TECHNOLOGY IN EDUCATION: AN INTERFACE WITH NEP 2020.

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ABSTRACT

Education as a field of innovation has transformed the life style. It is possible with the discovery and use of new technology from time to time. It is initiated through the process of education. National Education Policy 2020 has proposed a design for transformation through a revolution of technology in education. This is an attempt to explore through the content analysis the possibilities of benefitting from the technological revolution in the theory and practice of education. The objective of this descriptive study is to understand the provisions of NEP 2020 for adoption of technology in the progress of education. It considers the secondary sources and proposes the measures that can be initiated to frame the educational practices technology oriented. The researcher identified certain areas and they are enlisted.

Key words: Technology Oriented, Educational technology, Possibilities, Revolution of technology, etc.

INTRODUCTION

India is a diverse country with 1.3 million population out of which two-third youth (census-2011). If we talk about the economic growth and development of any country, education is considered a national investment for creation of a knowledge society and contributing in standards of living. Education in India is second to none with 1.5 millions school 900+ higher education institutions, 85 lakh teachers and about 33 crore students in imparting equitable, quality, lifelong learning and holistic education is the goal, which includes 21st century skills and Sustainable Development Goals (SDGs) as well. If India is to be seen as a world leader "Vishwa Guru" then planning and implementation for education embedded with use of technology needs to be strengthened.

The use of Educational Technology and Information Communication Technologies (ICTs) in education is the need of the hour. It has the capability to reach out to every nook and corner of the country and bridge the digital divide by providing teaching, learning, assessment and continuous professional development solutions anytime, anywhere coupled with achieving scale and spread. It is with these perspectives that the National Education Policy b(2020) lays great emphasis on the use of educational technology to enhance the access of educational opportunities improve the quality of education,address concerns of inclusion and diversity and improveaccess, quality, equality, affordability and accountability of the educational system in the country.

Thus, meticulous use of educational technology and information and communication technology (ICTs) can liberate the system and help achieve quality education in school and teacher education in the country.

Importance of the study:

It is an age of technology. Ordinary and regular life is practically impossible without the intervention of technology in various matters. In the same way in the theory and practice of education technology plays a major role in order to achieve the educational ends at the various levels. The National Education Policy makes it possible for all to find the way to mark mile stones in the development of education with the use of technology. Therefore it is significant that one explores the possibilities for the adoption of technology in education in varied ways.

The context of National education Policy 2020: The highly appreciated National Education Policy 2020 is the result of grass root level discussions and discernment for the well being of the future generation of the society. It is found that internationalization of standards of learning as well as improving the economic status of the citizens has been the primary objective of the discussions related to sustainable development goals. The goal number 4 is related to education as a means to eradicate poverty . It is this motive that lays the foundation of the NEP 2020.

The objectives of the study

The objectives of the study consists of identifying the provisions proposed by NERP 2020 for introduction of Technology in education at various level. It alos strives to chart the methods to introduce the intense use of technology in education.

Recommendations of NEP-2020

Given the pace and depth of technological development worldwide, NEP 2020 calls for addressing the broads consequences of disruptive technologies that are relevant to education.These include research, de-skilling and awareness raising to enable our education system to cope with the rapid and disruptive changes that places us individually and nationally at a perilous disadvantaged in any increasingly competitive world.The thrust of technological intervention will be for the purpose of improving teaching-learning and evaluation processes, supporting teacher preparation and professional development, enhancing educational access, and streamling educational planning management, and administration including related to admission attendance, assessment etc.

To achieve these objectives, NEP 2020envisions creating an autonomous body, the National Educational Technology Forum (NETF), which will be the vehicle for integrating technology into different aspects of school education and higher education. The NETF will have the following fourfold functions:-

➢ To provide independent evidence-based advice to Central and State Government agencies on technology-based education.
➢ To build intellectual and institutional capacities in educational technology.
➢ Envision strategic thrust areas in this domain, and
➢ Articulate new directions for research and innovation.

It also talks about strengthening CIET to promote and expand DIKSHA as well as other educational technology initiatives. Further, the NEP 2020 has recommended following key initiatives:

➢ To conduct a series of pilot students for online education.
➢ lnvest in creating digital infrastructure.
➢ Promoting appropriate online teaching-learning platforms.
➢ Creating contents, digitals depositories and their reliable dissemination.
➢ Focus on addressing digital divide in the country.
➢ Leveraging technology for creating virtual labs for easy and equal access to all students.
➢ Training of teachers and incentivizing their digitals literacy.
➢ Extensive use of online exam and assessments including on 21st century skills.
➢ Emphasizing the importance of blended learning.
➢ As technology gets integrated, laying down stand will assume significance and.

➢ A rich variety of educational software in all major lndian languages will be developed.

There is continuous work and progress in the area of technology as it offers significant benefits. And these benefits have a huge impact on our day-to-day lives and the operations of countless industries, such as healthcare, automobile, communication, manufacturing, and business, among others. With that said, here are ways in which technology is both important and immensely beneficial:

1. Added Efficiency: Organizations constantly struggle with the goal of maximizing their output while reducing the inputs. This is where technology is a game changer, especially automation. With automated processes, repetitive and redundant operations take minimal time or labor while ensuring expected output.

2. Faster Decision Making: With technologies such as artificial intelligence and machine learning, it has become easier than ever to handle large volumes of data and make crucial business decisions based on the insights derived from the data. In addition to this, technological resources add accuracy to the decision-making process as they reduce the scope of errors from manual operations.

3. Cost and Time-Saving: Since machines are way faster than humans, certain tasks that may require an incredible amount of manual work and attention to detail can be easily accomplished with the help of technology. Technology also ensures improved accuracy.

