

# Educational Transformation- A Paradigm Shift

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## Abstract

India is a place where the education system has shown a tremendous transformation. From a Guru's preaching at Gurukul to an organized system of education, from primary to secondary, secondary to senior secondary and higher education at university level and now reaching to digital and AI based education. With a fast pace of life we are prone to various Global challenges and to overcome these we are enriched with new innovations in various areas. Science is a boon to us which has initiated several technologies to adapt with the environment. Digitalisation is one amongst them. It has raised its momentum in every field of life and if we talk about education, it has given new wings to it. New education policy 2020 has brought new facets of education where it gave least emphasis on rote learning and focused on self education as per the current market demand. The paper explores the current state of educational transformation, examining the factors driving change and the ways in which educational systems are responding to new platforms like MOOCs, SWAYAM, AI & Machine Learning etc.

**Keywords:** Transformation, Digitalisation, AI, National education policy, e-learning, personalized learning, online learning

**Introduction:** In this vulnerable life we are exposed to several contingencies in various sectors of life. For coping with this dynamic environment one should be conversant with all parameters of life. Thus education plays a great role in life. In today's scenario when there is revolution in every field one can see a biggest transformation even in the field of education. From ancient time till this era lots of transformation has been brought in ways of imparting education. During the last decade the use of the internet has increased so far. With the beginning of the twenty-first century, the role of various social media apps and other mobile apps has brought a new revolution. (Schallmo *et al.*, 2017). The Role of Internet reached its peak during covid 19 period when the use of mobile phones and laptops remained the only option to solve the problem of educating people while following the rule of social distancing (Salas *et al.*, 2022, Singh *et al.*, 2022). Digitalisation in the education sector has come as a boon as it provides personalized learning to cater to individual needs of the students. (Khan and Iqbal 2021). If technology is in hands of Great teachers it can make a revolution in education. With this notion our new education policy of 2020 of India recommended using digitalisation in the education for limitless knowledge. It has talked about transforming India from a traditional chalk & talk method to digital method (New Education Policy, 2020). Various online platforms have been initiated by the Government of India like SWAYAM, MOOC, ICT programmes. The Role of Edutech industries have risen up with a great speed.

**Rationale of the study:** We are living in a dynamic world, where everything just keeps on changing. With this vulnerability we should be adaptive and should go with the world. There cannot be a single way to make it fit for all when it comes to education. There should be several platforms made for tailoring the needs of all the students. Online learning helps in giving personalized education, self-

directing learning and easy accessible learning tools. This study is really helpful in creating awareness amongst the students, teachers and the researchers about educational evolution.

**Objectives of the study:** Global transformation and emergence of technologies has made it mandatory for an education sector to transform and adopt the new technologies. Various objectives behind this study are:

- A) To know the current state of education sector in India,
- B) To describe the transformation occurring in the education sector.
- D) Highlighting the positive and negative impact of educational transformation.

**Research Methodology:** The researcher aims to review various studies conducted by different researchers at national and international level. Researcher has done secondary data analysis by reviewing various studies conducted at national and international level to update knowledge and understanding. Researcher has used a descriptive research design for the study. According to the requirement of the research, various reference books, information tools, and websites have been used.

#### **Educational Transformation:**

Online Education has become a major part of delivering information. We are strongly adopting the scheme of Digital India in the education aspect also. Digital Education gives a widespread approach and provides an easy availability of online modules through ICT programmes and various MOOC programmes for the learners. With a strong vision of NEP, we are now enriched with a flexible curriculum which fulfills the needs of all educators in India. But in a Country like India which is composed of different economic sections in society, it is not possible for all people to get access to the Internet. Even people who do have access but they are not capable of getting the strong data speed. This creates a hurdle in Digital Education Platform to inculcate to the masses (Khan and Iqbal 2021). India has introduced the new wave of smart education. There are numerous opportunities and challenges before researchers in the field of education. In a digital learning environment it is the student, the learner who is the core of this process of imparting knowledge. He is the one for whose benefit the whole transformation has been introduced in the education system. So, Digital platforms provide ways to give learner centric education. Various technologies have emerged in the education sector after digitalisation like cloud learning, ICT etc. (Gopal 2020).

