

TRANSFORMATION IN EDUCATION SYSTEM DURING AND POST COVID-19

Madhu Vishal
Research Scholar
GGTU, Rajasthan
madhuvishal2003@gmail.com

Abstract

The Seeking of Knowledge is compulsory for every student. Providing educational opportunities for all is the responsibility of Government. The secret of the survival of life lies in education. The nation, which lacks education, dies soon. Education, which makes the system of a country, is often shaped on the basis of national aims and aspirations. The learners have to complete the syllabus with a fixed time schedule. In the presence of outdated teaching method, it is difficult to pay individual attention to all students. The crack between weak and talented students rises due to these outdated teaching methods. NEP2020 also emphasized to improve pedagogical method to attainment of educational objectives. Due to pandemic lot of changes has occurred in teaching -learning process. First, pedagogical adaptation has demonstrated to be pivotal as the traditional lecturing in. No matter which type of app is used, teacher need to be creative and attentive. NEP2020 emphasized on how to improve competency level teacher -educator and developing professional skills to meet global challenges as well. Education is in concurrent list so all stake holder of education system at national and state level should work hard for the realization of educational objectives.

Keywords : NEP2020, Pedagogical Methods, Pandemic

Introduction

The outbreak of global pandemic presents a crucial time for everyone. Such changes will be required to address from different stake holders. Pandemic not affected education system but also causes mixed emotions and psychosocial stressors for all stakeholders covid pandemic has affected 320 million students in India. A paradigm shift to e- learning has been noticed during and post covid situation. Although many challenges faced by teacher educator. These challenges must be addressed by our educationalist, economist and policy makers. In school system India stands second after china. 32 million children were already out of school before outbreak of corona pandemic based on report of NSSO2014 report. These students come under socially disadvantaged group. As per newly drafted NEP 2020, if e-learning is synonymous with new normal the policy must further modify to address the practicability of digitalization to ensure quality and equity in education. We need to highlight following points ...

The Operational Burden:

According to 2017-18 survey made by the Ministry of rural development, more than 36 percent of school in India run without electricity. The students belong to underprivileged background express inefficiency and inadaptation to e-learning. Unlike physical class room setting one to one discussion with learner through e-learning mode seems to be unreasonable. Competency level of faculty member and academic institution are not at par for transition to online learning.

The Digital Divide and Gender Bias:

For children dropping out from school, economic factors seem to be perilous. Majority of migrant workers are affected by pandemic and lockdown. Majority of India's population involved in unorganised sector for their livelihood. Such workers are forced to move back home and for them it seems to be hard to send remittances. In that situation technology driven education is not possible. 2017-18 NSSO data based on key indicator of Household Social Consumption on education in India, the Indian rural household have internet accessibility to less than 15 percent the percentage of female is very less for the accessibility of internet due to engagement in household work. In remote areas male child education is prioritised-learning facility boost the potential of each child. Economic reform policy have always propped towards digitalization. Unfortunately, implementation of these policy not address the inequalities that arisen due to caste and class struggle in India.

Poor Quality Education

Admittance to education of low quality is equivalent to no education at all. If child not acquire basic life skill, value education and literacy, numeracy skill, what is the objective of giving quality education?

Objective

- To study the challenges in the field of education.
- To study the competency level of teacher to facilitate e-learning.
- To study psychological aberration in adolescent during times,
- To study difficulty level of all stakeholder for achievement of educational objective.

Among all the factors which influences the quality of education as per Kothari commission 1966. National development depends on competency level of teacher. Future of our children depends on quality and skill of teacher. High quality of human resource created in classroom by teacher. Teaching profession is highly respected in our

society since ancient time. Need of the hour is to attract best talent that is realized in pandemic situation. Quality of teacher is not only to complete syllabus and conducting exam for promotion to next grade. How to identify and recognise best quality of child and also unique capability. Quality teacher always focus on equity and inclusion.

