

Digital Literacy in India: An Exploration

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Abstract

Huge demographic and technological shifts are taking place in India right now. In the next twenty years, this nation is predicted to have the biggest population of working-age people on the planet. The increasing need for work necessitates its adoption of digital literacy. Productivity will rise, and growth will be more evenly distributed. In this research, we look at digital literacy from a global perspective. Furthermore, it highlights the possibilities and threats to digital literacy in India. Major policy measures have been undertaken by the government in recent years to address this situation. The Digital India project is an overarching initiative spearheaded by DeitY with the twin goals of making India a digital country and empowering its inhabitants to be digital citizens. If different parties in India work together, this programme and digital literacy in general have a better chance of succeeding.

Keywords: Technological, Productivity, Global Perspective, Digital Literacy.

Introduction: The term "digital literacy" encompasses much more than just the ability to use digital tools. The two terms' definitions in the dictionary could lead to ambiguity since they imply different ideas. There was a time when teaching conventional reading skills using digital and technical methods was the accepted definition of digital literacy. And it's often believed that "digital literacy" and "computer literacy" are interchangeable. The idea is far broader than the former, even if it may have its roots in the latter. The breadth of digital literacy extends beyond the mere ability to utilise gadgets; it also includes the ability to apply information. Additionally, the phrase "information literacy," which gained popularity later on but is too broad and lacks precision, is different from digital literacy. In addition, the prior scholarly discussion presupposed that computers were necessary and the exclusive way to teach digital literacy. The inevitable reliance on computers was rendered unnecessary with the arrival of several digital gadgets brought about by technological innovation and improvement.

Getting comfortable with and proficient in the use of numerous digital technology gadgets is, in layman's words, digital literacy. Digital literacy is being used in everyday life in many different contexts, such as when a student fills out an online admission form and checks their results, when a housewife orders her favourite dress from an online store, when a soldier sends a Whatsapp message to his family from his border post, and when a farmer receives a subsidy through the Direct Benefit Transfer (DBT) option. Being able to use digital resources such as e-Library, encyclopedias', and networking sites is a sign of digital literacy. Opportunities may be unlocked via these knowledge sources. Individuals' competence and disposition towards making effective use of digital resources to facilitate and enrich routine life tasks is aptly defined as digital literacy (Casey and Bruce, 2010). Knowledge can be successfully created, found, used, summarized, and shared, and individuals can interact with one another. It includes desktop computers, laptops, the internet, software, hardware, smart phones, personal digital assistants, and any other digital device that allows or facilitates connection to the IT world.

Importance of the research: For "life in a digital age" to really begin, one must be literate in all things digital (Bawden, 2008). Because digitization has permeated every facet of our lives, including the educational system, UNESCO has designated this goal as Sustainable Development Goal 4 (SDG4). Since digitalization is now pervasive in all aspects of our lives, it is important to understand the importance of digital literacy, why it is taught in schools, what the government is doing to promote digital literacy, and the obstacles and solutions to this problem. For that reason, this research was necessary.

The level of digital literacy in India

While India claims to have one of the fastest-growing economies in the world, a recent study by the Digital Empowerment Foundation found that just 30% of our population is basic literate, and that number is double for digital literacy. To give every person access to the internet, the government introduced Digital India in 2015. Although there is no doubt about its potential advantages, there are still difficulties, such as slow infrastructure development, bandwidth availability, personal computer penetration, and scaling ability.

The Covid-19 pandemic has sped up the rate at which technology is ingrained in daily life, but it has also highlighted a glaring digital divide that has excluded a substantial percentage of India's population from this paradigm shift. According to the survey that emphasized differences in digital literacy throughout the states and union territories of the nation using data from the 2017–18 National Sample Survey (https://www.linkedin.com/pulse/importance-digital-literacy-india-richa-tiwari).

Benefits of Digital Literacy:

Support Educational Progress: Modern technology has made the internet the go-to place for a myriad of answers. At the push of a single button, it offers a plethora of potential solutions. Developing and accepting information is the essence of literacy in the twenty-first century. Readers' analytical and verifiability skills will be put to the test in proportion to the amount of material presented. Therefore, it got more challenging to study in the digital era. The internet, similar to traditional media, may spread misinformation, prejudice, or even questions about the veracity of what people write (Tazijan et al., 2022).

The capacity to find, organise, understand, rate, and analyse information using digital technology is known as digital literacy. A person who is proficient in digital literacy can find, organise, access, assess, and make good use of digital resources. Accordingly, having a high level of digital literacy may help one excel in many different kinds of digital work, whether at work, school, or just for fun (Yurtseven et al., 2021). Digital literacy may help students learn more effectively when they take part in online learning procedures. Many students may have a meaningful learning experience in digital learning environments if they comprehend the digital technology provided by such spaces.