In the wave of transformation, women's education has been considered very important. There is a saying: "If you educate a man you educate an individual, however, if you educate a woman you educate a whole family. Women Empowered means Mother India Empowered". PT. JAWAHARLAL NEHRU. If nation want to educate the whole India then the Women Education is necessary. If we want that women should not be exploited and should be empowered then a single key to make this happen is to educate the women. Only an educating woman will understand the various phases of life and will be in situation to face the various challenges. With and empowered and educated women we can remove several social problems like population explosion, infant mortality, sexual harassment and many more. (Ahamad and Narayana 2015).

In today's era Artificial intelligence is gaining ground in education and changing its all aspects. Artificial Intelligence system in education has made possible for the country to impart personalized and tailor made education to the students. Not students, even the teachers are now exposed to several AI

technologies and get an opportunity to learn more in their respective fields. Personalized learning, recommendation for the apt study material and various others customized AI- driven technologies in education makes the people advanced and adaptive to the current requirements. Though various ICT programs have been introduced by the country and made it possible to make all advancements in the education system. But still there are various untapped areas in the AI-Education system like emotions recognition, language processing, facial recognition etc. AI has many more capabilities yet to be found out which can change the whole education system. We can excel in those areas too where we are lacking (Jaiswal and Arun 2021). The aim is to encourage the implementation of artificial intelligence education and motivate the teachers to uplift their level of cognitive skills. Now they can make use of various online apps for making their task easier. It may reduce their workload and they can allot their time on improving their literacy. Teachers do recognize the role of artificial intelligence in their lives. As per a study 52.1 % teachers are in favour of artificial intelligence and consider it as an important tool in education. It leads to their professional development. 3.1% teachers don't consider it important for their professional development. (Xue and Wang, 2022)

There's a great role of TADEO ( word in Portuguese language which means digital transformation in education) with the help of TADEO , students can be equipped with various technical, social, cognitive and other skills. In this rapidly changing environment we have to be adaptive as per the current scenario's requirements, for this we have to modernize our education system. And this can be done with the help of digitalisation in the Education sector. With the continuous industrial revolutions, it becomes important for the citizens of the country to be capable of understanding the causes of problems and the ways to mitigate these problems from the country. With digital education the whole system can get education as per the global requirements (Olivera *et al.*, 2022). Researcher has thrown light on the concept of dual digitalisation. Dual digitalisation means digitalisation in education and digitalisation in subjects. Researcher talked about the challenges coming in front of dual digitalisation, and discussed how a digital learning space will be organised which will benefit teachers and students. There should be coordination between teacher and student. Their roles should be clearly defined (Bygstad *et al.*, 2022)

There should be a highly enriched digital infrastructure which makes digital learning space shareable and easily accessible by the students as well as teachers. There should be many educators not only from the university but also from the outside. A student should have an option to join any online or social media way to enter an online discussion and to be a part of it. With this, boundaries to inculcate knowledge amongst students will not be confined, though it will be in abundance. By way of digital education a teacher can cultivate a seed of self learning amongst the students (Bygstad *et al.*, 2022). Robotics in education effectively catches student's attention in grabbing the concepts. It makes computational thinking skills and engineering skills stronger. It is an all in one technological tool that brightens the future of the students and should be blended more into school curriculum (Eguchi, 2014).

### **Educational Transformation- A positive impact:**

In a focused group interview method conducted by the researcher it was found that students really enjoyed screen based education classes, as they were not required to copy all the notes, rather they could focus more on understanding the concepts taught by the teacher on an online mode. With this they easily understood the concept by taking notes later on sent by the teacher. In this type of educational transformation it became easier for the student to grab the concepts without giving much time. It is

easier, conceptual, skill generating and at the same time interesting and entertaining for the students. (Strakova and Cimermanova, 2018).

