Statistical Analysis of the National Education Policy (2020)

Akanksha Gavade

ABSTRACT
A revamped education system integrating a flexible, multidisciplinary curriculum coupled with a conscious inclusion of life skills had been long overdue, up until 29th of July, 2020. The purpose of the National Education Policy is to develop students’ in critical thinking skills, scientific temper, and imagination, along with instilling values like empathy, courage, and resilience. This paper endeavors to introduce you to the key aspects of the novel National Education Policy (here on referred to as the NEP), discuss its pros and cons, and offer solutions and recommendations to potential problems observed.

Date of Submission: 29-06-2021
Date of acceptance: 13-07-2021

I. INTRODUCTION
As the education system dealt with a huge blow due to the Covid-19 pandemic, a National Education Policy was introduced by the government in an attempt to soften the blow and refurbish the current, long-standing, under-productive, over-expensive education system. Offline schooling was shifted online, and new teaching routines and pedagogy were set in motion to optimize learning. It was also essential that India transforms its education system by inculcating multidisciplinary, innovation, and flexibility to adapt to the current times and compete with the standards of education of the western countries.

DIFFERENCE B/W NEP 2020 AND PREVIOUS POLICIES INTRODUCED
The previous policies concentrated a lot more on increasing the access to education. The Right of Children to Free and Compulsory Education Act 2009 makes certain that every child has a right to receive a quality education from age 6-14(class 8), irrespective of their social and economic background. The National Education Policy 1986 (modified in 1992) is a solid foundation to the NEP 2020.

The NEP 2020 focuses on the relatively newer concepts and strategies to promote a multidisciplinary and holistic approach towards education.

STATISTICS AND FIGURES RELATED TO THE INDIAN EDUCATION SECTOR
In 2020-2021 Budget, the education sector was allotted Rs 93,224 crore for 2021, with Rs 54,873 crore for school education and literacy and Rs 38,350 crore for the higher education sector.

As per the latest ‘World Talent ranking report’ by IMD, although total public expenditure on education as a percentage of GDP ranks at 35th, expenditure per student – as well as both measures of the quality of education (pupil-teacher ratio in primary and secondary school) - rank at 62nd in the list of 104 countries.

The study has pegged the overall literacy rate in the country at about 77.7 percent. In rural areas, the literacy rate is 73.5 percent compared to 87.7 percent in urban areas of the country. At the all-India level, the male literacy rate is higher at 84.7 percent compared to 70.3 percent among women.

Kerala tops the national literacy survey at 96.2%.

Population with Secondary School Completion: 11,159.04
Males: 6,155.66
Females: 5,003.38

Gross Enrolment Ratio

Kerala tops the national literacy survey at 96.2%.
Population with Primary School Completion:

<table>
<thead>
<tr>
<th>State</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uttarakhand</td>
<td>21,621.2</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>19,914.59</td>
</tr>
<tr>
<td>West Bengal</td>
<td>11,449.5</td>
</tr>
<tr>
<td>Andhra Pradesh</td>
<td>13,146.87</td>
</tr>
<tr>
<td>Bihar</td>
<td>12,135.16</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>21,873.34</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>10,507</td>
</tr>
<tr>
<td>Total</td>
<td>107,486.29</td>
</tr>
</tbody>
</table>

Public vs Private Schools

**MAJOR PROBLEMS DETECTED IN THE CURRENT EDUCATION SYSTEM**

1. Emphasis on rote-learning and memorization of content, rather than the real-world application of the concept
2. Extensive inclusion of irrelevant and unnecessarily difficult topics, which makes students lose interest in academics
3. A high-stake test system (like semester end and final exams), with minimum an incentive for students to study consistently throughout the year rather than cramming all the syllabus in a short time period before the exam
4. Good quality education is highly expensive, therefore not available for every student
5. Substandard student-to-teacher ratio at many schools
6. Inadequate the impetus to research and innovation
7. Admissions to universities and undergrad schools purely based on an academic/marks/test scores in standardized tests
8. Enormous focus on competitive exams like JEE and NEET. More focus on gaining marks, lesser focus on actually understanding the purpose of and enjoying the process of education and learning
9. Rigid separation of subjects into 3 streams: science, commerce, arts. Students lack the opportunity and the choice to choose subjects from different fields, and are forced to study subjects from a very limited selection of subjects, thereby curbing a student’s level of academic interest and engagement.
10. Unequal amount of respect for every stream. It is a common (mis)understanding that science students are smarter than commerce, followed by arts (humanities) students.
11. Limited utilization of technology, infrastructure, and resources

