SOCIAL TRENDS
Journal of the Department of Sociology of North Bengal University
Vol. 9, 31 March 2022; ISSN: 2348-6538
Peer-reviewed National Journal

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Digital Technology in Education: An Assessment

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Abstract: *Technology has positively changed the educational system in which we live. Digitalisation has enhanced the educational process, making it even more charming. Today, technology plays a crucial part in education. Traditional procedures have been supplanted by new modes of teaching and learning in education. Digital technology can assist students in gaining massive amounts of information, providing them with the ability to be self-directed and access to educational assets. But the positive effects that go along with the negative ones should not be overlooked. This paper discusses how diverse methods of teaching and learning could be suitable for students with the usage of digital technology; the importance of technology in the educational sector; and how the use of technology could open up new opportunities and bring challenges in the field of education.*

Keywords: Digital technology, education, opportunities, challenges, everyday life**.**

Introduction

Technology is essential across every part of the world. The educational segment is one such area where it is tremendously significant. With the development of technology, education has been made simpler, more interesting, and more accessible (Budhwar 2017). The utilisation of technological knowledge in education has fundamentally modified many aspects of modern life. It facilitates students to access vital information in a short

period of time (Quarshie et al. 2012). It provides a variety of modernisations that will be used for flexible exercises such as research, educational practices, and assignments (Dutta and Chabra 2019). It can easily access all the time, whenever and wherever it needs, ease of access to diverse required educational resources, online-based education, and eventually measure the prospect of the teaching segment for the last few decades (Verma 2020). Furthermore, images, animation, music, and video enable us to empower the students in different ways. Every single category has its own specific appearance and fulfils diverse needs; the visual impact of animation is to link the learning process, while sound encompasses all forms of spoken communication (Wikramanayake 2005). There are several technological elements accessible to make information-managing methods in connection to everyday life activities, but the way it influences students' education may be a significant theme in the present phase.

Despite the reality that technology may help students learn massive volumes of information, certain adverse consequences shouldn't be overlooked (Alghamdi 2016). Technological gadgets and social networking sites are often used to have a detrimental influence on students' ability to acquire knowledge. Spending more time on social media, such as Facebook, Twitter, YouTube, etc., distracts them from academic tasks (Gok 2015). Apart from that, one of the most neglected communities that have been alienated from the concept of digital technology is the indigenous people. Sometimes the dialect used on the digital platform becomes a burden for them as they cannot understand it as their mother tongue is different. Furthermore, due to the poor infrastructure and societal concerns, it will be more challenging to make digital education more accessible to all the categories of students, especially to the tribal community that has been living near the hill area (Aneesh et al. 2021). As a result, this paper attempts to emphasise how traditional and contemporary educational practices can be effective; what obstacles may various student groups confront while using digital tools; the implications of technology in education in connection to today's scenario; and eventually, how the use of existing technologies can build something new and address a wide variety of educational concerns in students' daily lives.

Sociological perspectives on education

According to Pierre Bourdieu, "cultural capital" is an assortment of representative components such as abilities, desires, appearance, attitudes, practices, and so on, that one receives by being a part of a given social class. He discussed that the children of the upper class are likely to partake in cultural possessions such as knowledge, manners, attitudes, and cultural involvement, which means they get ahead in education as compare to the lower class children (Agin 2018). This idea is pertinent within the contemporary-day scenario for the higher and lower class groups of our society. Students from the upper class can easily get all the facilities to access technology. Due to the several socio-economic levels, upper-class students effectively advance in all technological substances that can support in their education. They obtain direct or indirect assistance in their education by examining various internet sources. On the other hand, dominating class students are unable to comprehend technology and hardly ever define such possibilities in their daily life due to a lack of cultural capital.

Functional perspective reflects education has massive inferences for students in connection to their daily lives. Education enhances coherence, confidence, and has a positive impact on society. It prepares students to work well in progress throughout their lifespan and imparts vital skills and techniques to boost their knowledge. Education, for example, is used in the process of socialization; it is the process through which the next generation obtains information, methods, and morals as a form of learning platform (Welch 1985). In today's situation, digital technology enables students to encompass their knowledge in a diverse way by utilising digital tools. It allows students to accomplish educational activities in much less time, apply for jobs from home, and retrieve educational content from a variety of sources. It assists students in becoming familiar with extra-curricular activities and, ultimately, improves their knowledge of various easy strategies for obtaining a quick answer. Thus, technology is regarded as one of the most effective teaching tools available for students.

