National Education Policy 2020 and Online and Digital Education - A Brief Review

Sheeraz Ahmad Sheergugri and Malkeet Raj
Contractual Lecturer in Higher Education
Government Degree College, Sunderbani, Rajouri, Jammu and Kashmir, India
malkeetrajnik@gmail.com

Abstract: It is well known fact that a well-defined, visionary and futuristic education policy is a must for every country because education is the key driver of economic and social progress. Taking into account their respective traditions and culture, different countries have adopted varied education systems. Recently Government of India announced its New Education Policy 2020 (NEP 2020), which intended to transform our nation sustainably into an equitable and vibrant knowledge society, by providing high quality education to all. It is a welcome step, which will bring about a paradigm shift India's education system and will transform it into a modern, progressive, and equitable one. New circumstances and realities require new initiatives. The recent rise in epidemics and pandemics necessitates that we are ready with alternative modes of quality education whenever and wherever traditional and in-person modes of education are not possible. In this regard, the National Education Policy 2020 recognizes the importance of leveraging the advantages of technology while acknowledging its potential risks and dangers. It calls for carefully designed and appropriately scaled pilot studies to determine how the benefits of online/digital education can be reaped while addressing or mitigating the downsides. In the meantime, the existing digital platforms and ongoing ICT-based educational initiatives must be optimized and expanded to meet the current and future challenges in providing quality education for all.

Keywords: National Educational policy (NEP2020), Online and Digital Education, Vibrant Education

I. INTRODUCTION

Education is fundamental for achieving full human potential, developing an equitable and just society, and promoting national development. Providing universal access to quality education is the key to India’s continued ascent, and leadership on the global stage in terms of economic growth, social justice and equality, scientific advancement, national integration, and cultural preservation. Universal high-quality education is the best way forward for developing and maximizing our country's rich talents and resources for the good of the individual, the society, the country, and the world. India will have the highest population of young people in the world over the next decade, and our ability to provide high-quality educational opportunities to them will determine the future of our country. The global education development agenda reflected in the Goal 4 (SDG4) of the 2030 Agenda for Sustainable Development, adopted by India in 2015 - seeks to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” by 2030. Such a lofty goal will require the entire education system to be reconfigured to support and foster learning, so that all of the critical targets and goals (SDGs) of the 2030 Agenda for Sustainable Development can be achieved. The world is undergoing rapid changes in the knowledge landscape. With various dramatic scientific and technological advances, such as the rise of big data, machine learning, and artificial intelligence, many unskilled jobs worldwide may be taken over by machines, while the need for a skilled workforce, particularly involving mathematics, computer science, and data science, in conjunction with multidisciplinary abilities across the sciences, social sciences, and humanities, will be increasingly in greater demand. With climate change, increasing pollution, and depleting natural resources, there will be a sizeable shift in how we meet the world’s energy, water, food, and sanitation needs, again resulting in the need for new skilled labour, particularly in biology, chemistry, physics, agriculture, climate science, and social science. The growing emergence of epidemics and pandemics will also call for collaborative research in infectious disease management and development of vaccines and the resultant social issues heightens the need for multidisciplinary learning. There will be a growing demand for humanities and art, as India moves towards becoming a developed country as well as among the three largest economies in the WORLD – WIDE.
II. EMERGENCE OF NEP 2020

Long back India’s first Education Policy was introduced in the year 1986. About thirty-four years thereafter, a new policy called National Education Policy 2020 (NEP 2020) is introduced by the Government of India. NEP 2020 thus replaces National Policy on Education of 1986. The policy signifies a huge milestone for India’s education system, which will certainly make India an attractive destination for higher education world-wide.

The Government of India had taken initiative in January 2015, and the actual consultation process for the New Education Policy was started under the chairmanship of former Cabinet Secretary Shri. T. S. R. Subramanian. Based on the committee report, in June 2017, the draft NEP was submitted in 2019 by a panel led by former Indian Space Research Organisation (ISRO) Chairman Dr. K. Kasturirangan. The Draft New Education Policy (DNEP) 2019 was then released by the Ministry of Human Resource Development (MHRD), followed by a number of public consultations. Thereafter, the Ministry undertook a rigorous consultation process in formulating the draft policy. In the process of emergence the new policy document has been updated, revised and finally approved on 29th July, 2020.