As per NEP 2020 guideline much more focus should be given on life skills, conceptual understanding, collaborative teamwork and we feeling. Technology assisted teaching -learning is mandatory now a -days and also during times. Quality teacher should always receipt inventiveness and promote ethical use of technology. New education policy focusses on 21st century skill and totally eradication of rote learning To develop critical thinking among children, emphasis must be given on experiential learning. At classroom level for effective implementation of NEP 2020 the role of teachers is very crucial. Teacher pedagogical style must be shifted from traditional to experiential2020, a path breaking reform in education definitely have an impact to ignite critical thinking among students and also meet global challenges.

Challenges in Education

At present covid-19 has affected entire world, more than 42 lakh learners are influenced by school closure evaluated by Economic co-operation and Development. During covid time online education system plays a significant substitution for traditional class. Data shows that urban teachers are very much update for access of technology for conducting online classes, exam meeting facing little challenges in teaching -learning process. Rural area teachers are showing difficulties in accessibility of technology To narrow the digital gap The government of India initiative is Swayam-learning platform. Although Indian education system has seen some advancement over the last 5 years. Advancement of education can be seen if technology will reach to rural school, then only revolution in education system can be seen. If the matter is for incorporating technology in education, we forget the challenges faced by school, teacher and students. As per ASER report 50% rural children are unaware of using computer. Learners are expected to be more efficient if technology is incorporated in school. In order to revamping digitalization process Government of India initiative DIKSHA, Smart school, ICT school, digital board, epath Sala, Swayam are major initiative. Technology assisted learning can enhance cognitive learning. Although National education policy is revolutionary document that address vivacious role of technology in promoting teaching and learning. Policy maker should try to create interconnected plan for cultivating technical competency. Lack of power supply in state like Bihar, Manipur, Meghalaya, Odisha also interrupt technology assisted instruction. If resources are available teachers are less competent to use technology. If competent teachers are not present, no doubt quality of education 100% reduced in school education system.

Government of India Initiative to interlinked technology in education

Diksha Portal

The MHRD ministry launched DIKSHA PORTAL on 5 September 2017. It supports teachers to connect with teacher community, in-class resources, assessment tools, training content etc.

E-PATHSHALA

In November 2015 MHRD and National Council of Educational Research and Training jointly initiated E-path Shala portal.

Covid-19 has brought definitely massive change in education system. The pandemic has formed special prospect for educational variation that have been projected before covid-19 but were never comprehended. In post-covid three big changes notified in education system, pedagogy that is student-friendly, probing-based, curriculum that is inclusive in nature and highly objective. Content delivery exploits on the strength of both synchronous and asynchronous learning. Outbreak of pandemic and subsequent school closure impacted every student of world and compel teacher educator to generate innovation in teaching-learning process.

Smart School

Technology based teaching-learning institution is called smart class. CT delivers secondary stage students to shape their capacity and learning through it.

National Education Policy 2020 Towards Creating A Digital India.

NEP2020 demands for speculation in the development of online-teaching platform and resources, establishment of virtual lab and digital library, investment in digital infrastructure design and implementation of online evaluation. The policy demands for the establishment of a planned unit for the advancement of digital content, digital technology and capacity building in order to supervise e-education need of both school education system and university education system. SWAYAM is a platform to encourage people to use e-learning. During the pandemic period Indian education system go through a period of understanding and realization of whole machinery. In order to keep teaching education system lacerated their way to a instant solution. The country digital divide is exposed in pandemic time, the unplanned and unexpected transition, which was accompanied by inadequate bandwidth, lack of facility to for students to attend online class. NEP2020 also emphasize lot in improving digital technology to meet global challenges as well.

Virtual lab

More interactive laboratory is developed in, students would have online access to hands on experiment-based learning. Policy emphasizes a lot on experimental learning. This cutting-edge innovation would improve the immersive learning experience.

Virtual Classroom and E-content

NEP 2020 emphasis on making interactive classroom, student centred and collaborative -learning approach. Online education is a alternative for physical mode in time of pandemic and disaster. This policy also to keep focusses on competency level of educator and enhancement of efficiency. To keep attentive during entire learning-period through content delivery, learning games and simulation.

Online Teaching Framework And Resources:

For tracking learner progress, e-learning system such as SWAYAM and DIKSHA will be providing educator with a rationalized, user-friendly. and wide range of assisting tool.

