



Integration of Technology: A Key Factor of NEP 2020

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Abstract

With the approval of the Union Cabinet for National Education Policy 2020, the country, after 34 years, has got its new education policy. There is a lot of emphasis given on the integration of technology in NEP 2020 as technology can serve as an important factor which can pave the way for a holistic development. In NEP 2020, a special emphasis is also given on the regional languages as E-courses will be developed in the same. Moreover, virtual labs will also be developed. It is pertinent to mention here that a National Educational Technology Forum (NETF) is also being created. NEP-2020 is a revolutionary step taken towards the upliftment of education system. Technology, which has entered in almost every sphere of life, makes things accessible and there is a growing need to embrace technology in the education sector as well. Constructive steps are being taken towards the implementation of the same and NEP 2020 has paved the way for it through various digital platforms being proposed. In this paper, we will try to discuss the multiple aspects of the policy with a special focus on technology and its implementation.

Keywords: National Education Policy 2020, Technology, Multilingualism, Accessibility, ICT

INTRODUCTION

NEP 2020 is considered to be a revolutionary step towards the upliftment of education. One of the major concerns of the policy is the implementation of technology in teaching and learning. With an aim to remove the language barriers, the policy also has a special emphasis on multilingualism. Technology not only makes the access possible but it also contributes in education planning and management. The National Education Policy with a learner centric approach aims to transform education with a clear objective to cater to the needs of this globalized society.

There are four parts which are covered in the National Education Policy 2020, i.e., school education (which forms part-I), higher Education (which comes under part-II), the third part covers promoting Indian languages, adult education as well as the online education and part -IV covers the implementation of the policy. The common objective is to have a holistic development of the learners by ensuring a fundamental learning.

It offers a wide range of takeaways which will help the stakeholders to contribute to the society creatively furthermore.

For this positive transformation, the policy offers change in the curricula, improvement in the digital infrastructure, building up of strong and relevant foundational skills, change in the traditional way of assessment system. The policy also includes the vocational education at both, the secondary and higher education.

During the pandemic, technology made teaching and learning possible through virtual learning. The education system was compelled to transform itself. With the introduction of the new National Education Policy, new avenues were opened. Efforts have been put to make India 'self-reliant', and it is not wrong to say that a major part will be played by technology to achieve the same.

The objective is to make the learners creative, to give them the power to imagine and to create. This can be well achieved with the integration of technology in the classrooms. The policy envisions improvement in the learning outcome.

In this study, we will try not only to discuss the key factors of NEP 2020 in the higher education sector but also the role of technology in the implementation of the new policy. We shall also discuss the place given to technology and its integration in the higher education.

FIVE PILLARS OF NEP 2020:

NEP 2020 is based on mainly the five pillars- Affordability, Accessibility, Quality, Equity and Accountability. NEP 2020 ensures not only continual learning but an overall holistic development of students. Choice based education will make learning flexible for students and they will be able to pursue their areas of interest.

Bank of credit is another brilliant move which will facilitate the transfer between institutions. It will help the students to keep their academic credits stored. Apart from this the emphasis is also laid upon infrastructure support and innovative education centres. NEP 2020 also facilitates multiple pathways of learning.

Creating an ICT literate community, providing free access to ICT tools is the need of the hour. There is also a great need to motivate a wider part of the educators to strengthen the education system via ICTs. The new education policy aims to make teachers fully trained in the next ten years. By 2030, the policy envisions to have professionally trained and professionally developed teachers.

HIGHER EDUCATION

With a focus on multi-disciplinary courses, NEP-2020 has brought remarkable changes in the Higher Education. In this digital era, NEP-2020 focuses on making the youth capable and competent to face the challenges of the globalised world by assuring continual learning. There is a demand of new as well as multi skills and the multi-disciplinary institutions will pave the way for the same.

