



## Digital Technology: Issues and Concerns among School Students

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**Abstract**

We live in a rapidly developing, highly technological world in which digital technology impacts many aspects of our everyday lives. Everyday life encompasses most of the activities that individuals engage in daily, and the bulk of these activities are now being impacted by digital technology. Nowadays, technology has become inevitably linked to students' development, either directly or indirectly, in their day-to-day activities. So, this paper discusses the impact of digital technology on school students' everyday lives and attempts to highlight the significant concerns such as; the impact of digital technology on education, health, and recreation and how these digital devices are creating a gap in their everyday social relationships.

**I. Introduction**

Digital technology is an integral element of our daily life. Students use it for education, recreation, information gathering, and creative thinking essential to their role. It is often used to connect with friends and family members, play online games, participate in online forums, and interact with others on social media websites such as Facebook, Twitter, and Instagram. It is changing the lifestyles of an individual, where most of our communication, leisure, and entertainment are done through smartphones. Hence, it has become an essential part of students' everyday life (Banyard, 2015). In terms of connectivity, the smartphone has become one of the digital devices that have dramatically transformed people's life. The most popular digital gadgets are the iPod, tablet computers, PCs, and personal digital assistants. It is handy for quick searches on the internet, such as Google, to look for vital information. This is one of the reasons why smartphones are such an essential part of modern technology. This technological advancement further plays an integral component in the educational experience. It is a criterion for increasing living effectiveness and vital to improving student life (Switzer & Csapo, 2005). These modern devices are now employed in our daily lives, and they aid in flexibility, allowing them to be used anywhere and at any time. These gadgets deliver information, efficiency, and interaction while decreasing an individual's mental and

physical burden. These ideas have genuinely helped individuals in their daily lives. While certain types of technology have brought beneficial improvements, there are significant adverse impacts of technology and its abuse (Gowthami & Kumar, 2016). The overuse of technological gadgets, directly and indirectly, impacted physical and psychological issues. Frequent use of it may significantly impact developing children and create a gap between parents and individuals.

### **Digital Technology: It's Relevance in the Contemporary Era**

The relevance of digital technology in our daily lives has become vibrant. It enables students to access a vast database of information and communication. There has been a technical shift with the increased usage of internet connections. It allows us to keep connected with friends who live far away from us via cell phones and computers and can also see them. Today's technological influence is limitless. People appear to always look for new methods to enhance their lives positively (Hans & Shawna, 2019). It improves students' quality of life and growth by preparing them for a knowledge-based society. It fulfils educational necessitates assimilating a large amount of material, strong communication skills, high-quality writing abilities, and a broad general knowledge. No one can deny the fundamental necessity of technology in our everyday lives. Everyone is so addicted to technology that we cannot function without it (Singh & Samah, 2018). Because of the advantages that computers, tablets, and mobile phones bring, technology has become a significant part of our daily lives, improving the way we learn. Smartphone use is one of the most critical milestones in technological progress; it may play an essential role in the lives of all educators in learning and accepting new knowledge. So being without a smartphone nowadays is nearly immeasurable.

### **Technological Scenario: A Statistical Outlook**

We currently have 1.18 billion mobile subscribers, 700 million internet users, and 600 million smartphones, increasing by 25 million per quarter (Abbas, 2021). According to the report, smartphone accessibility in rural India was 36.5% in 2018, growing to 61.8% in 2020 and 67.6% in 2021. In Kerala, 97.5% of the students successfully acquired a smartphone, the highest percentage. Himachal Pradesh (95.6%), Manipur and Nagaland (92.9%), and Punjab (89.9%) came before it. In contrast, smartphone usage was limited in several states; Bihar has the highest proportion of students who do not have smartphone access, i.e. 54.4 %, followed by 58.4 % in West Bengal and 58.9 % in Uttar Pradesh (Iftikhar, 2021). During the Coronavirus outbreak, digital schooling would be the only viable alternative for students to pursue education. The Azim Premji Foundation research shows that over 60% of Indian school children cannot access learning possibilities. As per a study conducted by Oxfam India, half of the parents of students attending private schools in major cities stated internet coverage and connectivity issues. One-third was concerned about the expense of mobile data. 38% of olds said that at least one of their children had dropped out of school because of COVID-19 (India Today Web Desk New Delhi, 2015). According to an NCERT survey, 27% of Indian students do not own a smartphone or laptop computer. 28% of students are unable to study effectively. 33% of students indicated being unable to pay attention to their academics in online classrooms (Zee Media Bureau, 2020). Furthermore, NCERT study reflected that 27% of students do not even have access to cellphones or computers to attend online classes, and 28% of

