

Digital Divide & Its Impact on School Education of West Bengal

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ABSTRACT

The wake of COVID-19 pandemic has given rise a major transformation in education system across the country with exceptionally a sudden change in technological domain of knowledge. As a consequence, ICT has acquired an important place in education sector as well as in school education also. But if we pay a glance into the situation & assess how far ICT has its place in school education of West Bengal it is revealed that the real scenario is not convincing. Our schools, mainly Govt. schools of West Bengal are ill-equipped in terms of infrastructure and basic facilities to teach its students digitally. Our teachers are not properly trained enough to implement ICT in education. Poor students don't have access to smart phones and even if they do net connectivity is poor and content is not available in vernacular languages. There is a lack of digital infrastructure for both the teachers and students and a disparity in internet connection and access to devices. All these creates a discrimination among students in access to education and gives rise of digital divide. The rapid shift to e-learning prompted by the pandemic has resurfaced long-standing issues of inequality and a digital divide that must be addressed by future economic, education and digitization policies of India as well as of West Bengal also.

Keywords: *Digital Divide, access, ICT, infrastructure, discrimination, pandemic*

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1. Introduction

The outbreak of COVID-19 pandemic has posed serious threat to global economy by infecting over 102 million people with more than 2.2 million fatalities in around 210 countries. The situation has compelled the Governments of different countries to keep their countries in lockdown mode to prevent further spread of the virus and save lives of people by way of social distancing. Therefore, at present the global challenge is COVID-19 pandemic. We all accepted the realities which changed our life styles and hampering our conventional teaching learning process. Among its many effects, the COVID-19 lockdown has also been a dampener on India's conventional education system. Shutting schools to maintain social distance amidst the COVID-19 crisis is the most logical solution to avoid community transmission. Because educational institutions are most vulnerable to spread of the disease due to mass gathering in classrooms. These educational institutions have no set date for reopening despite growing concerns of various stakeholders over the prolonged educational lockdown's immediate and long-term impacts on students and parents in particular and on society at large.

COVID-19 has disproportionately impacted school education negatively and put restrictions on the traditionally practiced classroom-based teaching-learning in schools. In this crisis period, our educational system is transforming the way to look at it from an unconventional perspective which is virtual teaching learning mode. Virtual Learning is the new order of present-day scenario. It is a platform of teaching-learning where teachers and learners are physically separated in terms of place, time or both and the instruction most commonly takes place in an online environment i.e. based on ICT. This transition has been quite smooth for privileged students. But the unprivileged ones are in a pitfall majorly owing to lack of access to internet service, telephone, mobile, computer, electricity or other electronics devices to view online content or attend various platform to meet their online classes. This unequal level of access gives rise to a digital divide among the students in accessing online education.

This digital divide starts right from school. In our education system schools are broadly divided as Govt. schools and private schools. Private schools have more or less well-maintained infrastructure and better facilities to continue teaching-learning through online mode. But except a few, Govt. schools are ill-equipped in terms of infrastructure and basis facilities to teach its students digitally.

Students studying in Govt. schools are deprived from access to better learning environment and modern techniques of teaching-learning that includes ICT. Content is often not available in vernacular languages. These faultlines continue to discriminate against many students who belongs to marginalised section of society.

By means of 86th Amendment Act, Right to Education (RTE) was given the status of a Fundamental Right by inserting Article 21A in the Indian Constitution. It aims to provide free and compulsory education to children in the age group of 6-14 years. Therefore, the denial of access to internet & online classes hampers the access to education and affects the dignity and freedom of children to study also. All these creates a digital divide among children based on the availability of resources. Digital divide is the gap that exist between individuals who have and who don't have access to and the capability to use modern information technology such as telephone, television or the internet and take advantage of their usage. Such digital divide among students escalate the complex societal issues existing within the Indian Society. Like other states, West Bengal too is experiencing the same problem and therefore it becomes an important issue to address. The main objective of this paper is to study the impact of COVID-19 on school education of West Bengal.