**AIMS OF THE POLICY**

Therefore, this multi-faceted policy aims to work on the following fronts:

1. Access
2. Accountability
3. Affordability
4. Equity
5. Quality

**PRINCIPLES OF THE POLICY**

A few of the foundational principles outlined are:

1. Honing life skills (like communication, teamwork, etc.)
2. Flexibility in the choice of subjects
3. Multilingualism
4. Continuous review of progress via a formative assessment for learning rather than a summative assessment
5. Focus on research and conceptual understanding
6. Promotion of Indian languages, arts and culture
7. Incorporate the use of technology substantially

**SALIENT FEATURES OF THE POLICY**

1. Modifying the 10+2 structure to a 5+3+3+4 structure
   a. Stage 1 [age 3-8]: Foundational: Pre-school to Grade 2
   b. Stage 2 [age 8-11]: Preparatory: Grade 2 to Grade 5
   c. Stage 3 [age 11-14]: Middle: Grade 5 to Grade 8
   d. Stage 4 [age 14-18]: Secondary: Grade 8 to Grade 12
2. Continuous professional development for teachers
3. Regulation of the education system by Directorate of School Education, and SCERT and SQAAF
4. Catalyzing academic research in all fields and curbing the commercialization of education
5. Common aptitude exams and entrance tests for universities by National Testing Agency

**DISCUSSING THE NOTABLE FEATURES OF THESE 4 STAGES OF EDUCATION:**
1. One of the main goals at the foundational stage is Foundational Literacy and Numeracy, which is basically the development of the basic reading and writing skills coupled with the ability to solve basic mathematical operations.
2. Consistent, formative assessments to track progress
3. Teacher vacancies will be filled up as soon as possible
4. Resources for teaching will be made available on a national level via Digital Infrastructure for Knowledge Sharing (DIKSHA)
5. Necessary nutritional and health needs will be immediately addressed

**CURTAILING DROPOUT RATES:**
Drop out rate is the percentage of students failing to complete a particular level of education or course. It may be due to various factors, like inability to financially support the education, problems in personal life (Eg: pressure from one’s own home), mere disinterest in gaining education, misconceptions about the future of the course, lack of belief in one’s own ability, etc.

The Gross Enrolment Ratio (GER) was a high 90.9% but for classes 9-10 and 11-12 was a 79.3% and a mere 56.5% respectively. This points to the fact that a prominent proportion of students begin dropping out of schools in the higher grades, and fail to attain this level of education.

One of the purposes of the NEP 2020 will be to minimize the dropout rate and maximize the enrolment rate. In all likelihood, hopefully, immediate measures will be taken to address the problems faced in underserved areas.

The following graph demonstrates the above-mentioned fact: The GER decreases and the Drop out increases as we go up higher in the classes.
DISCUSSING THE HIGHLIGHTS OF HIGHER EDUCATION INSTITUTES

1. One of the main goals is to help all Higher Education Institutes (HEIs) to become multidisciplinary and increase student enrolments.
2. To attain the required infrastructure and resources to achieve the aforementioned goals.
4. Extensively promoting academic research, establishing National Research Fund.
5. Revamping credit system, digitally storing all academic credits via Academic Bank of Credits (ABC).
6. Multiple exit options while pursuing a Bachelor's degree, integrated 5-year Bachelor/Master degree, integrated 4-year Bachelor/Ph.D., and other variants.
7. Continuous assessment/examination system rather than a semester-end exam system.
8. Increasing the number of financial aids and scholarships offered on a merit-based system to encourage student enrolment.

