International Journal of Policy Sciences and Law

Volume 1, Issue 3

<u>Impact of Digitalisation of Education on Teachers in India</u>

Rishabh Gandhi[1]

[1] *MA Financial Economics from University of Hyderabad*

Abstract

The entire education system moved out of traditional classrooms made up of bricks and mortar with the onset of the COVID-19 pandemic. Teachers needed to shift to the online mode to teach students as a result of its outbreak. The aim of the study is to explore the positive and negative impact of digitisation of education on teachers in India along with providing some recommendations in order to improve the online learning models. A qualitative research design was adopted in this study. The method of observation and case studies from previous studies were taken to reach the main objective. For analysing purposes, PESTELE analysis and cost-benefit analysis were used. According to the results of this study, teachers are facing a lot of issues like irritation, depression and hampering of their social relationships in this digital education phase. However, some positive things for teachers include a rise in teachers' income and a better career in the near future as they are now familiar with the technology. The cost-benefit analysis further confirms that the negative impact of online education on teachers outweighs the positive counterparts. The study also provides recommendations for making online teaching easier(like teaching only core topics and leaving the non-core topics that students can study on their own).

Keywords: *Coronavirus pandemic, traditional classrooms, online learning, teachers, recommendations*

1.0 Introduction

The COVID-19 Pandemic has brought about a sudden shift in student-teacher interaction throughout the world. The educational institutes were forced to close down overnight and forcefully accommodate the transition to online means of education, due to the rapid spread of the coronavirus. For students and teachers, this shutdown implied more than just a pay-cut or a professional setback, it shook the basis of everyday learning and teaching. It was observed that the educational system in India faced unprecedented problems not only in adapting to but also in implementing new modes of learning. Several positive things can be acknowledged in the context of online learning. Technology has helped in keeping the practice of learning functional. However, digitisation does not always indicate positive changes. Students, along with teachers in India, are faced with certain implicit negative impacts in the process of transition.

In fact, more than the students, teachers had to undergo concerns of anxiety, fear due to the pandemic, maintaining a healthy work-life balance and difficulty imposed by the remote learning-teaching experience.

1.1 The Flipped Classroom

Educational systems throughout the world have undergone a paradigm shift in recent times. The traditional school practices have been turned into a socio-digital participation setup. The teachers with little training and even fewer resources have had to switch from working in face-to-face interaction to distance teaching mechanisms. Earlier, teachers were able to act as a pedagogue (a person who is able to make a perfect match between students' needs and learning styles). Now the phenomena have changed to intensive online interaction which has resulted in hectic multitasking on the part of the teachers. The absence of face-to-face interaction in the new flipped classroom restricts the better implementation of students' needs-driven teaching.

1.2 What is Digitisation of Education?

Distance learning is a formal learning activity that is carried out by teachers and students involving different forms of media such as google teams, zoom, and other forms of indirect face-to-face learning. Distance learning has existed in developed countries like the USA and UK, but India started to offer such learning activities only after the onset of the COVID-19 pandemic. The Indian education system, for ages, has propagated the practice of face-to-face learning in natural surroundings. However, if related to the current situations in India, distance learning inevitably must be carried out so that students can fulfil their responsibilities as students and get their equity to learn.

1.3 Availability of Resources and Student-Teacher Interaction

All distance-learning activities must be sustained by technology or software that is a bridge so that learning can run smoothly. Online learning as a more liberal model of teaching, includes teaching content or learning experiences that are specifically delivered or activated by electronic technology and combines a variety of learning strategies and technologies, from CD-ROM and computer-based learning to learning video conferencing.

In India, the applications used to support distance learning include Google Forms, Google Meets, Zoom, Google Classroom, and others. The applications that have been mentioned help educators interact with students through video conferencing, for a more class-like learning experience.

In addition, there is a substantial need to address the hindrances posed by this distance learning, especially for the teachers. Along with recognizing the factors like the digital revolution in education, the psychological changes in teachers and their resistance to change needs to be given due attention. A drastic shift in one's work and workplace requires the exercising of serious stress management and coping techniques. Therefore, the purpose of the present study is to explore the positive and negative impact of the digitisation of education on teachers in India. The study uses qualitative research and analysis methods and provides recommendations for better online learning-driven models.

2.0 Context: Teachers' Shift from the Status Quo

With the onset of distance learning in the system, many researchers took into consideration the underlying facets of digital learning mechanisms through qualitative or quantitative studies. Many recent studies have focused on several problems that arose with the digitisation of education, along with its positive pay-offs like the introduction of Information and Communication Technology (ICT) in education.

