



## Use of Technology and Online Education

Sristi Kumari

M.Ed. 2<sup>nd</sup> Sem, Dr. Zakir Hussain Teacher's Training College, Laheriasarai, Darbhanga,  
Bihar, India

### ABSTRACT

#### Article Info

Volume 5, Issue 4

Page Number : 01-10

#### Publication Issue :

July-August 2022

#### Article History

Accepted : 01 July 2022

Published : 05 July 2022

The NEP 2020 is new National Education Policy which is released by central government. It transforms and reform in school and higher education systems in country. Four years integrated teacher education program (ITEP) framework has been designed for school teachers. The Program comes under the NEP 2020, bachelor's degrees with B.Ed. under ITEP. Some initiative in teacher education 4years ITEP, a dual holistic bachelor's degree with B.Ed. is launched by NCTE covering some mandates of NEP2020. These courses save one year for those students who are preparing for B.Ed. NEP2020 has brought a change in the field of our education . A new ray has come which will change our society, our region, and our thinking. It connects teacher-student from real world knowledge. It end rote memorisation process and it encourages children to learn more by understanding and by doing. It provides some new opportunity to students to do something new and develop thinking skills. It develops social knowledge. NEP2020 also adds technology in curriculum and in pedagogy also. In NEP2020 our mother tongue/Home language till class 5 takes importance in school curriculum because student can understand the syllabus and the knowledge of book in their own language(vocal for local). It gives importance to student –centered or teacher-centered learning classroom with real world knowledge. It improves school education in india. NEP2020 as good as to improve school education in india by achieve certain milestones, how we approach Teacher Education, Teacher Education Institutions, Continued professional development of teachers, quality of teachers, and status and prestige of teachers in society. During teachers training, it incorporates; self –learning, classroom –learning, class observation and practice teaching and apprenticeship. The self learning is very important learning process and it gives us some assessment of training program for develop our teaching skill among students with fully and familiar way. It gives importance to peer –assessment also because student develops their skill by socially by meeting people and learning new by

social environment. TEIs prepare the teachers with technology skill just like with IT, ICT, Digital Education, and Language skills. In covid time technology play important role in education sector for teaching and learning from home. It give formal and informal education in both directly or indirectly way in school education. The govt. of india has started the some work or some changes in school during new implementation policy just as develop projector or smart board for teaching and some new innovation in technology. The govt. provides some facility for student for education tour which is linked our classroom knowledge and students learn/understand a new thing in a better way. We have to change our thinking skill and change our attitude for progress in education field and touch the sky. We will have to change in pedagogy and development in software/hardware of technology so, that teacher-student don't face any obstacle while teaching. Its objective is to develop or improve in our teaching and learning skill. Though this status of school teacher teaching process has been developed.

**Keywords** – Technology, Education, curriculum, online education, multimedia covid pandemic, NEP 2020, school teacher curriculum.

---

## INTRODUCTION

Education is the process of transferring knowledge, values, methods, skills, and beliefs from one individual to another. Our whole education system is a cycle of technology. Without the help of technology not any education is possible. With the help of technology we achieve different learning goal of life. Whole processes of our education system depend on our technology. Curriculum also depends on our teaching techniques. Internet and multimedia enrich the student community for accessing the educational materials. Many new technologies invented day by day for progress in education system. In 21<sup>st</sup> century our education system has developed in a very high label basis of teaching practices. Internet, multimedia devices develop our thinking process or our curiosity level. The internet is now playing a bigger role in our lives and dictating how we live, socialize, teach, and learn.

As the internet is developing into a main educational tool, online education offers the educators and the learner access to numerous resources. Online education has becomes integral part of many universities programmers.

The covid -19 pandemic has generated a world – wide consciousness that the present way of life style does not work. In this pandemic situation all school, college or universities are closed so, according to this pandemic situation our govt. takes decision that all classes are continue with the help of advance technology through multimedia devices in online based and all office

work will also be continue through online mode. Thus, the technology and online education gets importance in educational sector. There are many areas need the revolutionary change in educational sector.