Educational transformation has given a new platform for teachers also. Now with the digital education system teachers have multiple options of using the new methods and techniques to educate the students. Teachers find it more entertaining and creative with the use of various educational technologies. In a survey conducted at college when asked whether teachers use innovative methods and teaching aids in their pedagogical activities, 75 % answered in favour of it and the rest 25 % were against it. Teachers find it as an innovative tool (Tsarapkina *et al.*, 2021)

Digital education gives a learner centric platform to educate the students (Gopal, 2020). It caters to the Global requirements and thus gives the personalized learning platform (Olivera *et al.*, 2022). During Covid 19 pandemic it became paramount for teachers as well as for students, as online teaching was the only way to stay connected with students without having face to face connection. Teachers enjoyed this change and accepted this transformation with a positive attitude (Fitria *et al.*, 2021). During Pandemic, the transformation from offline to online learning was welcomed by the students. They found it more flexible, efficient and effective which makes optimum use of their cost and time (Firmansyah *et al.*, 2021). Professional collaboration in education has brought an immense change in the working of society and the economy is growing with a great speed. The education system is contributing to the consistent and sustainable development in economy through creating a continuous knowledge platform for the nation (Harris, 2013)

Research suggests that screen based education has a positive impact on cognitive development of a child. Computerized educational programmes enhance the thinking ability of the child and they excel in many fields (Anderson, 2017).

#### **Educational Transformation- A negative impact:**

Children mostly spend time on entertainment programming and their skills are not fully explored. With intense use of mobile phones children lag behind for other productive activities (Anderson, 2017).

Students find it as a limited source of information and learning, as they were limited to their notes only which were given by teachers on online mode, which led to lower down their grade. (Strakova and Cimermanova, 2018).

With lots of advancements in education still we are lagging behind, as in a survey conducted for teachers, some teachers were not satisfied with these new educational techniques, the reason behind it was non acceptability of new techniques, partial or no knowledge of using these teaching aids and sometimes inadequate equipment. Study indicates that in 70 % cases, a salary is an important tool which contributes in modern activities of a teacher and just 55 % sufficient college equipment contributes to their modern activities (Tsarapkina *et al.*, 2021).

#### **Challenges**

Online learning and making use of various online apps still encounters hurdles and challenges before the user. Inadequate facilities, reluctant behavior of people, ignorance, lecture estimate change, lack of equipment creates obstacles in the wave of transformation in education (Firmansyah *et al.*, 2021, Tsarapkina *et al.*, 2021). In this world everyone is so busy in himself and with advancement in technologies people spend most of their time on mobile phones, with this we are losing our culture.

There's no face to face interaction amongst people and they don't require others to spend time (Etherington, 2019). In A Developing country like India there are people from different economic backgrounds. It is not possible to access the Internet by everyone and accessing it at a high speed is also a challenge that creates a hurdle in the path of digitalization. (Khan and Iqbal 2021).

### Conclusion:

Technological advancements have accelerated, enhanced by the revolution brought by the Internet and social media which made the world habitual to it. And it has become an integral part of people's lives. After Covid 19 pandemic, it became necessary to work on an online mode. Role of MOOCs, SWAYAM, online apps, ICT, Machine learning, Artificial Intelligence has increased massively. There's a great role of teachers and researchers in the process of true 'educational transformation', teachers and researchers work as social agents for the students and for the nation (Fisher, 2006). Women empowerment and honoring the rights and viewpoints of women have emerged as a major global movement and are continuing to break new ground in recent years. Women empowerment is governed by education and there's a tremendous change in the education of women. Online learning has paved the way for personalized education to cater to different needs and different catching power of students.

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