students and parents said that a shortage of energy is a significant source of distress that hampers student learning (India Today Web Desk, New Delhi 2020). According to a recently available poll conducted by Learning Spiral, one of India's largest providers of online test solutions, more than half of Indian students, including both urban and rural locations, do not have internet connectivity to study or learn online. Furthermore, access to virtual learning needs both for powering equipment and connecting to the internet. Thus, a lack of technological connections and gadgets has also resulted in an e-learning gap (India Today Web Desk New Delhi, 2021).

### **Digital Technology and Everyday Life: Theoretical Framework**

According to Karl Marx the term alienation refers to separating people from each other in a specific event or activity. The term's sociological dimension relates to his notion that alienation results from societal institutions subjugating individuals, depriving them of their inherent humanity. For the worker, the significance of all his creative effort is found not in the task itself but in the wage, he obtains at the end of the day. Staying active, creative, and productive is what life is all about. However, the workers' output does not pertain to him but to the capitalist. He strives exclusively to obtain the necessities of life, not for the sake of life itself (Petrovic, 1963). In today's world, technology has infiltrated every aspect of human life.

Even though students from various social groups cannot access all technological tools due to socioeconomic and geographical factors, they feel alienated. Most prosperous segments of society acquire all of the advantages of technology in their daily lives; it creates a digital gap within the student community based on public and private schools. Private schools have been using more advanced technology in the teaching-learning process with good infrastructure facilities, whereas public school students get alienated from these facilities. While one set of students is getting all of these benefits from technology, others may become alienated from the use of such advanced equipment in their daily lives.

William Fielding Ogburn's concept of cultural lag refers to the gap between material and non-material culture. Cultural lag relates to the idea that culture needs time to reflect on technical advancements and the societal problems that emerge from this lag. In other words, cultural lag arises when the degree of development in various aspects of culture is uneven, resulting in a gap between material and non-material culture. As a result, cultural lag applies to this concept and theory and explanation. It assists in predicting future societal difficulties by detecting and describing social problems (Osmova, 1961). As we all know, technical instruments are one of the most widely used forms of material culture. Students are even more provided with material culture as electronic equipment in today's society. This has also been observed that students are becoming more attached to the usage of digital technology and accomplishing almost everything with the assistance of this platform. Furthermore, due to their excessive use of technology, students spend less time with their friends and parents, resulting in a gap between material and non-material cultures.

### **Internet and Daily Life**

The Internet has changed how individuals communicate, work, and spend their leisure time. The internet has become embedded in the habits of everyday life; it is used

at work, in schools, colleges, and other institutions. It is used for a broad range of activities, including looking for information, playing video games, and chatting (Howard et al., 2001). Thus, the internet is an essential technology in the evolution of information technology. Their academic performance has improved as a result of their internet use. It is now a crucial tool for a professional and understanding society to offer for information systems, information seeking, communication, exploration, and learning. The use of technology will make it simpler for everybody to obtain a wide range of information quickly and efficiently. The Internet is beneficial to the globe, particularly students (Shahibi & Rusli, 2017).

### Lifestyle before the Internet



Source: (Funalive, 2015)

Accessing YouTube, eBay, Google, and social media requires you to get off the rear and leave the house before the internet. Those who survived before the internet would sit for hours awaiting that one song to play before frantically pressing the record button. Browsing for electronics would take you to a local store; viewing a movie would need you to go to a theatre and pay and meet and become friends with people in person. Before the internet, people had to do their research in books. However, these odd items might also be utilised for fun (McFadden, 2020). Compared to traditional games, most individuals nowadays spend more time playing modern games. Modern games are typically played on electronic devices such as computers and smartphones, whereas conventional games are usually played in the field or over large areas. Modern games help students improve their computer abilities, which is essential. However, many students are becoming hooked due to their excessive usage of current video games. A result of this addiction is hazardous to their mental health. Traditional games help children by providing more excellent space to engage with their surroundings. Furthermore, classic games include physical exercise, which aids youngsters in honing their athletic abilities.