POTENTIAL APPLICATIONS & ADVANTAGES OF THE HEIs AS OUTLINED IN THE NEP

1. A student-centric model, as opposed to a teacher-centric model, definitely upgrades the standard of education offered and student enrolment observed, thereby maximising the potential benefits of the NEP in terms of building a better-equipped, well-informed youth making unprecedented progress in multiple fields through increased commitment to education and an augmented potential for research & innovation.
2. A multidisciplinary curriculum boosts students’ level of interest in academics, promotes innovation and creativity and free flow of ideas.
3. The independence and flexibility in the choice of subjects proliferates student enrolment and student engagement.
4. Further the cause of research. Inter-disciplinary and holistic approaches to concepts and problems improves the standard of research and creative genius tremendously.
5. Exposure to a variety of fields and minimizing the segregation between the currently outlines streams (science, commerce, arts) motivates students to follow their particular interests and connect seemingly unrelated ideas, thereby producing something revolutionizing and unique.
6. Standardization of a baseline level of academic and holistic education and resources made available at every HEI.
7. Curbing the commercialization of education.
8. Restructuring the administrative division of HEI by employing highly qualified professors and educators to teach at universities, and having extremely accomplished professors as institutional leaders (like Dean, Chancellor, etc.)
DISCUSSING THE SALIENT FEATURES AND POTENTIAL IMPLICATIONS OF TEACHER EDUCATION:

1. Career Management and Progression, and Continuous Professional Development: Continuous and ample growth opportunities will be offered to the teachers.
   - This will, in turn, motivate teachers to heighten their standard of teaching, and
   - Encourage more student engagement
2. Vertical mobility of the teachers based on their merit: Teachers will be promoted to leadership/managerial positions (like Coordinator, Dean, Vice Principal, etc.) If they exhibit the required skills and qualities (like strong communication skills, cogent decision-making ability, responsible behavior)
   - This will inspire the teachers to introduce educational programs and courses in the school and manage the student body adroitly, thereby
   - Promoting the standard of education
3. A 4-year integrated B.Ed. Degree/2-year B.Ed. Degree with a 4-year multidisciplinary degree (and other variants of such teacher education programs) standardize the level of education of teachers, enhance the quality of the faculty
   - This ensures that teachers learn and use the newest, most effective teaching pedagogy and that students receive the best teachers and human resources to assist them to gain the best education possible

II. RECOMMENDATION:

1. Strict and regular check on the faculty, making certain that teaching standards are up to the mark and all the human resources are being used efficiently and productively.
2. Periodic Teacher Training Programs and Meet-Ups for teachers to learn about brand new teaching pedagogy and form a network of teachers/colleagues, thereby building a strong teaching community
3. Essential that every single faculty and educator has the required job qualifications an educational qualification. Mandatory for college/university level professors to have a Ph.D.

III. CONCLUSION

In theory, this policy is a breath of fresh and one would expect to welcome it with open arms. Harboring a multi-faceted approach to upgrading the education system has a sea-like abundance of merits, but it only comes along with an ocean-like preponderance of known, calculated risks and inherent, unrealized complications. Not to mention the untiring efforts of a prominent proportion of the population at sabotaging a noble cause like this one. At the same time, it must be remembered that it is still crucial for the country to take our economy in the positive direction and not compromise our long-term success to our short-term goals. One last but not the least important thing here is to keep in mind the physical and mental well-being of the students, teachers, and everyone in the education sector. The happiness and welfare of these stakeholders are non-negotiable. The National Education Policy 2020 is pacing towards making education and learning more attractive, better optimized, equitable, and affordable.

REFERENCES

[4]. https://www.researchgate.net/publication/345100384_An_Empirical_Study_on_NEP_2020_National_Education_Policy_with_Special_Reference_to_the_Future_of_Indian_Education_System_and_Its_effects_on_the_Stakeholders_JMET
[5]. https://www.researchgate.net/publication/345100384_An_Empirical_Study_on_NEP_2020_National_Education_Policy_with_Special_Reference_to_the_Future_of_Indian_Education_System_and_Its_effects_on_the_Stakeholders_JMET
[7]. https://www.firstpost.com/india/at-96-2-kerala-tops-indias-literacy-rate-chart-again-andhra-pradesh-ranks-lowest-with-66-4-8796401.html#:~:text=The%20study%20has%20pegged%20the,to%2070.3%20percent%20among%20women.