

Analysis on use of Technology and its Integration in NEP 2020

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Abstract: *Well defined and futuristic education policy is essential for a country at school and college levels due to the reason that education leads to economic and social progress. Different countries adopt different education systems by considering the tradition and culture and adopt different stages during their life cycle at school and college education levels to make it effective. Recently Government of India announced its new Education policy which is based on the recommendations by an expert committee headed by Dr. Kasturirangan, Former chairman of the Indian Space Research Organization (ISRO). This paper highlights on various technological aspects published in the National Education Policy 2020. Various innovations and predicted implications of NEP 2020 on the Indian higher education system along with its advantages and disadvantages are discussed. Ultimately some suggestions are proposed for its effective implementation towards achieving its objectives from technological point of view.*

Keywords: Higher Education, National Education Policy 2020, NEP-2020, Overview & Analysis, Implementation Strategies, Predicted Implications, Predicted Impediments & Merits

I. INTRODUCTION

Education is the basic requirement for development of every human being and hence for the progress of society as well as nation. First National Policy on Education was announced in 1968 which called for a "radical restructuring" and proposed equal educational opportunities in order to achieve national integration and greater cultural and economic development. Then, in 1986 a new National education policy was introduced for special emphasis on the removal of disparities and to equalise educational opportunity, especially for Indian woman. 1986 National Policy on Education was modified in 1992 by the P. V. Narasimha Rao government. On 29 July 2020, the cabinet approved a new National Education Policy with an aim to introduce several changes to the existing Indian education system. This paper is mainly focusing on role of technology in higher education system.

Due to the pandemic world has faced lot of challenges in all the fields, especially in the field of education. New initiatives should be taken to find out alternative ways of teaching and learning whenever traditional ways of teaching are not possible. In this respect, the National Education Policy 2020 recognized the advantages of technology. But certain risks and dangers are also there. The time has come to carefully analyze how the benefits of online/digital education can be gained while addressing or alleviating the obstacles.

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.

But to take the benefits of online/digital education the digital divide should be eliminated through combined and focused efforts. Some efforts can be the Digital India campaign and the availability of affordable computing devices and internet infrastructure especially in rural areas. Another issue that should be addressed is that teachers require appropriate 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.

Another issue that should be considered is online assessments. It 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.

The growth of knowledge becomes possible with the spread of education in course of time. The role of library also changed in parity. The introduction of Information Technology (IT) completely changed to traditional concept of library and almost synonymous terminologies like 'Paperless Library', 'Electronic Library', 'Virtual Library' and most recently 'Digital Library' evolved. (Bhattacharyya, 2002).

Today, it is possible to digitize and store information in the form of high quality graphics, colour images, voice signals and video clips at an actively low cost with the help of computers. The present century has been dubbed as "electronic age". Significant changes in information technology and tools are affecting the behaviours in library and information activities. The development of ICT had forced to change to a new concept of operation for libraries that is digital system.

Digital Library is a relatively new concept. The term digital library explains the nature of its collection. Digital libraries are electronic libraries in which large number of users across the world can access contents of large and diverse repositories of electronic objects. It includes networked text, images, maps, sounds, videos, catalogues, government publications, etc. The concept of digital library has started in U.S.A. in early 1990s. Due to rapid change of modern world, digital libraries play a significant role in higher education as well as research institutions. The present study has highlighted some important role of digital libraries particularly NDLI in higher education in India. In pandemic situation we have started using digital libraries, e-notes, e-books on large scale.

II. OBJECTIVE

- To understand National Education Policy from the technological point of view
- To find the benefits and limitations of blended mode of education

2.1 Initiatives before implementing New Education Policy

1. Proper digital infrastructure is required to provide online education and it should be open, robust, interoperable and cross platform
2. Appropriate tools/platforms for online teaching should be developed. Existing platforms such as SWAYAM, MOOCs, DIKSHA etc. should be modified so that it can be more user friendly for both teachers and students.
3. Some modules/tools like two-way video and audio interface can be developed for proper assessment of learners
4. Proper training is required for teachers to be good educators on the online platform
5. Some subjects' practical require offline mode for proper understanding.
6. Good quality and innovative E-Content is required to be created for online teaching. Repository of e-content containing animated videos, recorded videos, virtual reality, augmented reality etc. should be developed.
7. Digital divide should be considered and appropriate measures should be taken so that even the people who have access to the digital equipment, Internet etc. can be provided with appropriate facilities for online teaching.
8. Arrangement should be made to perform practical in the online mode. For that good quality virtual labs should be developed and it should be made accessible to all the students.
9. Survey should be conducted by appropriate agencies to evaluate the advantages and disadvantages of blended mode of learning. So that side effects of online teaching can be mitigated.

III. RESEARCH METHODOLOGY

- Primary Data- It is collected through questionnaires.
- Secondary Data- It is collected through different websites, e-notes, research papers, journals etc.

IV. CONCLUSION

Recently due to pandemic we have already explored different platforms and tools for online teaching and learning. But to make it more effective some initiatives should be taken and those are introduced by New Education Policy 2020. This paper is summarizing those initiatives in more easy and understandable format. Since, use of technology is increasing day by day, so using digital library and innovative tools, e-contents it will help to achieve objective of implementation of National Education Policy 2020 related to use of technology for quality education.

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