2.1 A Paradigm Shift In Education

Research from Wattal (2020) depicted that a new approach is imperative in this online paradigm. Regular schooling ensures that the emotional, behavioural and social health of children is on a good track, which is opposite to the concept of social distancing. Thus, in post-pandemic times, a huge shift in the mindset of children is required, which further disrupts teachers' work-life balance. This is because teachers need to come up with new ways to inspire students to continue learning. It was shown that teachers are as important as health workers because they are maintaining the social, mental and emotional well-being of children. This amplifies the need to discuss the behavioural changes in teachers in this new home-learning model.

Higher Education Institutes (HEIs) are swiftly adapting to alternative pedagogies with the aim to engage students virtually and to continue the learning processes (Pujari, 2020). The study from Pujari (2020) called this new learning mechanism "Teach-From-Home-Students-At-Home" situation. It was shown that this is pandemic pedagogy that is completely different from the concepts of online education or distance learning. Online learning is a concept where teachers are given proper training and then allow teachers to teach from anywhere and anytime. But, pandemic pedagogy refers to the sudden switch to online teaching in order to continue traditional educational programmes after the onset of a pandemic. This is an emergency situation where teachers do not have the luxury of ideal teaching infrastructure. The teachers may be delivering the lecture while doing household chores like cooking for their family. And, at the same time teachers are not much comfortable with online teaching tools and technology which puts them in a double whammy situation. Therefore, it opens up a gap to be fulfilled in terms of analysing the impact of pandemic pedagogy on teachers.

Hietajärvi et al., (2015) pointed out the difference between traditional school practices and ICT based educational practices. The modern generation is called a generation with social and digital participation. The difference between socio-digital participation (ICT based education) and traditional school practices is depicted in the following table. On one side, traditional school practices involve offline working with face-to-face interaction between students and teachers whereas on the other side ICT based education is featured with digital networking applications. ICT based education replaces 'teaching using blackboard' with 'teaching on screens.' Teachers need to make PPTs and PDFs to share in groups virtually instead of students taking down notes offline. It was pointed out that the internet provides constant and intensive online interaction with different people. The fact that ICT based education has lots of advantages is true but the fact that cannot be denied is that teachers are forcefully imposed with online education models. Teachers did not face a smooth transition from traditional school practices to this new socio-digital education model.

Socio-digital participation	School practices
Socio-digital networking	Offline working, face-to-face interaction
Working on screen	Paper, pencil and blackboard
Making PDFs, PPTs and sharing on groups	Individual performance-driven methods
Extended networks	Closed classroom community

2.2 Who is Teaching the Teachers: The Need for a Teacher's Mentor

Several studies have already discussed the quality of education in government schools in India with recommendations on what can be done to improve the same. In a study from Maslekar (2020), the need for the inception of the teacher-mentor model was highlighted in the pre-covid times. A teacher mentor acts as a guide to government school teachers of India and ensures their professional growth. Their role ranges from training, observations and providing effective feedback that results in the holistic growth of the teachers. For Zilla Parishad (ZP) schools in India, there is a formal post of 'Cluster Head' whose responsibilities are the same as that of a teacher mentor. The transfer of professional support from mentors to teachers is in two significant ways- classroom support and creating learning spaces. The facet of creating learning spaces need not be limited to just face-to-face training. An example could be the Massive Online Open Course (MOOC) for English teachers, which was conducted by the Regional Academy Authority of Aurangabad which helps the teachers in consuming online modules. Through this, the teachers will not only get professional training but implicitly learn how to use the technology that can be further incorporated into teaching. The research from Rosa (2020), shows that professional development is critical to facilitating the transitions to virtual learning models amid the ongoing pandemic. Just like mentoring of teachers had been a high value-added method before the onset of the health crisis, it is still significant as moving to a virtual environment is as tricky as transitioning a classroom. Studies have proven that educators need a person to connect within these times of online education, even if it is on a computer screen or a mobile phone to get immediate responses to help them in setting virtual classrooms (Rosa, 2020).

The study of the behavioural changes of teachers with the digitisation of education becomes significant, given the fact that teachers were in need of a guide or a mentor even in pre-covid times. The fear and anxiety caused by the pandemic along with the burden of household work made the life of teachers difficult.

3.0 Methodology

3.1 Research Design

The paper tried to evaluate the impact of digitisation of education on teachers in India through a qualitative research design. Qualitative research is an iterative process in which improved understanding of the scientific community is achieved by making new significant distinctions resulting from getting closer to the phenomenon studied. The qualitative research method was adopted to understand and evaluate the consequences or ramifications of the transition to online modes of teaching from a teacher's perspective.

The specific method adopted for this research study was the method of observation. The aim was to examine the teachers' ongoing behaviour in the online classrooms through observation. Since this method of observation is beyond control and is subject to different interpretations, thus previous studies on the related subject were taken for validation purposes.