2. Objective:

The main objective of this paper is to study the impact of digital divide on school education of West Bengal and addresses the challenges in bridging the gap of digital divide.

3. Concept of Digital Divide:

ICT is one of the important driving forces of modern civilization. Rapid development and proliferation of ICT has accelerated the socio-economic development process. It has opened up vast avenues for business, education and transformed the whole World into a global village. But the potential to exploit the benefit of ICT largely depends on the access and adoption of these technologies. The new technologies while improving our life in many ways have created what is called the 'Digital Divide'.

Digital Divide is a dynamic concept. It means the disparity between technology-rich and technology-poor. In 2003, Cullen defined digital divide to describe the perceived disadvantage of those who either are unable or do not choose to make use of ICT in their daily life. According to OECD (2001) the term 'Digital Divide' refers to "the gap between individuals, households, businesses and geographic areas at the different socio-economic levels with regard to their opportunities to access information and communication technologies (ICTs) and their use of Internet." Digital Divide exists based on race, gender, geography, economic status and physical ability in skills, knowledge and ability to use information and other technologies.

4. Facets of Digital Divide in school education of West Bengal:

The COVID-19 lockdown in our state has suspended physical classes in all educational institutions. The suspension of physical classes moved teaching-learning and assessment of students to online mode. This shift from a chalk-talk mode to online mode has bared a big digital divide in education system at two levels –

1. Continuity of learning of students in Urban versus those in rural areas:

The access to quality education at higher education level in rural area has been a known challenge for many years. Now, with learning moving to an online mode, this challenge has further intensified in the rural areas due to poor access to electricity, smartphone, computers and the internet. According to survey report of National Statistics Office (NSO), only 15% of Rural household have access to internet as against 42% of Urban households.

This huge divide is not just limited to the access but is also applicable in the use of technology. No of students able to operate computers are more in urban households rather than rural households. These stark gaps in access and ability to use technology for learning have profound effects on the development of students from these areas.

2. Digital readiness of Govt. Versus private educational institutions:

Many private educational institutions were quick and agile in making the transition from physical to online learning mode. On the other hand, the majority of Government Educational Institutes are struggling to make this transition with the exception of a few. Some of the challenges faced by these institutes are lack of digitized content, lack of training to their teachers in the use of virtual teaching and assessing tools and poor or no investment in technology. The continuity of learning for those enrolled in Government Schools especially in the rural areas is a big concern till the time schools remain shut.

5. Determinants of Digital Divide

Existence of digital divide depends on several factors. However major factors which contribute to digital divide includes the following issues ---

1. The major cause of digital divide in school is lack of access to ICT. All the students don't have the computer, fast internet, technical assistance or simply the telephone services.
2. Another reason of digital divide is economic inequality. Wealthier people can carry out the expenditure of new technologies because they have enough income. But such newly adopted technologies remain expensive and beyond the reach of financially poor due to lack of money.
3. Social mobility is another factor of digital divide. All students are not getting as much technical education as others because lower socio-economic areas can't afford to provide schools with bundles of computers. As a result, students are being separated and not receiving the same opportunity as others to be as successful.
4. One of the most important criteria of digital divide is language barrier. In the web page most of the contents are written in English which is not well versed to all. So, all students don't get benefit out of these contents.

Moreover, digital divide exists based on race, gender, geography, economic status and physical ability in skills, knowledge and ability to use information and other technologies.

6. Impacts of digital divide on Education & Society:

The digital divide has severe and far reaching adverse implication on education as well as on the society. Some of the impacts are listed below:

1. Lack of exploitation of full potential hence low performance:

Students hailing from low-income families are much limited to the access to information that is crucial in advancing their education and coming up with innovative ideas since they can't afford connectivity to the web. Most students from underdeveloped areas will only do programmes that are theoretical and don't involve technology. Limitation by the range of information available to such students is discouraging. As a result, they will either avoid pursuing involving courses or if they register the performance is poor.