National Education Policy 2020 (NEP 2020), which was approved by the Union Cabinet of India on 29th July, 2020, outlines the vision of India's new education system. The policy envisions an India-centred education system that contributes directly to transforming the nation sustainably into an equitable and vibrant knowledge society, by providing high quality education to all. The policy provides a comprehensive framework for elementary education to higher education as well as vocational training in both rural and urban India. The policy aims to transform India's education system by 2021. The policy unequivocally endorses and envisions a substantial increase in public investment in education by both the Central government and all State Governments.

III. NEP 2020

What’s it about?

National Education Policy 2020 (NEP 2020) will bring in ambitious and dramatic change that could transform education system in the country. It will bring about revolutionary changes in the education system of India.

3.1 Vision

NEP 2020 aims at building a global best education system rooted in Indian ethos, and aligned with the principles enunciated in the discussion below, thereby transforming India into a global knowledge superpower.

3.2 Thrust Areas

NEP 2020 is necessarily addressing the crippling challenges that have affected the Indian Education System for over last few decades. Certain thrust areas of the policy are:

- **In Primary Education, poor literacy and numeracy outcomes**: Several reports show that 50% children lack basic numeracy i.e. the ability to understand and work with numbers and literacy despite spending five years in school. NEP 2020 basically looks at this foundational learning as a core area and aims at developing multiple skills and abilities among the students.

- **In Middle and Secondary Education, high dropout levels, curriculum inconsistency**: Dropout rates at the secondary level in several states have increased over the past three years according to the ministry’s data. There are multiple reasons behind drop out such as poverty, poor health and distance from school. Moreover, large variations in dropout rates exist across states, gender, ethnicity and class. Even the Gross Enrolment Ratio (GER) is also decreasing considerably as the data indicates that a significant proportion of enrolled students are dropping out after Grade 5 and especially after Grade 8. Therefore, minimising dropout rate and increasing GER, particularly at middle and secondary education level is also a thrust area of the policy.

- **In Higher Education, a lack of multi-disciplinary approach and flexibility with regards to subject choice, assessment as well as a skill-gap**: Dropout rate is also increasing in higher education institutions. At the same time Gross Enrolment Ratio (GER) is decreasing and remained about less than half of that is in middle and secondary education. It means many students are not enrolling in higher education. Hence, the policy mainly focuses on to minimising dropout rate and increasing GER in higher education institutions.
Moreover, overall thrust areas for NEP 2020 include childhood care, curriculum design, language/medium of instruction, teacher training, teacher appraisal, assessment pattern and evaluation and exam format. A new assessment centre called, PARAKH i.e. Performance, Assessment, Review and Analysis of Knowledge of Holistic Development is proposed to determine the standards for education.

Lastly, issues with regulation, recruitment of teachers and the absence of common standards and norms for universities are the additional areas in this new policy.

3.3 Principle Guidelines

The foundational pillars of this policy are access, equity, quality, affordability and accountability. The policy strongly believes in the thought that the purpose of education is to develop good human beings capable of rational thought and action, possessing compassion and empathy, courage and resilience, scientific temper and creative imagination, with sound ethical moorings and values. Thus, it aims at producing engaged, productive, and contributing citizens for building an equitable, inclusive and plural society as envisaged by our Constitution. The principle guidelines on which this policy is based are:

- **Flexibility**, for learners to choose their subjects and programmes, and thereby choose their paths in life according to their own talents interests.
- **No hard separations** between arts and sciences, between curricular and extra-curricular activities, between vocational and academic etc. to ensure the integrity and unity of knowledge and eliminate harmful hierarchies among and silos between different areas of learning.
- **Multi-disciplinary** and holistic education across the sciences, social sciences, arts, humanities and sports for a multi-disciplinary world.
- **Emphasis on conceptual understanding** rather than rote learning and learning for exams only, on creativity and critical thinking to encourage logical decision-making and innovation, on ethics as well as human and Constitutional values e.g. empathy, respect for others, cleanliness, etiquette, courtesy, democratic spirit, spirit of service, scientific temper, liberty, responsibility, pluralism, equality and justice and on life skills e.g. cooperation, teamwork, communication and resilience.
- **Regular formative assessment for learning** rather than the summative assessment that encourages today’s coaching culture.
- **A respect for diversity** and respect for the local context in all curriculum, pedagogy, and policy by always keeping in mind that education is a concurrent subject.
- **Total equity and inclusion** is the cornerstone of all educational decisions to ensure that all students are able to thrive in the education system.
- **Resource efficiency** without any compromise on equity and quality along with optimum utilisation of resources.
- **Being teachers and faculty as the heart of a learning process**, their rigorous recruitment and preparation, continuous professional development, positive working environments and service conditions are require to be assured.
- **A light but tight oversight and regulatory system** to ensure integrity and transparency of the educational system through audit and public disclosure while simultaneously encouraging innovation and creative ideas through autonomy, good governance and empowerment.
- **Outstanding research** as a prerequisite for outstanding education and continuous development.
- **Continuous policy-making** based on regular assessment of realities on the ground by educational experts.
- A rootedness and pride in India and its rich, diverse, ancient and modern culture, knowledge systems and traditions, and its forward looking aspirations to be incorporated in an accurate manner, and form an anchor and source of inspiration for all education.
- **Education is a public service** and not a commercial activity or source of profit, and access to quality education must need to be considered a fundamental right of every citizen.
- **Lastly, substantial investment in a strong, vibrant public education system** as well as the encouragement and facilitation of true philanthropic private participation.
NEP 2020 Online and Digital Education: Ensuring Equitable Use of Technology

New circumstances and realities require new initiatives. The recent rise in epidemics and pandemics necessitates that we are ready with alternative modes of quality education whenever and wherever traditional and in-person modes of education are not possible. In this regard, the National Education Policy 2020 recognizes the importance of leveraging the advantages of technology while acknowledging its potential risks and dangers. It calls for carefully designed and appropriately scaled pilot studies to determine how the benefits of online/digital education can be reaped while addressing or mitigating the downsides. In the meantime, the existing digital platforms and ongoing ICT-based educational initiatives must be optimized and expanded to meet the current and future challenges in providing quality education for all.

However, the benefits of online/digital education cannot be leveraged unless the digital divide is eliminated through concerted efforts, such as the Digital India campaign and the availability of affordable computing devices. It is important that the use of technology for online and digital education adequately addresses concerns of equity.

Teachers require suitable training and development to be effective online educators. It cannot be assumed that a good teacher in a traditional classroom will automatically be a good teacher in an online classroom. Aside from changes required in pedagogy, online assessments also require a different approach. There are numerous challenges to conducting online examinations at scale, including limitations on the types of questions that can be asked in an online environment, handling network and power disruptions, and preventing unethical practices. Certain types of courses/subjects, such as performing arts and science practical have limitations in the online/digital education space, which can be overcome to a partial extent with innovative measures. Further, unless online education is blended with experiential and activity-based learning, it will tend to become a screen-based education with limited focus on the social, affective and psychomotor dimensions of learning.

Given the emergence of digital technologies and the emerging importance of leveraging technology for teaching-learning at all levels from school to higher education, this Policy recommends the following key initiatives:

1. Pilot studies for online education: Appropriate agencies, such as the NETF, CIET, NIOS, IGNOU, IITs, NITs, etc. will be identified to conduct a series of pilot studies, in parallel, to evaluate the benefits of integrating education with online education while mitigating the downsides and also to study related areas, such as, student device addiction, most preferred formats of e-content, etc. The results of these pilot studies will be publicly communicated and used for continuous improvement.