Within, educational institutes closed due to covid-19 pandemic, the government has been encouraging online education to achieve academic continuity. All students' talents come by this creativity. Technology provides many field of creativity and opens the mind of students and develops the knowledge or skill power. In education sector many loses come in education due to covid-19 pandemic situation.

Students at home receive good education with good guidance and with good knowledge of books also provided to him/her without any problems.

Our govt. also provides knowledge of computer or multimedia by a camp to our teacher/ professor/learners so, that they should not face any difficulties in teaching. Today's some students mind work like super computer. Teachers also need that their mind also be developed like super computer in teaching.

NEP 2020 is a very challenging task. In NEP 2020 practical work gets more importance. Let's do then learn (learn the knowledge by doing practices). Learn from environment or learn from society is also involve in it. NEP 2020 also adds online education in its curriculum and evaluates the learning potential. Today's students are very generous about knowing what happened around him/her. Intelligence power is also high and has capacity to do something new or invent some new technology. In NEP 2020 to do something new or gain new knowledge.

## **DEFINITION**

### **ONLINE EDUCATION**

The education which we receive through online mode called online education. Online educations are also called distance education or web-based education. It has becomes part of school/college and universities programmes.

Online education is the form of education that takes place over internet. It is also called e-learning or online learning. It is electronically supported learning/teaching that relies on the internet for teacher/students interaction and the distribution of class materials. To teach and learn outside of traditional classrooms and away from college campuses.

Various methods can be used such as one-on-one video calls, group video calls and webinars. This type of teaching/learning involved live classes, video-conferencing, webinars and others online tools. With online education, students can turn anywhere with internet access and electricity into a classroom. It can include audio, video, text, animations, virtu Page | 1

environments and live chats with professors. It's a rich learning environment with much more flexibility than a traditional classroom.

It is a student –centric methodology that increases students interest and participation level in virtual classroom. The teaching/learning skills play a great role in successful interaction with students.

It start from any location (home, coffee-shop, co-working places or from institutes also) and enroll students from various backgrounds and geographical areas. In it we all interact with each other from many distant areas.

The online teachers use digital resources to share with their students. It provides lots of freedom to individual to learn, teach and develop skills. Online education is now and the future. It is a digital which linked with technology education program. It offers exciting opportunities to expand the learning environment for diverse students populations. The advancement in technology has improved the quality of distance education and increased the trend of e-learning. It creates some learning environment and sometimes it becomes serious on online platform and sometimes teachers/professors creates some funny moments for students so, that students can't feel bored in study time.

## **TECHNOLOGY(MULTIMEDIA) IN EDUCATION**

The instrument which we are used according to web based in education called technology in education. In today's modern world technology is advancing day by day. Due to which life become very easy.

It become an integral part of life. Internet is probably the most famous means to spread all information from one part to another. Education technology is the systematic application of scientific knowledge about teaching/learning and conditions of learning to improve the efficiency of teaching and training (G.OM.LEITH).

Technology is making education improve over time. With technology, students and parents have a variety of learning tools at their fingertips.

Technology creates some creativity in mind of teacher/learner. They get full opportunity to do something new. By this, they want to try to learn by doing .they do copy from one another also.

Technology is also a multimedia. Multimedia is any combination of text, graphics, art, sound, animation and video with links and tools that let the learners/teacher interact and communicate with computer/laptop/or mobile phone. They are integrated materials through

searching. A multimedia application incorporates a full range of available facilities in order to enhance the communication between the creator of multimedia application and the reader.

### **USES OF TECHNOLOGY IN ONLINE EDUCATION**

Technology is used in online education and it plays very important role in education. It almost anyone's schedule. It has been shown face to face instruction. Today's technology has been incorporated into a good no. of curriculum. Students also get to know how to use the technology. Today, through the Tech. or computer classes. Students make use of computers to come up with presentations and also make use of internet to carry out research in a variety of topics. This confirms that after completing their education the students will not have difficulties with using technology in their work place.