Educational practices in India

Since independence, substantial advancement has been made in several aspects of the education field. Learning has shifted from a

monologue to a dialogue process. It has made important contributions at all levels of educational attainment: primary, secondary, and higher. However, there are extensive breaks in our learning systems, such as the new technical infrastructure in certain academic institutions could not be accessible as per the needs of the students (Dogra and Gulati 2006). Technology is rapidly expanding in the modern period, and it carries over into the existing educational system, modernising it as well. In modern times, learners only study at institutions by competing to be the first; there is no intensive study to gain practical knowledge. Thus, it is indeed a massive strain, as well as a lot of work pressure on them. Due to this, it forces students to commit suicide. Our system of education must learn from ancient and mediaeval educational practises in terms of its practical knowledge acquisition, learning environments, student lifestyles at that time, and much more (Ghonge et al. 2021). After going through several stages of education, it is seen that the education sector in ancient times did not have a wide variety of sources and modern technology. Yet they attempted to drive a better structured learning framework for the students to get suitable knowledge regarding their subject matter. However, the predominance of the caste system in schooling was indeed the main concern at that time. After the British arrived in India, they proceeded to modify the education system for their own gain. In the existing educational system, the government is spending a lot of money on education and major initiatives are being taken to eliminate educational barriers (Kumar 2012). Technology is primarily used as a good example at several institutions, such as teaching; using a projector or smart board to show the presentation; displaying motivational clips to encourage the students. Furthermore, numerous articles, reports, virtual learning platforms, and web sources help the students get new and extensive information regarding their subject theme.

The educational situation in India has been perceived from a diverse viewpoint after the traditional period to this current era. Both traditional and digital methods of the teaching-learning process are important and have their relevance in various ways. Traditional methods of teaching and learning have given way to new and emerging technologies. It has a significant impact on all areas of educational programs, such as techniques for school, classroom learning (Bhakta 2016) and so on. Technology is making

information more accessible and highly contagious to all types of people from anywhere. It is hard to derive which mode of education is best because both have their significance. However, due to modern education, traditional education is gradually being lessened and replaced with new ways of teaching that make use of technological gadgets. The following key points highlight the methods and importance of both traditional and modern teaching-learning processes.

Traditional scenario

Prior to the digital age, most students couldn't gather sufficient data in a short amount of time. There were no schools for children; they obtained their education or information in *gurukuls* from their masters, who essentially focused on the ceremonies or customs instead of this leading-edge education (Budhwar 2017). In addition, a few more critical characteristics have been noticed in the traditional situation; during class, the teacher usually persists longer than the learners, class time is used for group work and cooperation, and textbooks have been broadly used as there is no alternative for this. If teachers focus on conveying the content in the best way and the students truly demonstrate attention and engage with what they study, this mode of education assists them more to gain more knowledge (Sharma 2018). In the traditional teaching technique, the teacher explains the concept to the students using chalk and blackboards. The students can take significant points from the blackboard which have been highlighted by the teacher. Students evaluate their records following class and attempt to remember the notes. The traditional teaching strategy is much less expensive than the modern way of teaching (Sharma 2018). Traditional teaching strategies involve more interaction between students and teachers than modern teaching methods (Dimitrios et al. 2013). The class is more disciplined and interesting in the traditional way of teaching. Its approaches do not require any special technical abilities from the instructor, so it can allow him to focus only on his topic and provide the best information to the learners.