3.2 Analytical Methods

The methods of analysis employed in this study are PESTELE analysis and cost-benefit analysis. PESTELE analysis tool was used to get a comprehensive picture of the impact of online education on teachers. The main goal of the study was to get an overall picture in terms of both the positive and negative impact of distance learning models on Indian teachers, a comprehensive analysis tool like PESTELE analysis, therefore, is most suitable. Along with recognizing the overall impact of distance learning on teachers, an evaluation between costs and benefits to teachers from this model was intended for the purpose of giving recommendations. Therefore, the cost-benefit analysis tool was used.

4.0 Results And Discussions

The following results depict the impact of digitisation of education on teachers in India in the form of various analysis methods. The findings are organised into the following heads: PESTELE Analysis, and Cost-Benefit Analysis. Citations from previous studies were used as validation.

4.1 PESTELE Analysis

The paper focused on analysing the impact of distance learning on teachers in India using the PESTELE Analysis. PESTELE Analysis is used in order to explore the effect of pandemic pedagogy on teachers on various grounds like social, economic and technological grounds.

4.1.4 Political

Teachers with the onset of the pandemic needed a favourable political scenario to keep going strong. In this tough time of pandemic pedagogy, teachers need favourable policies and rules from several agencies of state and central governments. Various state and central government' agencies have helped them in this regard. Studies from Wadia (2020) have shown that the state and central government had banned online classes for very young children and had restricted the length of online class time to lower down the struggles of teachers. Thus, the political environment is supporting teachers in order to curb their menace in online teaching.

4.1.3 Economic

With the onset of a new teaching style using online tools and media, it cannot be denied that somehow this entire scenario has opened lots of opportunities for teachers. After months of struggling with online teaching tools, teachers have now become quite familiar with the technology. This will definitely aid teachers in the near future, once the technology is synthesized with traditional classrooms in the future. A study from Desk (2020) describes the most important skills that teachers need to stand out while looking for a job in the corona era. The study explains that teachers need to have basic knowledge of using technology for teaching purposes. Thus, the paper came to the result that somehow this pandemic pedagogy is related to the increased income and a better career for teachers.

4.1.1 Social

This 'emergency online education' situation has had a great effect on the attitude of teachers. Prior to the pandemic, a comparatively small number of teachers were using technology in order to make students understand the concepts in a better way. The pandemic pedagogy has affected the teachers work-life balance as they need to do both teaching and household chores simultaneously. A study clearly stated that a teacher might be giving a lecture virtually while working in the kitchen (Pujari, 2020). A study from Shah (2020) explains that teachers get questions from students the entire day irrespective of the time. Students believe that teachers are at their disposal 24/7. Online classes are a headache for teachers as half of the time of the online class is spent in asking students whether they could listen to teachers or not (Shah, 2020). In some schools, teachers are instructed to teach in three shifts which further cause a delay in cooking and feeding their children. Teachers are consulting psychologists and asking about stress-management (2020). These effects lead to irritation and depression among teachers as they are stuck in lots of issues altogether. This also hampers the social relationships of teachers with their family members.

4.1.2 Technological

Despite the challenges faced by teachers in the recent past due to the digitisation of education, somehow they have learnt how to use the technology in teaching processes. In this way, a positive change has been felt by teachers who are now able to integrate traditional classroom practices with technology and innovation for a better learning-driven model. The digitisation of education has also strengthened the digital infrastructure of India as lots of ed-tech companies focus on the personalisation of learning. As a result, students can learn at their own pace and learning paths are customised with artificial intelligence and data analytics for students' academic growth. Lots of lucrative opportunities will be opened for teachers in the near future as they are now accustomed to online meetings, conferences, and presentations. Studies have proven that instructors with no experience in teaching online have discovered new approaches to teaching in order to overcome the challenges of current times (A New Pedagogy Is Emerging... and Online Learning Is a Key Contributing Factor | Teachonline.Ca, 2020).

4.1.6 Environmental

The impact of digitisation of education on teachers on environmental grounds is neutral. On one side, politically and legally teachers are getting support through supportive policies and easing of evaluating methods. But on the other side, the natural environment created in a teacher's home might not be conducive for teaching online. Environmentally, a teacher might not be in a position to focus entirely on teaching students online. There might be lots of disturbances in the surrounding of a teacher caused by his/her children or due to other reasons, making it difficult for teachers to teach properly in a virtual scenario.

4.1.5 Legal

Legally, teachers are not under any pressure to abide by some rules and regulations strictly. Rather, political parties are trying to create some good policies in order to lower down the teachers' problems arising due to online education. Hence, teachers' situation is not getting affected more due to strict enforcement of unfavourable laws.