NEP-2020 ensure lifelong learning opportunities. The New Education Policy welcomes the transformations in the elementary as well as the higher education which will result in accessibility to job opportunities. A number of key reforms have been proposed in the New Education Policy which will enable the students to compete in this digital age. Digital literacy, problem solving, multi-disciplinary focus has been stressed upon. The aim is to build an overall personality of the learners.

Increasing the Gross Enrolment Ratio (GER) is another area of focus in NEP 2020. The aim is to raise it up to 50 percent from 26 percent by 2030 in the higher education setup. By increasing the use of technology in the educational space, it enhances the chances of wider accessibility to all. The New Education Policy also offers multiple exit points and a flexible curriculum.

The setting up of National Research Foundation (NRF) indicates that a special place has been accredited to research related activities to attain global quality standards a number of areas will be focused on such as Indian languages, yoga, arts, music, history, culture, social sciences and many more.

Another remarkable shift comes in the form of setting up of the Higher Education Commission of India (HECI) for the entire higher education. The Higher Education Council of India (HECI) will come up with a number of verticals to fulfil what NEP has proposed.

The HECI which will act as a single regulator will include accreditation, funding and academic standard setting that will be carried out by independent verticals. These will eventually replace other regulatory bodies like the University Grants Commission (UGC) or the All India Council for Technical Education (AICTE).

There would be an “accreditation” conducted by an independent body. The accreditation will help the accredited Institutions to have Open Distance Learning (ODL) and online programmes. These programmes will enhance their offerings, improve access, improves GER, and will also provide opportunities for lifelong learning.

This accreditation scheme aiming to improve credibility of Learning Service Provider (LSP) has been developed by National Accreditation Board for Education and Training (NABET), Quality Council of India (QCI) under Department of Industrial Promotion and Internal Trade (DPIIT), Ministry of Commerce and Industries, Government of India.

As we have mentioned earlier, a special place has been given to quality research in the New Education Policy. This move will open a gateway to innovation. The setting up of the National Education Technology Forum (NETF) is a key factor in NEP-2020. Higher Education Institutes have been motivated for the setting up of technology development centres. This will enable the youth to contribute effectively and result in growth of a tech-savvy and knowledgeable society.

DIGITAL INDIA

The new education policy has put a special emphasis on the development of infrastructure, online teaching platforms along with the tech tools. There is equally a great need of teachers who are technology friendly and for that a special emphasis has been put on training the educators. Without the educators being technology friendly, it will not be possible to create online content, online assessments.

The incorporation of technology with an aim to achieve 100 percent literacy has also been put forward. Due recognition has been given to technology as it plays an important role in the progress of the society. There is no doubt that technology can enhance the quality of education. Huge efforts in the form of providing support to integrate technology and to accept and implement the other changes in the present education system are needed to be made to provide the support for the integration of technology. The major chunk of this responsibility lies on the shoulders of the state governments.

There is a great need to make the teachers aware about the changes and transformations that this new policy brings along. Methods leading towards the effective student engagement are the need of the hour. For the successful implementation of NEP 2020, teachers must be given adequate training so as to make them fully aware of the upcoming changes.

Flipped classroom, blended learning has been given due importance in the new education ecosystem. If the students are aware about what is going to be taken up in the classroom beforehand, they may be able to participate better.

Moreover, active participation from the students will generate more interest in the discussion of the topic. In conventional teaching, the students were not used to be aware of what will be taken up in class, more time was devoted in conventional teaching by giving lectures but in the flipped classroom the students have advantage of knowing the topic beforehand as they get study material beforehand. This enables them to come prepared with their questions and the classroom turns out to be much livelier.

The new teaching methodologies have been given a favourable place and innovative ideas were welcomed. The main focus is on competency-based assessments where regular evaluations will be made so as to help students understand whenever they will go wrong. The students will be provided feedback with an aim to help them to recognize their unique potential and capabilities.

In order to make learning more effective and fruitful, apart from textual learning other innovative methods and pedagogies will be followed such as teaching through videos, audio, interactive real time discussions. This will all together lead to a better understanding of the concepts.