Technology has proved how important it, as when due to covid -19 pandemic. Students were not able to attend their physical classes. Due to technology or with the help of technology they are able to attend their virtual classes. With the country under lockdown, the children/ learner/teacher spend a significant part of day in front of the screen taking online classes on various digital platforms. i.e; zoom, google meet or through whatsapp group with the help of link create a classroom model in which they all send or receive msg related to lesson.

Nothing is permanent, only the changes are constant. So, technology has been changing with time. It makes education easier. Teacher can teach in many innovative ways and they can connect to students more easily and fastly than before.

Technology in education are uses for teaching and learning and for gaining of new knowledge or creating of new knowledge in the world. It plays an important role when it comes to education. Especially after outbreak of covid-19, the latest technology has enabled students and teachers to stay connected with e-classrooms. Through, this students increase their retention power with the help of some pictures.

Technology, i.e; used in classroom is very beneficial in helping the students to understands and absorbs quickly what they are being taught through online mode. It uses in education through different modes i.e; web -based modes or mobile phone modes also. With the help of technology we design many sites or app with the help of online education.

Technology involved in the form of ICT in our NEP 2020 curriculum or digital education also involve in ICT platform for teaching and learning. It helps in evaluation process in both formal and informal ways. In 21<sup>st</sup> century in NEP curriculum online education are uses for following purposes:

- To give training to teachers in the field of technology/multimedia.
- Change in pedagogy for online education.
- Online assessment.
- Educational programmes to make in every language for learners.
- Availability of affordable computing devices.
- Provide audio/video interface.

### **TOOLS OF TECHNOLOGY IN ONLINE EDUCATION**

Tools that are used for making teaching/ learning better in different modes. Hardware educational technology (i.e; given to teaching accessories) machine linked to educational technology with the help of T.V. by doordarshan channel, tape recorder, projector. It is audio-visual aids. Ex- computers or machines etc. software educational technology (it requires some changes in study materials of students and it is instructional technology and it make presentation of courses more effective and it helps in teaching/learning. Various apps are designed for conducting online classes. You-tube also helps in conducting online classes. Some websites are also designed for searching some important classes for improving teaching /learning.

#### **Some tools of technology in online education:**

- Internet connectivity.
- Laptop, desktop, smart android phone etc.
- HD Integrated camera.
- Digital white board or smart board or projector in online classes for writing, visualizing and drawing the theories online for explain study materials content to students.
- Some Apps are available for online education.
- Websites.
- High quality of microphone and web -camera.
- E-book learning /e-classroom.
- Whatsapp classroom group for teaching and learning.
- Telegram group.etc.
- High lighter digital pen.

### **SCOPE OF TECHNOLOGY IN ONLINE EDUCATION**

It creates digital platform and try to connect all children or all citizen together with digital platform or from e-learning classroom. It focuses on online education. Develop awareness/knowledge in technology skills. It help learner to learn something new with the help creativity skills. It fulfill goal of learner .Technology in Education help or facilitates teaching learning process easy. Education connecting us previous knowledge with new knowledge in a better way with the help of technology.

Some scope of technology in education:

- Development of curriculum.
- Development of teaching –learning material.
- Development or selection of audio-visual aids.
- Development of software programmes in digital way.
- Development of essential feedback and control through evaluation.
- Development of practice material with the help or real life experiences.
- Development of knowledge of technology skills.
- Development of virtual classroom environment.

To provide education in the use of ICT. It encourages higher-level thinking skills and creativity knowledge. It supports scientific foundation knowledge. Technology links our mind with outside world environment for better learning in educational field and we create new discoveries. It modifies our curriculum in within five year .it helps in evaluation process in very easy way. It develop pedagogy curriculum in technical term in teaching and learning.