Digital Divide

Majority of school going children has insufficient access to technology, conventional public media such as tv, radio and community radio would be heavily used for telecast and broadcast. To meet the diverse demands of learners 24 hours training programme offered in different language. To achieve global sustainable goal the digital divide must be resolved. As far as possible digital content should be provided in their medium of instruction. The Edtech has equipped with progressive strategy with a deal of new opportunity. In addition to English and Hindi in different language, ED tech is to provide a variety of educational service NEP 2020 emphasize to technology integrated education. Implementation of new education policy envisages on building on online pedagogy. One integrated portal and platform to provide free online courses is developed by ministry of human resource development. From senior schooling to post-graduation educator from thousand of institution throughout the country are involved in developing and delivering MOOCs through SWAYAM in almost all discipline. On SWAYAM platform there are 1000+ courses available and about 30 lakh students have enrolled in it. During lockdown period 50,000 students have accessed SWAYAM platform. Every citizen has the right to dream, thrive and contribute to the national development. By gaining access to the education system. New education policy given special focus on Socioeconomically disadvantaged group that are broadly categorised on gender identities, socio cultural identities, geographical identities, disabilities and socio-economic condition. Current education system is revamped by new education policy

with progressive outlook 2020 aims to eradicate rote learning with experiential -learning to provide 21st century skills among learner. Student get versatile learning experience ,freeing them from time and location constraint always focus on providing open access to education and training. All over the world online education emerged as the substitute for face-to-face learning.

CURRICULUM: In a globalized world traditionally accredited valued skill and understanding become less important and new dimension added in skill and knowledge. The society is renewed through crisis. The way of working, communicating on global level, transformed due to covid-19. For online teaching innate technological capability is needed, the need is also to revamp education system. The school system and higher education system must struggle to over whelmed this situation to be competitive and provide high quality education in a situation of digital transformation, unruly technological innovation. It is important to highlight some barrier and challenges that school education system encounter. The economic and social measures have undergone massive change due to covid-19 pandemic. There is paradigm shift from traditional teaching to online teaching from elementary to higher education. Due to closure of entire education system in 185 countries as per UNESCO data,1,000 million learners get affected. The reality of the new normal has intricate a radical transformation of education and training. The sudden forced shutting of face-to-face schooling has led stakeholders of education system into unacquainted terrain due to the need to adapt rapidly to total e-learning setting. This unexpected change has required education system to develop towards online teaching in record time executing and familiarizing the technological resources available and involving educator and researcher who lack innate technological capacities for online teaching. The development of disruptive innovation is a time of menace and ambiguity, but it is also a time of prospect, bringing talent and innovation to the education system. In education sector disruption means paradigm shift from traditional, established educational model of knowledge transmission. Existing methodology is replaced by disruptive educational innovation by initial new alternative for learning. With the help of information and communication technology it introduces new advance in education system. To promote and open curriculum enabled by new digital education, this educational disruption considers both learner and educator. It also includes innovation in teaching method, the development of new learning material, mechanism and the transformation of the role of students. The successful transformation of education system from old learning method should stand-in a participatory culture, involve participants and encourage evidence based deci99sion making and transparent assessment of learning outcome. The impact of pandemic will convey an era of radical technological transformation. The education system must redesign and address the difficulty level to confront new situation. It is now challenge before academician to

through light on how education system are radically transforming education and training. To realize successful transformation education system must be aware of difficulty level and recognise new tool integrating technology into teaching-learning process.