2. Unfair Competitive edge:

Presently in school most activities including assignments and presentation of learning material are made available online. This gives superior students who can access the internet unfair competitive edge over their less privileged counterparts. The poor will remain void of crucial information presented online concerning academia and thus they will always lag behind.

3. Enhanced Convenience in Learning:

Owing to integration of technology in education, now students can learn from their home and avail distance learning programme also. The elites are empowered because they have the machinery to support this kind of advancement while the poor are faced with many hurdles in their endeavours to achieve quality education and they have to travel to institutions miles away.

4. Difference in Learning Experience:

While the rich can easily access schooling materials online and work on their programme in a flash, the students of lower socio-economic classes are disadvantaged and have to undergo long hours of cumbersome studies in meeting the objectives of the course.

5. Decreased Productivity among the Poor:

Digital divide decreases productivity among the poor due to limited research abilities as connectivity to the internet is limited to them. The digital split not only impacts the future of young minds but also reduces the chance of having a great career. As a result, students from different backgrounds, geographies and communities lose their chance to develop innovative solutions and be responsible citizens.

Some of the adverse implications on the society are as follows:-

- The digital divide will increase economic inequality between those who can afford the technology and those who don't.
- In the age of social media political empowerment and mobilization are difficult without digital connectivity.

- Transparency and accountability are dependent on digital connectivity. The digital divide affects e-governance initiatives negatively.
- Negative impact on basic literacy rate.
- Income disparity among the society.

Above all, internet penetration is associated with greater social progress of a nation. Thus, digital divide in a way hinders the social progress of a country. Rural population is suffering from lack of information due to digital divide in India and this will only strengthen the vicious cycle of poverty, deprivation and backwardness.

7. Barriers to bridge digital divide

The barriers for the information access and digital literacy are the basis issues which are needed to be addressed while discussing on digital divide. Considering the present scenario an attempt has been made to analyse the more fundamental problems and issues act as barriers to bridge digital divide.

- Government policies need to be framed for digital divide issues as increasingly it is becoming a social menace.
- Economic disparity results in denied access to electronic gadgets, internet, access to databases and other resources.
- Even in this digital age we still get to see many villages without electricity and telephone line. Owing to this connectivity to the remote places and building vigorous infrastructure are unsuccessful.
- Low literacy and education are also an important barrier of digital divide.
- In Govt. school it is very difficult to have access to ICT of their own for the students who come from a low economic background due to lack of money. We need to think for them also.
- ICT infrastructure required for the Govt. schools is still not in the priority. Lack of access to technology (Hardware & Software), proper power supply adds to the problem.
- Geographical factors and transport divide have separated the communities living in remote places from mainstream of the society.
- The linguistic diversity has been a crucial impediment in balancing information access as English is mostly used in software and internet.
- Gender issue is one of the most prevailing digital issues in our state as woman have less access to the internet than males. This disparity is partly attributed to perception that it is a technical subject for men with many females consequently shying away from it.
- Promotion of telecommunication infrastructure in the rural area is the most important condition for bridging digital divide.
- Internet is inaccessible to the blind and visually impaired students because the screen reader is unable to read the graphically based web page.

8. Conclusion:

During this pandemic situation online teaching-learning has opened up vast avenues for education and acquainted us with the new era of digital technologies for teaching learning purpose. But at the same time it has created a major digital divide among students which must be addressed by future economic, education and digitization policies. Govt. should put thrust towards connectivity provision, content creation, capacity augmentation, cost reduction, competence building, community participation and commitment to the deprived and disadvantaged would definitely help in bridging digital divide. Now, it's a time to initiate a National Mission for digital inclusion with an aim to provide access, availability, ownership, affordability of digital device and internet service to all especially the students from vulnerable sections of the society from rural and urban area of West Bengal.

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