Education in the contemporary era

Technology has drastically altered the way we educate, and its impact is grasped strongly among the students of all category (Raja and Nagasubramani 2018). Utilizing technology in education demonstrates a great, even an unpleasant, connection between learning and technology (Sigdel 2017). Inside the school sector, technology demonstrates that students are becoming progressively sociable, enthusiastic, active, and intellectually better. It encourages it through expanded productivity and adequacy (Courville 2011). With the help of the internet, it has more potential influenced on their education, helping to enhance their brains and grasp new thoughts and opportunities simultaneously (Bremer 2005). With the assistance of technological gadgets, children can now participate in learning networks all over the world. With the use of digital learning tools, it enables students to use share information and help with their academic tasks. Also, with the use of enchanting graphics and visuals, modern technology-based education captures learners' attention in a varied way. Using visible elements during class teaching allows learners to become close to the subject and hold the belief for a prolonged period (Brooks and Brooks 1999). Advanced teaching frameworks are made up of more focused videos and animations than traditional blackboard tactics. Thus, as long as someone can manage to pay for the gadgets, this type of education is tremendously flexible and convenient. During this period, the barrier of societal alienation can be overcome by forming study groups online or offline and simply interacting with them.

Technology-driven education: New opportunities

There are such a large number of favourable circumstances in technology that assist in improving the educational process. It appears that across the planet, there is an active relationship between children and technology. They realise they will use technology more effectively and more normally than their parents. They realise they are the computer generation, "as seen by Seymour Papert, a prestigious master within the field of computers and man-made intelligence" (Papert 1996). The impact of technology on learning is exceptionally massive. Technology within the classroom is progressively improving learning with the

help of technological equipments (Paul 2014). With the help of technological gadgets, it improves new ways of learning as well as their enthusiasm, imagination, and enlightenment. It promotes cognitive development because the cerebrum is the most precious reserve of a student. It works best when an individual employs it. Also, it assists in building up the psyches of students through access to a boundless expanse of knowledge online. It encourages students to stay engaged with the learning environment, approach advanced information with self-guided learning, easy access to information through different sites, and virtual recreation. It is also integrated into the classroom in several ways; teachers can find new ways to present the subject theme and also have ideas to lead new procedures. Through the use of various tasks by utilising digital tools, it can be able to make education become more interesting (Reddy and Bubonia 2020). Furthermore, it accesses learning information by using digital resources in a variety of ways to support learning, such as electronic grade books, accessing websites to gather information, reading e-papers, knowing the weather forecast, and visiting several sites to gather assignments based on the subject matter.

The Corona virus pandemic had a global impact on all elements of human life, as well as the different sectors of our society like; education, research field, sports, entertainment, transportation, religion, social events, the economy, and commerce. The truth of the situation has been tough to face, and the education sector continues to be one of the most affected sectors by the coronavirus pandemic (Onyema 2020). Students were unable to leave their homes for fear of the spread of this virus. Due to the shutdown, schools, colleges, and other institutions use online education as the primary mode of instruction. Home learning always provides a pleasant place to focus, as students can determine the best environment for themselves. Because of the shutdown, all educational institutions remained closed. However, to continue the teaching-learning process, most institutions adopted a virtual method of education during the Corona virus pandemic, utilising different internet technologies such as Google Meet, Zoom, and others (Adeoye et al. 2020). The teachers steadily organise online webinars and meetings to get in touch with the students and their faculty members. The requirement for online teaching and learning has seen a massive explosion since the pandemic. This represents

a huge and growing demand for online learning. The online teaching method only requires a reliable internet connection and a laptop or smartphone to conduct smoothly. Also, students do not have to move from one place to another, so it saves their travel time and they can attend the class by sitting at home (Mathivanan et al. 2021). During this pandemic time, this is the only way through which a teacher can connect with the students for the teaching-learning process. Thus, digital technology is one way in which it can be able to help students as well as students in education.

Technology in education: Some concerns

Even though digitalisation over media and electronic devices helps students obtain vast amounts of information, teaches them how to be creative, and provides them with access to technical resources, some negative consequences should not be overlooked (Alghamdi 2017). Children's creative minds are being influenced, but simultaneously, their reasoning capacity is being condensed, which kills the creativity of the students. Students nowadays are completely reliant on technology. They cannot accomplish basic tasks by themselves. Due to technology, they are becoming unenergetic and exhausted. They spent the entire day on smartphone and computer, not attending any events or going for a walk. Furthermore, using computers in the classroom has a negative influence on students since they are overstimulated and divert their attention away from the classroom teaching (Raja and Nagasubramani 2018). Furthermore, it negatively impacts on reducing imagination; it indirectly develops factual approaches to deal with frustration, anger, fear, and struggles with time management in education when using technology (Padmanabhan 2020). Nowadays, children operate computers, play games, run different applications on smartphones, and spend more time on this digital platform. These conditions do exclude children from their education. Sometimes it leads to harm the eyes. Students who use screen-based technologies for extended periods of time for studying are at a risk of developing vision syndrome. Even though many students nowadays carry a smartphone in their compact. They, however, find a means to unfairly observe their texts and

emails and see who likes their most recent picture on social platform throughout the class.