Transformation of Education system To Face COVID-19 Disruption

Technological Resources and Methodologies Used

Due to covid-19 consequences education system has experienced a paradigm shift to e-learning. This transformation was speedy and driven by circumstances. The pandemic demonstrates a period of global experimentation with remote teaching. The initiation of digital transformation in education system started years ago, global pandemic only stimulates it. We have to focus on competency level of teacher-educator, pedagogical methodology and assessment tool to assess learning outcome. In a virtual system focus should be given on child-centred approach, inquiry-based learning that engage students more enthusiastically. Appropriate infrastructure and technological stage e.g., Blackboard, Moodle, Microsoft team required by digital education system. A wide variety of online communication platform and solution are available to assist digitalize the entire teaching-learning process at a global level. Video conferencing tool (skype, zoom, Google hangout, Google meet), instant messaging Future of entire generation a tool (what's app, Telegram), and educational app(Google classroom) to maintain individualized contact with learner. The technological resources accessible provide various option for teaching learning. Various innovative methodology has proven to be to be useful in current pandemic. Online and digital learning deliver efficient means of content transmission to learner. Economical point of view online method is beneficial. Online learning allows both the educator and learner to established their own speed. School opening after pandemic is not simple phenomenon. School need to help them for readjust and provide psychological support to mental health and well being of children. MHRD initiative to set up MANODARPAN cell is working hard to encounter mental health problem of different children. Future of entire generation is at stake after covid19 pandemic. It is priority of education sector to provide healthy environment. Only giving assistance to encounter psychological problem is not enough rather remedial classes also given to recover learning losses and improve all-rounddevelopment. Most children have lost significant instructional time and may not be ready for curricula that were age and grade -suitable prior to pandemic. The pandemic also revealed a unambiguous digital divide that school can play a significant role in addressing by ensuring children have digital skill and access.

AREA OF ACTION: The companion will assist the design and implementation of large-scale remedial learning at different level of education.

- Lau an open access, flexible learning assessment tool that diagnose learning losses and identify learners need.
- Assist the design and implementation of digital transformation plan that include component on both infrastructure and ways to use digital technology to stimulate the development of foundational literacy and numeracy skill.
- Incorporating remedial instruction, digital technology and social emotional learning into curricula by the end of 2021 will be a major challenge for most of the countries.
- Country level action and global support needed in this way. UNICEF WORLD BANK, UNESCO are working in collaboration to support countries to achieve target mission, through various educational funding.
- The partner will involve government and decision makers to line up educational financing and activate additional domestic resources.
- The educationalist will join forces to gather data related to survey analysis and set-up a global, regional, and national real time data warehouse.

Emerging Barriers and Challenges in the Current Scenario.

Education sector badly affected by covid-19 pandemic. The drastic dilution of physical mode of teaching emphasized both teacher and learner to adapt with transformed technology integrated teaching -learning process, that is need of hour. Although teacher -educator bring some major barrier into notice. Government is taking planned initiative to face the current challenges in education sector. Global pandemic after effect is so serious that all stakeholders of education system should work together with efficient effort to overcome challenges. Students from different region address their issue in facilitating online teaching-learning process. Education sector must activate various resources to ensure that students residing in various region

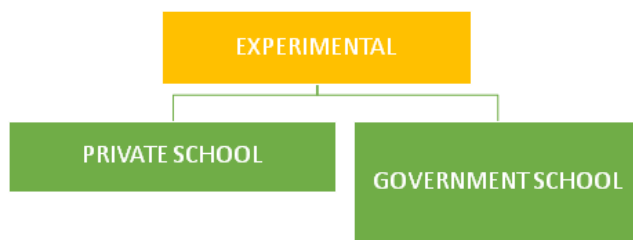
Covid-19 effect directed to a rapid transformation of education sector. As a educational researcher, in depth study of literature review directed me to assemble some factual insight for education sector transformation towards online mode of education. In line with NEP2020 school education and higher education need to strong their technological infrastructure and ensure that all learner from remote and urban area must have equal access in digital transformation. In budget allocation government must increase package for education sector to to meet challenges of digital transformation. There is also need of leadership management and best human resource, in short whole educational machinery need to revamp to meet sustainable development goals. The specific objective of digital service provider is to make all age group learner familiar with technology integrated teaching-learning. In advance world computerised and digital world become a standard need of hour. With the help of innovation in technology, online education steadily growing worldwide. Till 2025 online-education on mainstream. This

problem is not specific to national level rather all over world is facing problem created by disease, named covid-19. Organisation for Economic co-operation and Development reported that more than 42 lakh students get affected by school closure. More than 20 nations reported partial closure. Online education system provides sufficient advantage to young learners. Education plays a significant role in every field of life. Education is need of the hour. And also making future bright. But due to various circumstances to continue education online education system is significant alternative. To impart education to physically challenged person online education is a best substitute. Online education system is student friendly and convenient method. To facilitate online teaching time and place is not critical