### Lifestyle after the Internet

Students who have direct internet connections have more access to information and knowledge, supporting their career advancement. Students can also buy instructional resources online instantly. It also spared the difficulty of transporting many study materials, books, and articles. These resources can be kept on tiny devices, such as a flash drive, from which students can obtain the knowledge whenever they choose. Perhaps the days of students lugging hefty backpacks on their backs to school are coming to an end. Another element influencing internet usage is academic achievement.



By sitting at home, someone can access the necessary information (Jackson et al., 2011). Students have abandoned their jobs in favour of a fast-growing and lively career in information technology due to the influence of technology. Also, the extensive use of the internet is seen in online shopping, playing online video games, finding jobs, and accessing social networking sites in their everyday lives.

### Practices of Digital Technology in Education



Source: (Life Learners Limited, 2018)      Source: (Inspirationfeed, 2020)  
(Role of technology in the field of education)

In the information era, computers play an essential role. They have an undeniable influence in many domains, including education, to enhance the quality of learning and instruction. Various resources and technology have improved the educational system's quality. Prospective teachers and in-service instructors must be knowledgeable of the effects of computers in the education field and their content matter to achieve better learning outcomes (Dabas, 2018). Education is a means of taking an individual from birth to death and developing skills, attitudes, and other valuable behaviours in the community in which they live (Eryilmaz, 2021). While technology can help students to learn, at the same time, it can also be harmful to the learning system. Technology improves many learning possibilities and provides student comfort, but it may also be an overly reliant tool (Carstens et al., 2021). Technology facilitates both teachings and learning by infusing classrooms with digital learning tools such as; expanding course options, experiences, and learning materials, increasing student motivation, and accelerating learning. Web-based learning, including educational content and other technologies, can boost academic performance by improving learning progress, decreasing the cost of teaching materials or programme development, and making better teacher time. By improving academic progress, utilising study time outside of school hours, reducing the cost of educational materials, and better-using teacher time, online learners have the opportunity to enhance scholarly output. Open educational resources are materials for teaching, learning, and research in the public realm and are easily accessible to everyone via the internet (Jindal & Chahal, 2018). Moreover, curiosity aids students' learning of arithmetic and reading subjects by using videos or podcasts to provide exciting information is one option. Computers and the internet have changed the schooling system. Computers can store vast amounts of data in minimal space, eliminating stacks of relevant sources favouring a single flash drive. They provide better information presentation, making the teaching method more accessible and practical. Because of online learning, worldwide now has access to unsurpassed learning opportunities.

No one can apprehend how an educational setting may achieve desired goals and objectives without using technology in today's world. However, the adverse effects that technology might have on education, specifically the excessive use of technology, may contradict many educational goals. Face-to-face education is distinguished by collectivism and cooperation, whereas technology-based teaching is determined by the absence of any sense of collectivism or togetherness. This sense of isolation frequently leads to feelings of loneliness, and it is strongly linked to the dehumanising influence of technology. Teachers rely on technological devices to educate students, which lack social connections (Alhumaid, 2019). Another disadvantage of relying on technology in education is the widening gap between the affluent and the poor. The infrastructure of schools demonstrates stark disparities between rich and poor. While schools in developed countries have nearly all modern gadgets, such as laptops, tablets, projectors, and Internet access, schools in developing countries lack these items (Van Dijk & Hacker, 2003). Schools may use the information to support the teaching and learning process in various ways. Technology may help students learn in several ways, including online grade books, learning games, and teacher and student performance feedback. According to studies, teachers may encourage students' sense of curiosity and enthusiasm by providing exciting and instructive content, which has been linked to academic achievement. Furthermore, online education may provide challenges for teachers, particularly where it has not traditionally been the norm. Regardless of the issues and problems, it is essential to consider the benefits of technologies in education, such as improved interaction and collaboration, more excellent educational quality, and engaging courses that assist fire students' imagination and search for knowledge.