4.1.7 Ethical

Ethically, teachers were put in a difficult situation with the onset of the pandemic. Morally, educational institutions and government agencies should have given proper training to teachers to get familiar with digital technologies in order to teach virtually. Teachers with the onset of the pandemic were supposed to switch to the online mode of teaching by themselves. Hence, ethical aspects are not in the favour of teachers amid the online education scenario.

4.2 Cost-benefit Analysis

The paper also intends to undertake an evaluation of the costs and benefits faced by teachers in online learning models. This cost-benefit analysis is undertaken in order to find out whether the costs to teachers outweigh the positive impact of online education on teachers. This analysis is significant for augmenting the paper with some recommendations for the improvement of flipped classrooms. The costs to teachers due to the digitisation of education involve the hampered work-life balance, irritation, depression and hampered social relationships.

These issues altogether are attacking the mental health of teachers that further induce them to seek for stress-management things. On the other side, the benefits to teachers involve better opportunities in the near future as they now have become familiar with technology. The future potential increase in their income and a better career in the near future are the positive things for teachers in this online education phase. The comparison of these costs and benefits that teachers are facing points out that surely, costs outweigh benefits. The costs in terms of irritation and depression that teachers are facing are severe as these affect the mental health of teachers. And, the degradation of mental health further affects the physical health of teachers. Plus, there is no certainty in regard to better career options for teachers in the near future. Therefore, the cost-benefit analysis discloses that teachers' situations are degrading in this online learning phase.

5.0 Conclusion

The study lists recommendations to make the life of teachers easier to cope with the challenges they face in distance learning times. Teachers can put their efforts in teaching only core lessons, leaving non-important lessons to be studied by students themselves. This will not only make the life of teachers easier but will also inculcate a habit of self-study in students. By implementing this technique, teachers can have short teaching sessions that will further provide them with enough time to engage themselves in household chores. Plus, teachers can let students take control in these difficult times. Students can decide on difficult topics that need to be taught in virtual classrooms. Students can come up with some innovative ways to learn like through a virtual group discussion among students that will also result in up-gradation of students' communication skills.

References

A New Pedagogy Is Emerging... and Online Learning Is a Key Contributing Factor | teachonline.ca. (2020). Teach Online.Ca. https://teachonline.ca/tools-trends/how-teach-online-student-success/new-pedagogy-emerging-and-online-learning-key-contributing-factor

Desk, I. T. W. (2020, August 24). 5 basic skills teachers need to stand out while applying for jobs in the Covid-19 era. India Today. https://www.google.com/amp/s/www.indiatoday.in/amp/education-today/jobs-and-careers/story/5-basic-skills-teachers-need-for-jobs-in-the-covid-19-era-1714482-2020-08-24

Hietajärvi, L. (2015). Is Student Motivation Related to Socio-digital Participation? A Person-oriented Approach. University of Helsinki. https://researchportal.helsinki.fi/en/publications/is-student-motivation-related-to-socio-digital-participation-a-pe

Maslekar, P. H. A. A. (2020, February 14). Who Teaches the Teachers? Developing teacher mentors for quality education. THE BASTION. https://thebastion.co.in/politics-and/who-teaches-the-teachers-developing-teacher-mentors-for-quality-education/

Pujari, A. K. (2020, May 8). A pandemic pedagogy to overcome covid disruptions. Https://Www.Livemint.Com. https://www-livemint-com.cdn.ampproject.org/v/s/www.livemint.com/opinion/online-views/a-pandemic-pedagogy-to-overcome-covid-disruptions/amp-11588933646265.html?amp_js_v=a6&_gsa=1&usqp=mq331AQHKAFQArABIA%3D%3D

Rosa, S. (2020, November 16). Teacher mentoring still adds PD value in remote learning. K-12 Dive. https://www.k12dive.com/news/teacher-mentoring-still-adds-pd-value-in-remote-learning/589075/

Shah, S. Q. (2020, August 26). Online classes stress out students, teachers during pandemic. DAWN.COM. https://www.dawn.com/news/1576427

T. (2020, July 26). Stress-filled life for teachers at virtual classes. The Times of India. https://timesofindia.indiatimes.com/city/madurai/stress-filled-life-for-teachers-at-virtual-classes/articleshow/77176412.cms

Wadia, L. C. (2020, July 7). Online school education in India during and beyond the pandemic. ORF. https://www.orfonline.org/expert-speak/online-school-education-india-during-beyond-pandemic-69317/

Wattal, A. M. (2020, April 23). Post-pandemic, a shift in mindset will be needed — to teach and learn. The Indian Express. https://indianexpress.com/article/opinion/columns/coronavirus-lockdown-education-children-going-back-to-a-new-school-6374612/