Discussion and Conclusion: Unprecedented impact of pandemic and the accessibility of digital technology that can assist online-learning present an unparalleled opportunity for the transformation of education at global level. Need of hour is to adapt with digital world. Online teaching has gained momentum and ensured its continuance even after covid-19 pandemic. Our examination system reveals the overabundance of technological tools and platform to support online learning, web-based learning platform, Massive open online courses, instant messaging tool, video conferencing tool to facilitate teaching-learning process. All stake holder of education sector still unable to understand what the shift to virtual learning will mean for the future of education at global level. It is clear in present scenario that school education and higher education should develop aerudite combination of face-to-face and online learning to connect the potential of the technological tool available to meet learners expectation and enhance their learning experience in the current digital environment.

Assessment problems and the main difficulties in online teaching and learning caused by Sars-Covid-2 outbreaks throughout the world.

Research statement: The researcher has aimed to study the impact of cooperative and on-line learning evolvement of scientific ability and problem-solving ability. It is an quantitative research. It, is experimental research in which pretest and posttest was considered to be suitable design for study. schools are randomly selected. After selection of school further two groups were formed. Both two groups are experimental group. Special teaching session of 30 days are applied to both group by investigator.



SAMPLE OF THE STUDY: The sample of the study of experimental research comprised of 120 students. 60 from private school and 60 from government school. An achievement test is used to measure the scientific ability and problem-solving ability of learner. The pretest was administered to the sample to see the equivalence of the groups. The pretest consists of 30 items of 30 marks and posttest consist of 90 items of 100 marks. These achievement tests were of objective type consist of question related to knowledge, understanding, application and skill.

Comparison of Pre-test score of Learner of Nilgiris Hill School of Cooperative Learning and online Method

Sr. No	Group	Treatment	Mean	N	Std. Deviation	t	Df	Sig(2- tailed)
1	online method	Pre-test	31.3	30	10.998	.485	29	.631
2	Cooperative method	Pre-test	29.933	30	12.216			

The p value (.631) in the above indicate that the performance of the two groups is not statistically significant. The computed-value is also not significant at 0.05 level. Thus, the statistical analysis of the pre-test score of two groups indicate that both the groups were at equivalence in the beginning of the treatment.

Comparison of Post-test scores of Learners of Nilgiris Hill School of Cooperative Learning and online Method

S.NO	Group	Treatment	Mean	Std deviation	t	df	Sigma two tailed
1	Online method	Post test	32.23	11.83	2.41	29	.609
2	Cooperative method	Post test	38.60	9.55			

The p-value (.609) indicate that there the performance of the two groups is extremely significant. The computed t-value is significant at 0.05 level which suggest that the effectiveness of treatment of teaching through cooperative learning over demonstration method. On the basis of the above analysis of data hypothesis 1” There is no significant difference between cooperative learning and online method for developing scientific attitude in secondary school learner in not accepted.

Significance of the study

The main objective of NEP 2020 is to provide qualitative education to all .Innovative pedagogical method to improve learning outcome and conceptual understanding .All round development of learner not envisage achieving good percentage in subject rather it should focus on socialization process also.

During covid pandemic online education may be substitute but students across nation seems to face difficulty level for their psycho social development. How to organise classroom activity into social and academic learning is visualized in cooperative learning. It inculcate feeling of positive interdependence, mutual cooperation, team leadership and higher self esteem.

Conclusion: Post-test of learner on which treatment is given clearly indicate cooperative method is best way to develop scientific attitude and problem-solving ability of child. With treatment of this method achievement score of low achievers also increase. The key overall thrust of curriculum pedagogy reform across all stages will be to move the education system towards real understanding and towards learning how to learn and away from the culture of rote learning. Study area is innovative for future prospect. There is wide prospect for educationalist. Alignment with NEP2020 study area is totally student centred.

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