### Understanding the Technological Impact on Health and Well-being



Source: (Business Insider, 2015)      Source: (Aninews, 2017)  
(Addiction to digital technology and its impact on health)

Excessive use of high-speed internet and interactive online services impacts learning and well-being. The use of internet activity can negatively impact well-being and school performance (Hume & Sullivan Mort, 2012). Nowadays, almost everyone has a smartphone application. It is now possible to get healthcare services and guidance on wellbeing problems through online doctor conversations, which convey fast, helpful, consistent advice and normative information. Technology has aided in improving and simplifying health care in everyday life by giving critical data and treatment options fast and precisely. Today, we found a remedy by using information and communication technology devices to call our doctor and discuss our issues. Reduced physical health

issues; people may adopt a more sedentary lifestyle due to digital devices. Because of the apparent continual use might result in health issues such as headaches, being overweight, heart disease, hypertension, muscle strain or eyestrain, neck pain, physical and mental stress, etc. Children are strained when they play computer games and watch cartoons, which may keep them from going outside but make them fearful of interacting with other friends. This mindset lacks physical exercise, enhancing our health hazards (Bosamia, 2013). This is because blue light, generated by cell phones, laptops, and computers, affects the brain. This level of blue light would have been enough to disrupt the body's natural sleep cycle. This disturbance may make it even harder to oversleep or induce sleepiness the next day.

It is crucial to remember that if technology is not carefully integrated and used correctly, it has the potential to outrun human purpose, causing enormous harm. However, the consequence may not be instantaneous, but it will impact the human race in a few years. Even the negative influence of technology on healthcare is a source of worry. The use of digital technology in preschool and school-age children has indeed been related to a lack of concentration, physical aggression, lack of exercise, overeating, and insomnia. The overuse of digital technology encourages individuals to waste time. Issues should also be raised about the cognitive and emotional consequences these devices have on children's development (Mustafaoglu et al., 2018). More computer usage poses a significant risk to our physical and mental health, resulting in a shift away from vigorous leisure hobbies and sports activities and toward inactive entertainment such as; television, video games, and computers. Students confront several health hazards, including computers and the internet, which may hinder them from performing their different obligations (Wang et al., 2012). Excessive usage of technology may have negative psychological implications. Social media, for example, is meant to bring individuals together. However, in some cases, that might have the opposite impact. Students who had more meaningful relationships and social support on those platforms were less sad and nervous. Students have reported more negative social interactions online, are much more vulnerable to social contention, and have higher levels of sorrow and stress. Students' overreliance and attachment to technologies and electronic gadgets cause them to obtain little rest and develop bad sleeping habits. Bringing a television, computer, or cell phone into the bedroom throughout childhood is linked to poorer sleep (Cespedes et al., 2014). In pre-adolescents, poor sleep quality is closely related to excessive smartphone use. In contrast, the number of devices in bed and impaired sleep quality are associated with heavy internet use and the length of digital technology usage before sleep (Bruni et al., 2015). Individuals are forcibly abandoning their rest to spend more time on social media and their devices, resulting in sleeplessness. Staying up late physically interrupts the body's normal sleep cycle and makes people weary. Emphasis and attention lead to severe problems, and the body has not had enough energy to perform effectively throughout the day, resulting in inefficiency. Extensive use of technology in daily life might result in neck and back discomfort. Excessive use of mobile phones or prolonged sitting at a desk on a laptop or computer can cause significant pressure on the back, neck, and pelvic bones.