2. Digital infrastructure: There is a need to invest in creation of open, interoperable, evolvable, public digital infrastructure in the education sector that can be used by multiple platforms and point solutions, to solve for India’s scale, diversity, complexity and device penetration. This will ensure that the technology-based solutions do not become outdated with the rapid advances in technology.

3. Online teaching platform and tools: Appropriate existing e-learning platforms such as SWAYAM, DIKSHA, will be extended to provide teachers with a structured, user-friendly, rich set of assistive tools for monitoring progress of learners. Tools, such as, two-way video and two way-audio interface for holding online classes are a real necessity as the present pandemic has shown.

4. Content creation, digital repository, and dissemination: A digital repository of content including creation of coursework, Learning Games & Simulations, Augmented Reality and Virtual Reality will be developed, with a clear public system for ratings by users on effectiveness and quality. For fun based learning student-appropriate tools like apps, gamification of Indian art and culture, in multiple languages, with clear operating instructions, will also be created. A reliable backup mechanism for disseminating e-content to students will be provided.

5. Addressing the digital divide: Given the fact that there still persists a substantial section of the population whose digital access is highly limited, the existing mass media, such as television, radio, and community radio will be extensively used for telecast and broadcasts. Such educational programs will be made available 24/7 in different languages to cater to the varying needs of the student population. A special focus on content in all Indian languages will be emphasized and required; digital content will need to reach the teachers and students in their medium of instruction as far as possible.

6. Virtual Labs: Existing e-learning platforms such as DIKSHA, SWAYAM and SWAYAMPRABHA will also be leveraged for creating virtual labs so that all students have equal access to quality practical and hands-on experiment-based learning experiences. The possibility of providing adequate access to SEDG students and teachers through suitable digital devices, such as tablets with pre-loaded content, will be considered and developed.
7. Training and incentives for teachers: Teachers will undergo rigorous training in learner-centric pedagogy and on how to become high-quality online content creators themselves using online teaching platforms and tools. There will be emphasis on the teacher’s role in facilitating active student engagement with the content and with each other.

8. Online assessment and examinations: Appropriate bodies, such as the proposed National Assessment Centre or PARAKH, School Boards, NTA, and other identified bodies will design and implement assessment frameworks encompassing design of competencies, portfolio, rubrics, standardized assessments, and assessment analytics. Studies will be undertaken to pilot new ways of assessment using education technologies focusing on 21st century skills.

9. Blended models of learning: While promoting digital learning and education, the importance of face-to-face in-person learning is fully recognized. Accordingly, different effective models of blended learning will be identified for appropriate replication for different subjects.

10. Laying down standards: As research on online/digital education emerges, NETF and other appropriate bodies shall set up standards of content, technology, and pedagogy for online/digital teaching-learning. These standards will help to formulate guidelines for e-learning by States, Boards, schools and school complexes, HEIs, etc.

3.4 Creating a Dedicated Unit for Building of World Class, Digital Infrastructure, Educational Digital Content and Capacity

Technology in education is a journey and not a destination and capacity will be needed to orchestrate the various ecosystem players to implement policy objectives. A dedicated unit for the purpose of orchestrating the building of digital infrastructure, digital content and capacity building will be created in the Ministry to look after the e-education needs of both school and higher education. Since technology is rapidly evolving, and needs specialists to deliver high quality e-learning, a vibrant ecosystem has to be encouraged to create solutions that not only solve India’s challenges of scale, diversity, equity, but also evolve in keeping with the rapid changes in technology, whose half-life reduces with each passing year. This centre will, therefore, consist of experts drawn from the field of administration, education, educational technology, digital pedagogy and assessment, e-governance, etc.

IV. CONCLUSION

We know that a well-defined, well-designed and comprehensive education policy is essential for a country at school, college, and university levels due to the reason that education leads to economic and social progress. Even today, adoption of appropriate education system is necessary in consideration of the prevailing conditions. Thus, to be precise, it is well accepted fact that a good education policy always leads to good and quality education in a country.

REFERENCES