The key initiatives for online and digital education include the blended modes of learning, setting up of virtual labs, digital infrastructure, online assessments, content creation, digital repository, online teaching platforms. NEP 2020 proposes a better integration of DIKSHA/SWAYAM in higher education along with a rich variety of education software.

The new National Education Policy ensures equitable use of technology by investing in the setting up of open public digital infrastructure. A due place has been given to the adoption of the emerging technologies like 3D, simulation, robotics, artificial intelligence (AI). It also facilitates blended learning with online and experimental learning. It also proposes to expand the existing digital learning platforms.

CHALLENGES

Undoubtedly, the policy has remarkably integrated technology into teaching but there are certain concerns towards which the attention must be drawn. The implementation of the policy is no less than an uphill task. There was a survey conducted (July 2017-June 2018) on 'Household Social Consumption: Education'. The sample included 64,529 rural households and 49,238 urban households. This sample was collected from 8,097 villages and 6,188 blocks of India.

In the survey, it was found that the literacy rate among persons of age 7 and above was about 77.7%. In rural areas, it was 73.5% while in urban it was 87.7%. There was also a difference in the literacy rate of males and females, 84.7% and 70.3% respectively [1].

In order to integrate technology in education, it is important that all students have access to technology, at least they should have smart phones, computers with internet access. Unfortunately, the underprivileged students do not have access to same and that is one of the main challenges to overcome. There lies another challenge in handling the network issues, power cuts and controlling the unethical practices.

Another challenge comes in the form of accepting the transformation from the traditional rote learning system to the technology driven critical thinking and experimental learning system. This will require a change in the attitude of the stakeholders and continuous efforts are needed to be made to understand and implement this new vision.

To fulfil the upcoming requirements, there is a strong need of digitally competent teachers. Moreover, there is an unavailability of digital resources infrastructure and there are a number of subjects which face a limitation as far as teaching through digital space is concerned.

For the successful implementation of the policy, centre and states need to work together as the implementation of the policy and the integration of technology come with challenges. There is still a lot of technological advancement that needs to be done and a long way has still to go. NEP 2020 is seen as the most comprehensive education policy of the century and can bring a number of positive transformations in the present education system.

CONCLUSION

India is moving positively in becoming digitally enriched. A massive progress can be seen in this direction. However, every big reform need time and one has to be patient and wait for the result. The complete integration of technology in education will require a bit of time as making it accessible in remote areas will be a little time-consuming task. But slowly and gradually it will be attained.

It will be important to identify the key technologies that will answer both, the needs of the students and the teacher for a better teaching learning experience. According to the experts, this will be one of the crucial factors in the successful implementation of NEP. What NEP strives to achieve is a learner-centric approach.

The government has remarkably built the interest of the stakeholders towards the National Education Policy 2020. Constructive steps have been taken to make the stakeholders aware about the vision and mission of the new policy. A ten day long 'Shikshak Parv', which included a series of national level events, is one of the examples of the same.

Apart from this a digital repository of content will be formed which will include the creation of course work, simulations, learning games for a fun-based learning. The content will be developed in multiple languages with clear instructions. In order to disseminate the e-content, students will be provided a backup mechanism. The benefits of digital education can be fully achieved if the digital divide is eliminated by making efforts. The digital programmes are being provided to cater to the needs of the stake holders. The digital India campaign is working in this direction and fruitful results are expected.

Industry-Institution collaboration and tie up may also be seen as a solution in the implementation of ICT in education. Faculty enriched with industry and research experience can contribute in ICT integration.

No doubt, NEP 2020 has come up with progressive ideas. It has acknowledged the role of technology in taking the education a step forward as it plays a remarkable role in facilitating teaching and learning. Some states have launched and implemented the new policy and many others are in the process but still a long way has to be covered. If the centre and states go hand in hand, the New Education Policy will pave the way for making the learners future ready as it stresses upon the learning of skills and technology.

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