### **Technological influence on Recreational Activities**



Source: (Hazra, 2017) Source: (Williams, 2015)  
 (Students' engagement in the different digital platforms)

Smartphones enable both physical and virtual learning. Offline access allows smartphone users to save any instructional content, including PDF files, PowerPoint's, text, spreadsheets, images, graphics, and symbols, regardless of their geographical location. Internet connectivity is required for students, such as students and instructors, to browse web pages to fulfil their information demands. The smartphone's exploration has altered the dynamics of students' active learning. A student, for example, can download their teaching materials, whether in a car, train, airline, or market, to give another example. This also allows students to subscribe to classes available, take a quiz or semester using an allocated or enrolled e-learning system, and participate in a classroom discussion online (Darko-Adjei, 2019). Technology facilitates communication, makes life more straightforward, and allows for the collection and sharing of knowledge (Daghan, 2017). Students are employing more superior technology than ever before in today's world. Instead of wanting to spend time with family and friends, students choose to stay indoors and gaze at a screen for long periods. Although computers, TV sets, and smartphones have become common in nearly every household, the technology employed for recreational activities has evolved. One of the recreational activities that can still be done when sitting in a room at home is gaming, which is now available on the internet from any desktop or mobile device.

Television is another medium that has received mixed evaluations regarding its impact on social skills and social life. As a result, while watching television, there is a limited chance for genuine connection (Life Learners Limited, 2018). Students realise that technology has advanced stress relief efficiency by allowing students to communicate more quickly, relate to isolated places more conveniently, and start introducing all sorts of weird sections of technologies and tools that are used for free events, such as gaming systems, exercise machines, smart glasses, and so on. Several of the things accessible include archery, water sports, skydiving, off-road racing, and shooting. Technology has somehow made such activities safer by giving adequate suits and technology, but it has also empowered teams to reach levels previously unimaginable. Ultimately, technology has enhanced how we devote our free time and engages in our favourite recreation.

### Digital Technology-driven Social Relationships





Source: (Wanjala, 2014)      Source: (Paez, 2019)

(Technology affects relationships and connects the world through the power of social media)

In our everyday lives, technology helps us interact with each other and maintain ties with individuals all over the globe. We may connect with people via e-mail, social media websites, and smartphones using technology and communication channels. It helps save time and is inexpensive to use. Forums and group discussions are available for connecting with many people simultaneously. We can simulate face-to-face communication by using virtual meetings, which is beneficial for group meetings or communication. Even though the internet has eliminated physical barriers between people, it has not brought everyone closer together, and in some respects, it has increased emotional distance. Students are always busy with their very own digital environments and killing time. They have lost touch with their families and friends, and their lives have deteriorated into formalities. Children, too, are spending a lot of time in the digital world and absorbing erroneous notions, contributing to a surge in piracy and adulterous affairs via ICT gadgets (Bosamia, 2013). The majority of online activity was centred on social connections. Students get more interested in gaming than their schoolwork, negatively impacting their academic achievement. They did, however, believe that it had a good effect on their social ties with their friends (Hume & Sullivan Mort, 2012). Networking sites are internet programmes that allow users to build a public or semi-public profile within a local social media network. These are intended to enable users to communicate with such a list of individuals with whom they have a relationship and allow individuals to examine and study their list of connections and those made by many others inside the network (Raacke & Bonds-Raacke, 2008). While the bulk of social networking reflects ties between people who have common interests, attitudes, and views, it can also facilitate communication between people who don't share such common interests but are connected through mutual acquaintances (Boyd 2007). Technology has had a subtle but significant impact on how humans see the environment and interact with others. Mobile and internet devices (i.e. smartphones, tablet computers, PCs, phone gaming systems, and social media) have also certainly changed the way students interact. One of the significant impacts of technology is the improvement of information sharing systems. It consists of telecommunications and networking.

This generation is widely known as being largely reliant on the internet, spending the bulk of their time on social networking sites such as Twitter and Facebook. It is

probably because college and university students, along with teenagers, use it thoroughly to gain worldwide access. The main reason is that students are lured to social media sites to kill boredom when learning or browsing for online course information, distracting their concentration away from their occupation. Facebook has an impact on student achievement. Furthermore, the influence of social networking sites on academic achievement has highlighted another critical concern, i.e. health. Today, social networking sites control students' futures and careers. Social networking sites were designed to be only a digital link between users, but they have unfortunately become an obsession for many students (Abdulahi et al., 2014). Similarly, individuals commonly use apps to meet friends or dates in the ease and comfort of their own homes for social interactions. Several students can only communicate via messaging, chatting, or online dating. Although technology has allowed us to overcome global divisions, cellphones and online networking apps, for example, have primarily contributed to an increased split among students. Increasing isolation diminishes social connections and social skills, and increased human-to-machine interactions result from the overuse of technology that has created a barricade between many people worldwide.

