualified and so proper training should be provided to take care of children’s education in their crucial development stage as promised in section 1.7 of NEP 2020.

e) Crores of children in India are deprived of quality Early Childhood Children Education (ECCE). Curriculum for ECCE will be developed by NCERT in two parts, viz. for 0-3-year-olds and 3-8-year-olds. Though the development of curriculum (National Curricular Framework for School Education, NCFSE) is expected to be completed in this year (2020-21), the objective of achieving quality education for all will take much longer and is aimed to be achieved by 2030.

d) It is proposed to have assessments in grades 3, 5 and 8 with reformed board examinations in the secondary stage. At this juncture, it is important to assess the quality of education in government schools and private schools. It is repeatedly reported that the status of government schools are far behind that of private schools. The literacy and numeracy skills of the students of government schools are abysmal (Jitendra, 2018). Moreover, IANS (2019) revealed that nearly 1 lakh schools in India operate with a single teacher at elementary and secondary school level. With a key proposition of assessments in grades 3, 5 and 8, the Government should focus on increasing the appointment of qualified teachers, teacher training programs in newly proposed learner centric pedagogies; enhance infrastructure and efficient monitoring. Appropriate and suitable assessment methods should be developed at the earliest for the successful attainment of NEP’s goals.

e) NEP 2020 recommends the continuation of board exams for 10th and 12th grade but seeks to make them easier to reduce the stress levels of the students and will test core competencies rather than testing students’ memory power. The new assessment system will be developed slowly over a period of time. Further to reduce the stress levels, students can seek to take board exams twice in a year if an improvement is needed.

f) Similarly, entrance examinations for admission to higher education institutions will be based on conceptual understanding and the ability for knowledge application which may reduce the necessity for extra coaching classes.

g) Another feature of NEP 2020, which attracted more attention, is the introduction of a multilingual system of education in schools. This point is opposed by southern states, especially Tamil Nadu which contests that the 3-language system tries to impose Hindi and Sanskrit (Deepak, 2020). As an extreme step, Tamil Nadu chief minister has rejected the 3-language policy and affirmed the dual language system in Tamil Nadu. But, Dr. Kasturirangan, Chairman, NEP 2020 clarified that NEP 2020 provides flexibility to adopt a multilingual system of education and assured that there is no imposition of any language.

h) Education in mother tongue/ local / regional language till 5th grade, if possible, till 8th grade in schools is advisable. Learning in mother tongue prevails across the globe in many countries. Many studies are conducted in support of mother tongue education in primary schools. Benson (2005) reported that a bilingual system of education is a key to enhancing the quality of education. The bilingual system teaches the concepts in L1 (first language), and a foreign language L2 systematically. This brings in a smooth transition from familiar language to
unfamiliar one. He further deliberated that the bilingual system of education increases the accuracy of assessment and strengthens the affective domain (foundation of personality development). UNESCO study [35] supported that a mother tongue based bilingual system has a positive impact on quality of education and hones cognitive learning. Mother tongue-based education reduces school dropouts considerably (Shreya, 2020). Though the concept is already pronounced in Article 350A of Indian constitution and Right to Education Act, 2009, the point attracted much attention with the introduction of NEP 2020. There was no clarity regarding the switching over of medium of instructions, public or private schools, boards of education etc. in NEP 2020, which raised many queries. HRD officials clarified the point by stating that the proposal stands as advisory but not mandatory [37].

i) One of the major reforms proposed in the NEP 2020 is the flexibility to students to choose their curricula, introduction of concepts of emerging technologies such as artificial intelligence (AI), design thinking, coding etc. will definitely prove to be beneficial in internationalizing Indian education. At the same time, it is proposed to give importance to ethos, environmental conservation, health and hygiene, fitness, Indian knowledge system and the like for the intended overall development of the students.