During the coronavirus pandemic, the use of and transition to e-learning may prompt teachers to include more online elements in the classroom. Moreover, there are some real-world issues and limitations associated with the convenience of digital tools for education. As a result, there is a digital divide between students from different socioeconomic backgrounds, although not even all students and faculty may have internet connectivity or reliable internet connections. It also implies that obtaining e-learning is now the most affordable. As a result, students from underprivileged backgrounds face more hurdles than other students group (Rashid and Yadav 2020). Due to the Corona virus pandemic, many students are forced to study from home. In addition to the cost of an online education, a number of further challenges, such as network problems, improper electricity supply, low digital literacy, poor access and unavailability, contribute to making education challenging (Onyema 2020). Although individuals may learn using a variety of online tools and techniques, it does not always facilitate proper learner performance (Sangma 2021) due to lack of proper concentration in online education. On the one hand, students from urban centers have access to all kinds of facilities from their homes due to their high social profile, while majority of the tribal and rural students do not have easy access to network connectivity. They often come to the hill area to get network connections for the online sessions. In addition, due to the lack of technological skills and low socioeconomic status, it is impossible for a person to buy a smartphone.

Critical remarks

Digital technology promotes many advantageous things for students in the educational field as well as in their everyday lives. Everyday life includes how people conduct all of their activities from day to night, and most of these activities are gradually becoming linked with digital technology. Technology offers numerous benefits, but it also has many drawbacks for learners. Nowadays, the use of the internet has the benefit of providing students with a broad grasp of their daily life activities. They now

obtain global knowledge in fractions of a second while working from home. But at the same time, some students cannot profit from it owing to different constraints, such as connectivity issues and weak infrastructure (Selwyn 2010). Moreover, their ability to focus on educational activities is found to be disrupted by YouTube, Facebook, or Twitter (Raut and Patil 2016). They do not want to use their smartphones exclusively for educational purposes, but they do customise them to make calls, watch movies, and browse the internet. Moreover, they like to access and use different sources like messaging, online mail, and operating social networking sites rather than researching library online resources (Alfawareh and Jusoh 2014). Also, due to the large advancement in technology, teachers facilitate students with various online apparatuses instead of genuinely speaking with them. Numerous websites feature incorrect data on many issues, which may have been pasted or copied from several repositories without confirming the legitimacy of the content. As a result of this misinformation, students regularly make mistakes that can have a substantial impact on their educational growth (Hanson 2011). Students are not learning with the help of these gadgets. Instead, they are interested in monitoring their loved ones' postings, status updates, and other information. Ultimately, it disconnects students from the real world. Most of them prefer to text or converse on social networks instead of in-person contact with one another in reality. Even though students devote lots of time face-to-face altogether, they like to spend that significant time communicating on their smartphones instead of in-person interaction.

Conclusion

Digital technology could provide students with a better understanding and knowledge of subjects, and also allow them to participate in a variety of academic activities through an online mode. It provides enormous potential for enhancing students' education and makes it even more suitable to utilise diverse sources concerning their subject needs. It also meets several of the educational burdens and expectations of today's students. Science and technology have the potential to hasten the transition from offline to online teaching and learning processes. During the coronavirus pandemic, despite the obstacles in education during the lockdown period, there has been a new paradigm from offline

classroom teaching to online teaching. Teachers and students were less aware of several online learning modalities and virtual classrooms in the initial stages of technology adoption. Ultimately, after using it frequently, the teachers as well as students have adapted to different educational abilities and capabilities that necessitate online education, which is finally help to maintain contact between the teachers and students during the crucial time. Digital technology positively impacts students in the field of education, but simultaneously has some negative impacts on them. Students' excessive use of technology can result in a number of social, psychological, and physical problems. Thus, students should take advantage of the opportunities and eliminate the drawbacks so that they can be prepared to face the current reality while avoiding the negative aspects of digital technology.

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