Further, the use of technology in certain areas can also help save significant costs. For instance, transitioning to digital communication from paper-based communication and engaging machines in tasks that might take a lot more time to complete can help save costs.

4. Competitive Edge: In today's day and age when organizations compete neck and neck, technology can be one aspect that empowers a company to outdo its competition. Oftentimes, technology also serves as a USP or something that sets the company apart from others in the eyes of potential clients and customers. With access to advanced technology, companies have the opportunity to create better products, which can ultimately help them improve their sales.

5. Increased Innovation: Technology has proven to be the most useful resource for almost any industry to move forward and make progress. Upgrades not only help organizations step up but they also ease the operations for employees as well as people in general. This underlines the importance of technology in making innovations, which has a large-scale benefit.

While technology finds its application in several fields and subfields, there are mainly three broad types of technological innovation, which are as follows:

1. Semi-radical Technology: Semi-radical technology builds up on the technological knowledge that already exists. However, it aims to improve the already existing knowledge in ways that bring about innovation. For instance, smartphone brands keep rolling out newer versions of hardware with better features from time to time.

2. Disruptive Technology: Disruptive technology is a whole new innovation in a specific area, which disrupts an existing technology by making the innovation more accessible. It essentially makes for the best alternative by challenging the usefulness or relevance of the current technology. One of the best examples of disruptive technology is streaming music via various apps, such as Spotify and Apple Music, which has made the practice of downloading songs on a device almost obsolete.

3. Incremental Technology: Incremental technology, seemingly similar to semi-radical technology, differs from it in a sense that it focuses on making smaller innovations to the already existing technological aspect. However, the smaller innovations contribute to significant improvement of a product. Upgrading the versions of operating systems, releasing security patches, or making modifications to the existing services of a company are all examples of incremental technology.

Technology in Our Daily Lives: Technology has become an indispensable part of our daily lives. Everything we do right from starting our day to ending it involves some form of technology. One of the reasons why technology, no matter what field, has been a focus area for scientists and other professionals and stakeholders is that it adds convenience to our day-to-day activities while saving us time and improving our quality of life.

Right from our smartphones which are useful to us in more ways than we can imagine to various kitchen appliances, computer systems, means of communication, transport system, and online shopping (to name a few) have changed how we live our lives compared to a decade ago. The sheer benefits that technology bestows on our lives in smaller and bigger senses account for the continuous work in the direction of making further progress in technological innovations.

Types of Roles in the Field of Technology:

➢ Since technology is associated with every possible field you can think of, the types of roles in the field of technology are limitless. However, some roles are a lot more in demand in the current times than others. Information technology is one such field, with job roles such as data scientists, software developers, cyber security experts, and computer programmers being lucrative options.

➢ Beyond the field of IT, fields like medical, space, robotics, superintelligence, pharmaceuticals, education, business, and automobile technology witness the scope for great advancements, thus creating many opportunities for individuals who aim to explore new technological possibilities in the respective fields.

➢ Technology Changed Our Lives:Technology is immensely useful both personally and professionally. While the way we live our lives has changed significantly with every technological innovation, it is just as true for businesses and industries, such as healthcare, education, construction and architecture, and entertainment—to name a few. With that said, here's how technology has changed different spheres of our lives:

1.Technology Makes Collaboration Easy

We live in a world where collaboration is essential, and technology has transformed how we collaborate. Businesses specifically benefit a lot from the collaborative advantages of technological innovations that allow communication from any part of the world through virtual means. With this, businesses can tap into opportunities to expand globally or reach out to a wider audience with more ease.

2. Technology Helps New Businesses: Today, technology empowers entrepreneurs to start new ventures and raise capital by offering a wide range of options. People with ideas can find ways to implement them and turn their ideas into the next big thing, create transformative business plans, and take their initial steps to start a business with more convenience. Technology also offers the advantage of easy scalability while improving both customer sales and employee processes.

3. Technology Helps Create More Equality in Society: Technology has made it possible for people from all walks of life to have access to different resources. Further, technology is also being used to equip people who need a certain type of assistance to improve their quality of life and help them avail opportunities that would otherwise be inaccessible.

For instance, with technological advancements, people with blindness or hearing difficulties can be provided assistance using technology. Further, health-related tools, such as artificial joints and cardiovascular implants help people with certain disabilities or health conditions to have an improved quality of life.

Recommendations

In lndia, characterized by multifarious diversity and constraints in terms of availability of resources (ICT lnfractucture, electricity, budget, skilled human resources) Switching over to digitals modes of education is a humongous lask, as well as full of challenges. A decentralized planning and implementation with flesh and blood approach is the need of the hour for which various States/UTs level organization such as SCERTs, School Boards, DIETs, BIET, CTEs, IASEs, and National level organizations such as NCERT, CBSE,NOlS, KVS, NVS need to join hands for a change. Such collaboration will help to continuously enhance the quality of education and skill development of the large student population and we can leverage the demographic dividend in coming years.In order to achieve the content-ICT-pedagogy integration and use of disruptive technology in the real sense, integration and convergence of policies, schemes programs and services needs to happen with the merger of parallel structure following a multimodal approach and innovate strategies.

Conclusion:

The thurst area of the NEP 2020 is the introduction of technology in education for the development of critical thinking and problem solving skills. It is by adoption of technology that any agency of education could render its service to the society in general and particularly for updating the teaching and learning methodologies.

Whether in school education or higher education in the area of general education the use of technology is a catalyst for development and thus for relevance. The National Education policy 2020 has aptly opened the possibilities beyond horizon to initiate the use of technology for progress with education.

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