j) Another much debated proposal of NEP 2020 is the introduction of vocational training to school students from 6th grade onwards. Though many see it to have a positive impact on skill enhancement, there are few strong arguments against the introduction of vocation training like carpentry, pottery, gardening etc. at the age of 11 where physical labour is involved. Also, a 10 day internship on vocation skills (bag-less period) during grades 6 and 8 is recommended. According to India’s Child and Adolescent Labour (Prohibition and Regulation) Act of 1986, a person under 14 years of age is considered as a child and prohibits any physical work. Another perception is that students from lower middle classes may get distracted and go for jobs (Anbuselvan, 2020). All these recommendations of NEP 2020 are truly aimed at enhancing the quality of education. Major concerns in this regard lie in government schools, where the performance of students is consistently sub-standard due to lack of infrastructure and lack of qualified teachers. When curriculum introduces contemporary courses, teachers should be trained for attaining the objectives through appropriate pedagogies.

k) Formation of School Complexes: In order to overcome the issue of single teacher schools, lack of resources and lack of infrastructure, the policy puts forth the formation of school complexes (para 5.10, NEP 2020). School complexes refer to the combining of five to six primary / upper primary schools for sharing the academic and administrative resources with the support of a nodal school, generally a senior secondary school in the locality. School complexes are recommended as a solution of better governance, resource sharing, knowledge base creation and positive learning environment, but without affecting the accessibility to the students. The formation of school complexes was first envisaged by the Kothari Commission, but was not implemented (Ranpise and Jyothi, 2020). The authors strongly recommend the school complexes and listed down the advantages, which include:

- Integration of education at all levels
- Formation of critical mass of teachers, students, library and other resources and
- Improved support for divyang children.
At the same time, Sujatha (2019) reports that though the intention of formation of school complexes was to improve the quality of education at the grass-root level, the effective functioning of the same needs restructuring.

l) **Progress card**, now will not only reflect academic performance but also the performance in cognitive, affective and psychomotor domains.

m) **Teacher eligibility tests** will be strengthened, promotions will be merit based and not on seniority and National Professional Standards for Teachers are some of the notable reforms.

n) Need for special educators for facilitating children with disabilities is addressed in NEP 2020 and teachers will be trained and certified.

o) **A National Book Promotion Policy** to ensure the availability and accessibility of teaching – learning resources will be formulated.

p) **PARAKH (Performance Assessment, Review, and Analysis of Knowledge for Holistic Development)**, national assessment center to set guidelines and norms for assessment across various boards across (reframe the sentence) India will be set up.

q) **Open schooling and distance learning** programmes will be strengthened to facilitate learning through multiple pathways

**4.2 Salient features of NEP – Higher Education**

The 21st century is driven by knowledge and technology and should be percolated down to the roots of any nation. Challenges of higher education are at the global level and an immediate reorientation of the higher education system is the need of the hour (University Grants Commission, 2003). Gross enrollment ratio in higher education in India stands at 26.3% in 2018-19 (AISHE, 2018). But it is disheartening to note that quality higher education is provided by the government subsidized premier institutions and only a very small percentage of students have access to such institutions. The quality and quantity of the higher education system are still in the state of disarray (Sunder, 2010). Part II of NEP 2020 elaborates on the various reforms intended to universalise the higher education sector in India.

NEP 2020 lists down the problems of the higher education system as “fragmented, limited autonomy, less cognitive evaluation, less research emphasis, ineffective regulatory system and affiliating system of colleges”. Salient features of the new educational policy with respect to higher education are summarised below:

a) **Multiple entry options for undergraduate degree**: Undergraduate degree courses will be of 3 or 4 year duration, and at the end of the prescribed duration degrees will be awarded. If he/she wishes to exit in their 1st year of 3 year UG course or 2nd year of 4 year UG course will be conferred with Diploma. 4 year degree course may be extended with research to result in a degree with research. This proposal will considerably improve the enrollment into higher education institutions, but if students get satisfied with their diplomas, then the percentage of graduates from these institutions may drop.

b) **Academic Credit Bank**: Interestingly, the students can accumulate all the credits earned through their respective institutions, online courses, distance learning and certification courses, and can use later for the award of the degree. The courses that may be considered, to what weightage, assessment and evaluation criteria for the same are not clear. The effect may be felt after a few years of implementation.
Another innovation, similar to international education systems, is that the students have the *flexibility to choose any combination of courses*. This requires the establishment of multidisciplinary universities which NEP 2020 promises in future.