### **Digital Divide: Significant Aspects**

The digital gap is the discrepancy between people who have and do not have access to technology. It is often used in academic settings. There are three fundamental degrees of the digital divide among students. The first level is concerned with the disparity in ICT equipment. The second level of the digital divide discusses inequalities in Internet usage, whereas the third level describes differences in educational achievement using ICT. Individuals' educational levels are frequently observed to connect with digital inequality. A student's academic status is determined by economic, cultural, and psychological variables. These issues contribute to more significant disparities in the usage of ICT. In other words, variables such as students' competence, competency, motivation, experience, interest, and usage autonomy play a significant role in the digital divide. Because of the various ways the digital divide affects society, it places weaker students at a competitive and economic disadvantage. These students struggle to use the vast ocean of knowledge available on the Internet. Technology has bridged as well as caused gaps. The concept of virtual distance occurs when people are present physically but are isolated from one another because they are entirely absorbed in their technological devices, such as a laptop, smartphones, or tablets. Consequently, human ties and connections have diminished substantially, with intimacy and human-to-human interactions being replaced by human-to-machine interactions. Technology has altered human behaviour by increasing the distance between people and reducing their intimacy (Aswathi & Haneefa, 2015). Inequitable access to ICT at academic institutions and home contributes to educational and societal stratification, resulting in a digital divide. The educational digital gap can result in a loss of educational benefits for the disadvantaged, such as increased employment, incomes, social and political involvement possibilities, and concerns about equality and civil rights. On the other hand, it may provide educational benefits for individuals who use ICT wisely. It can provide quick access to a lot of information, offering an uneven chance to reinforce fundamental, new, and higher-order cognitive abilities. The efficient use of ICT in learning is predicted to enhance student achievement (Gunduz, 2010). Moreover, male students use social media more

often than female students, and urban students use it more than rural students. Those in computer science use the Internet the most, while students in human sciences utilise it the least. Students who are not using the internet claim a variety of reasons, including a lack of digital facilities at universities, families, and communities, lack of access, lack of skills, lack of understanding, loss of enthusiasm, a lack of requirements, environmental factors, and a diversity of others (Loan, 2011). Furthermore, in today's society, technology is an essential component of education. However, many public school students do not have the relevant expertise to complete tasks that require an internet connection. Public school students are not prepared to use digital technology, and they often have difficulty obtaining computers due to budgetary constraints in their homes. This is a significant issue for students doing tasks that need internet and computer connectivity. Furthermore, even if these students go to a public library to use a computer, they may have difficulty since the library may not have enough machines and other people may use them. Moreover, because the hours of operation are limited, they will have little time to use the computer. However, in private schools, technology is used often in the teaching-learning process. Students are also more familiar with computer expertise and are reaping more benefits from technology in their daily lives (Asaolu & Fashanu, 2012). However, it has been seen that public schools are using a high frequency of technology with adequate infrastructure facilities, which assists students in gaining more indebted knowledge about the technology field.

## I. Conclusion

Everyday life encompasses how we think and act on a daily basis, and digital technology has altered the majority of these activities in recent years. Students nowadays spend more time in the digital realm than in the actual world. As a result, it has resulted in both positive outcomes and negative consequences on the students' lives not only in a single fragment but also in varied aspects such as education, health, student recreation, social interactions, and so on. Thus, the guardians should make time despite the busy schedules and set aside a couple of times to engage in outdoor recreational activities to challenge this existing actuality and evade the harmful fragments. It is up to the parents to enlighten them on appropriately using technology for their benefit. With suitable guidance, monitoring, and active involvement from parents, students can create the best of all the beautiful things modern technology offers.

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