### **ADVANTAGE**

The whole teaching/learning process fun-filled and easy to understand. In 21<sup>st</sup> century it connect in our curriculum with the help of NEP2020 to make education system better in everywhere. In covid -19 pandemic it takes importance place in higher level educational curriculum. It shows a path of direction that how technology are involved in our educational field. Many technology are invented day by day by our researcher for improvement in educational sector. It involves more engagements of learners. Time Flexibility – online education courses are convenient because student/teacher may log into the course materials whenever it suits their schedule. Increased access and reach – online education courses can takes place in any place or any - where as long as where devices connectivity is available. Variety of programs and courses – students have lots of option to choose educational programs and teachers have much option how they teach student in variety of style modes. So, that student cannot face problems. This helps to save money or time. Improves retention quality. No age barriers. Good virtual classroom /collaboration/communication. It gives good result and concentrate on study materials. It is very helpful for pregnant ladies for attend or conduct online classes. Technology gives us progressive path way. With the help of technology we get positiveness or motivate by our teachers/learners. Learning becomes very easy. Many devices are innovated for taking online classes. E-library also available within 24 hours for students/teachers. Those people who don't have facility of anything, they can understand the online education sitting at home and increase their will power. It is very affordability.

Now a days, our education system has become talented through digital system through which any people share their inner knowledge with each other through online and enhance their inner skills. It provides us with new opportunities in life to do something new in life. It

develops our research /innovative power. Online education develops our thinking skills and creativity skills and full-fill all desires related to education fields.

All evaluation work also carries by this technology. In today's world all exam are conducted through online modes. OMR sheets develop in computer screen and available with many options and that is true technology make education system in a broad minded level.

Online education proved very beneficial in 21<sup>st</sup> century education policy and during covid-19 pandemic and it also help soo many learners for attending class in digital platforms and change our education system also give teacher full knowledge related to pedagogy of their subjects and also give teacher knowledge of digital platform and many teachers bring out their inner potential/capabilities through the help of online education in technology skills. It develops some social acitivity action. Some programmes conducted online such as conference, seminars, work-shop etc with the help of some app in education sector. Meetings are also held online with the help of technology in professionalism sector of education.It creates active learning environment. Online education provides comforts and peace environment for teaching/ learning at home. It sells courses and makes money. Technology upgraded day by day. It is safe way to learn. According to learner we develop our education position.

#### **DISADVANTAGE**

Not appropriate for all because it is a well known fact, that students have a dominant learning style. Some a visual, some auditory etc. online education requires a student/teacher to sit in front of a device and understand the lesson, may not be suited all learning styles. Health issues also create by taking (teachers) classes or attending (learner) classes online requires sitting in front of a laptop /computer/mobile phones far longer hours can give some health issues like headaches, eyestrain, ear problems bad postures and other physical problems also. Lack of social interaction problems also creates by this technology skills in online education. Human beings learn a lot by simply being around other human beings. Unfortunately, online education takes away all physical interactions that students and teachers might have on the school premises. It is always better for students to be around other students to talk or discuss ideas, which is essential part of learning. It is cost effective means, everyone cannot afford a computer/laptop/mobile phone and internet prices are also high which touch the line of sky. Hence, everyone cannot afford online education. Distraction also creates in online education. Many students open the mobile to learn something and end –up using social media websites, chatting, sharing pictures or playing video games. This type of distractions waste time of learners, and it is not a meaningful task in education. Technical issues also create, ie; many students are not well equipped with a high internet connections that is required for online education. Due to this, they both face problems in going live classes for virtual teaching or learning and other platforms that requires internet connection. They face technical issues as they are not much aware of technology and computer applications. It requires a lot of self



discipline means online education does not have any guidelines that need to be followed. Therefore, a learner has a lot freedom to do whatever they want without worrying about the lectures. This freedom can ruin the focus of learners.

Working alone difficult. It creates sense of isolation. Lack of personal community and connection. Focus on memorization over learning core competencies. Digital devices may short circuit sometimes. Lack of assessment and feedback which may hinder learning. Instructor may not always be available for learner. Online education cannot take the position of traditional classroom teaching. Increased stress and anxiety levels.