In order to encourage research-oriented education, it is proposed to introduce *5-year integrated research programmes* or 2-year postgraduate programmes with 1-year research component. To encourage multidisciplinary research, Multidisciplinary Education and Research Universities (MERU) will be established.

The economically and socially deprived classes will receive *financial support* through national scholarships. Vocational education will be continued at the higher education level too.

**f) Provision for foreign universities to establish their campuses in India**, mobilise international students to India to learn our languages, culture, traditional medicine, Yoga, Indian knowledge system etc., would be welcomed.

Apart from these, major *restructuring of teacher education* is proposed such as 4-year integrated B.Ed. courses with a research component and dual degree in specialised subjects, 2-year B.Ed. programs for those who are qualified in subject specialization. Similarly, training in pedagogical aspects with teaching assistantships is made mandatory for Ph.D. entrants who opt to teach. Apart from this, continuous professional development through online platforms is encouraged.

It can be seen that the Indian government foresees the potential Indian youth (where 65% of the population is of age <35) (Population of India, 2020) and envisages to capitalize the same through quality education to make the nation as a global knowledge hub. With the vision of “building a global best education system rooted in Indian ethos, and aligned with the principles enunciated above, thereby transforming India into a global knowledge superpower”, NEP 2020 is formulated which emphasizes on entrepreneurship, higher education, technology based, project based and learner centric curriculum.

### 5. MAJOR CHALLENGES AND CONCERNS IN IMPLEMENTATION OF NEP 2020

A radical shift in the education system is proposed in NEP 2020. The magnitude of transformation goals pertaining to school education are lofty and will be a herculean task. Some of the major challenges are summarized below:

**Challenge 1:** Establishment of universities and multidisciplinary universities for doubling the GER from 26.3% to 50% by 2035 requires an estimate of one university / week for the next 15 years (India Today web desk, 2020).

**Challenge 2:** Implementation of vocational education to school children need a large pool of trained teachers. Training the teachers on vocational education poses a challenge economically.

**Challenge 3:** Establishment of “Higher Education commission of India –HECI” which will be the apex body to exercise control on education through

a) National Higher Education Regulatory Council - for the higher education sector;

b) National Accreditation Council – for accreditation;

c) Higher Education Grants Council for funding and financing of higher education; and

d) General Education Council, for academic role.

But the roles of AICTE and UGC who have contributed immensely to the higher education sector in India are not clearly mentioned. The norms and regulations for those
foreign universities that wish to establish their campus in India are also not clearly pronounced (Businessworld, 2021).

**Challenge 4:** Magnitude of financial commitment for the proposed reforms is huge and the Government proposes to spend 6% of GDP for education. But it should be noted that 6% GDP for education was the recommendation of the Kothari Committee in 1966, which could not be achieved till date. Moreover, the Government's spending on education has been gradually decreasing over the period of years and in 2021-22, it is 3.2%. Economic slowdown and COVID pandemic may also impact the financial commitment for education (Gourav, 2020).

**Challenge 5:** Education in India is the responsibility of both state and central governments. In the NEP 2020, the role of states is not defined clearly.

**Challenge 6:** Digitalization of education is given great significance and digital learning is recommended. But India is a country with a great divide in terms of economic inequality. A recent survey conducted by Learning Spiral reports that more than 50% of the population do not have internet access lack smart devices India Today (2021). This disparity in lack of electricity and internet facility is a major challenge in implementing remote learning or digital learning.

**6. CONCLUSION**

In this paper, an attempt is made to elaborately discuss the salient features of NEP 2020 in school and higher education sectors. The policy has taken a holistic view of reformation with a vision of internationalizing Indian education system. The features and the action plan proposed for NEP is lauded with positive feedback from various educationists and critics. Some of the propositions have attracted negative criticisms too especially at the school level, such as multilingual system, schooling in mother tongue and 5+3+3+4 system. The magnitude of reformation envisaged is huge and requires systematic and concerted efforts at all levels for its successful implementation.

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