## **CHALLENGES**

We have to develop some new technology for making better in education. The challenges of online education include poor network problem, lack of power supply, high fees, lack of direct teaching/learning, poor computer compliances and literacy level related to technology skills, lack of appropriate materials, and resources, short circuit or power off were some challenges that online education faced during virtual classes. In many areas students face difficulties in education they have no any technology skills available in their areas. In 21<sup>st</sup> century during covid-19 pandemic online education in the form of ICT or digital classes included in our curriculum framework of NEP 2020 and it is a very challenging task for all education sector to do improvement in education fields in each and every level so that teachers/learner cannot face any difficulties in digital platform while conducting classes. So, our govt. has to improve all those challenges and fixed our online education in a better way. Till now, govt. has been working in this task for providing future better education for present or future learner. Govt. of India preparing some certificate exam for providing certificated in technology field. There are many courses also available for students for choosing and make their future bright. Some new changes also takes place in our education system .Provide new opportunities to students to take out their talents in a great level way through various social media app or. Our govt. of India preparing digital platform for present and future to teach in a digital way in every govt. private institutions and to some extent the program has been completed and to make all teacher/learner educated and aware about digital and connected with a mission/program/courses of computer education. So, that they all educate in a better way in any situation.

Govt. will have to provide all facilities under the digital platforms/program in NEP 2020 curriculum in govt. school/college also to the teachers/learners. So, that our education system can touch the sky in a great heights with their learners or teachers achievements. In science develop practical instruments in lab for doing practices for learners. So, develop new

technology to make our online education better in technological field. Some changes in pedagogy is also challenging task for teachers. Develop in the field of education certificates courses through e-classroom.

## CONCLUSIONS

Technology changes base of education. As we know, technology us life day by day and it takes place vital role in our life and it appreciates for many learning techniques and new base of learning. Technology is a versatile and valuable tool for teaching and learning and becoming a way of life. The most important things are that teachers need to be prepared to use these technologies effectively. School/college/universities can use this technology effectively and for the welfare of students, teachers and society.

In covid-19 pandemic situation it takes place important role in education field for taking classes from anywhere with the help of technology skills. Online education can be seen as a complement and extension of traditional way of education. It should not replace traditional education system. Now a days, teaching/learning is a digital age. From the modernization world in digital platform e-learning or e-reading takes place for proliferation and adoption of educational resources. It connect learner to classroom with teacher through a bridge gap of digital line/platform. It creates strong connection between learner and teacher in learning in education fields from anywhere. It is a time of great possibility and progress for the use of technology to support learning.

## REFERENCES

1. D. Casey, Learning "from" or "through" the Web: Models of Web based education. (1998) (<http://www.acm.org1/p51-casey/>).
2. J.R. Hill, Distance learning environments via the world wide web, in: B.H. Khan, ed., Web-Based Instruction, Educational Technology Publications, NJ, 1996.
3. T.C. Reeves, Effective dimensions of interactive learning on the world wide web, in: B.H. Khan, ed., Web-Based Instruction, Educational Technology Publications, NJ, 1997.
4. A. Relan and B.B. Gillani, Web-based information and the traditional classroom: Similarities and differences, in: B.H. Khan, ed., Web-Based Instruction, Educational Technology Publications, Englewood Cliffs, NJ, 1997, p. 43.
5. <http://georgetown.edu/crossroads/mltmedia.html#4>.
6. [http://online.northumbria.ac.uk/faculties/art/information\\_studies/impel](http://online.northumbria.ac.uk/faculties/art/information_studies/impel).
7. <http://web.mala.bc.ca/seeds/>
8. [www.forminform.it/files/tab2/ueo](http://www.forminform.it/files/tab2/ueo)
9. [www.isoc.org/inet99/proceedings/4e/4e\\_1.htm](http://www.isoc.org/inet99/proceedings/4e/4e_1.htm).
10. [www.oucs.ox.ac.uk/ltg/projects/jtap/reports/teaching/chapter1.html](http://www.oucs.ox.ac.uk/ltg/projects/jtap/reports/teaching/chapter1.html).
11. [www.studymmentor.com/studymmentor/Terms.pdf](http://www.studymmentor.com/studymmentor/Terms.pdf).
- 12<sup>v</sup> [www.westga.edu/distance/oddly/winter54/collins54.html](http://www.westga.edu/distance/oddly/winter54/collins54.html)