Enhanced Communication and Collaboration: Furthermore, pupils in today's digital world must possess strong digital literacy skills. According to Iqbal et al. (2023), students who possess good digital literacy not only have an easier time navigating and making use of online resources, but they also cultivate the critical thinking, imaginative, and expressive abilities essential for thriving in the modern digital world. No discussion of communication can ignore the fact that classroom communication allows students to not only share knowledge but also re-contextualize and repurpose it, leading to the development of new understandings and their subsequent transmission to others (Krishnaswamy et al., 2022). A key component of good communication is the capacity to understand and cater to specific audiences' requirements while also clearly and transparently explaining potentially complex concepts. Finding the right formats, tools, and media may be part of this process, along with thinking about the pros and disadvantages of each and how you could use them to convey your ideas. The vast quantity of information that is easily accessible online may be accessed by pupils with the help of digital literacy. They have the research skills to gather information from many sources and examine a topic from several perspectives. Their communication has also improved thanks to their newfound knowledge and capacity to create educated opinions.

Creative Expression and Content Creation: Having a solid grasp of digital tools and resources allows individuals to unleash their creativity and create a wide range of digital material. They can make and share videos, audio, digital artwork, podcasts, vlogs, and blogs with a massive audience. This opens up a world of possibilities for narrative, self-expression, and learning how to create

digital media material. In this information era, digital technologies are used in the classroom because of their efficacy in facilitating learning. Digital technologies have immense promise for fostering creativity and enhancing education. Thanks to digital technology, we have access to a plethora of high-tech tools that allow us to express and develop our creativity. According to Černochová and Selcuk (2019), digitalization—which encompasses platforms like Facebook, Google, cloud computing, and YouTube channels—has altered our daily lives, workplaces, and interpersonal interactions.

Digital Literacy in Education: In this digital age, the use of technology in different fields has become the standard and is practically ubiquitous around the world. This is particularly true in first-world nations like the US, UK, Belgium, and Japan, which are highly industrialised, rich, educated, and tech-savvy. As an example, there are many ways in which the use of information and communication technologies (ICTs) in the classroom has benefited both instructors and students (Reddy et al., 2020).

To be digitally literate is to have more than just the ability to use computers and the Internet to do tasks. The capacity to seek for, recognize, assess, and ultimately choose knowledge that is both useful and relevant to one's requirements is a part of it. Digital literacy encompasses not just the ability to use technology effectively but also to think critically, solve issues, communicate effectively, collaborate, and make good judgments when faced with digital challenges.

Factors Influencing Development and Practices of Digital Literacy: The growth and application of digital literacy are affected by several elements. A person's socioeconomic status is a key component as it determines the resources and technology that are available to them in the digital realm. A person's socioeconomic status significantly affects their access to this topic. How accessible and inexpensive digital tools and connection are may vary by income level, educational background, and geographic location. A digital divide may be widened by socioeconomic differences, which in turn affect how different populations acquire and use computer literacy. Urbančíková et al. (2017) states that researching and increasing individual digital literacy is viewed as the path to achieving the digital prosperity of society. The study looked at a variety of digital talents and determined which socio-demographic factors are more influential and which ones remain influential over time. Some socioeconomic groups are disproportionately affected by the current digital divide. This includes those of advanced age, families without children, and those living in smaller towns. Although their influence is decreasing due to the increasing accessibility and affordability of digital services and the internet, the commonly held beliefs about low wealth, regional affiliation, and lower levels of education all exhibit further negative impacts.

Educational Policies and Systems are the Next Influential Factor on the Growth and Use of Digital Literacy. One way to greatly influence its growth is to integrate digital literacy into educational policies and institutions. The chances that children have to develop their digital competencies and abilities are influenced by educational policies, teacher education programmes, and school curriculum that include digital literacy. In addition, the amount of money schools spend on computers and other tech tools might affect students' level of digital literacy. To reiterate what Vargas and Castro (2020) have said, It is widely recognised that education's overarching goal is to provide equitable access to quality learning opportunities so that all individuals possess the necessary skills and knowledge to thrive in today's and tomorrow's global economy, communities, and public and private spheres. It is essential to teach individuals how to utilise, comprehend, and manage digital resources in today's increasingly digital world. The ability to read, write, identify, evaluate, and produce media is enhanced by the use of technology in the classroom. Knowing and understanding are essential components of literacy. Knowing where to get information, how to evaluate its credibility, and how to synthesise data from numerous sources are all hallmarks of a literate person. There has long been debate over how best to educate the public about digital literacy and whether or not the general public can really reap the social benefits of information. Those who live in areas without adequate access to computers, the internet, and other forms of digital technology are, without a doubt, at a severe disadvantage in modern society.

Additionally, technical access and infrastructure is another potential element that impacts the growth and use of digital literacy. Without a shadow of a doubt, the availability of technological infrastructure is of the utmost importance in this age of digital technologies. To promote digital literacy, it is essential to have readily available and high-quality technological infrastructure, including internet connection and hardware devices. The development and implementation of digital literacy skills may be hindered by a lack of access to proper internet connection, particularly in rural or impoverished areas. Online learning, research, and communication can only take place if people have sufficient access to technology and the internet.

Government Initiatives to improve Digital Literacy:

The government has taken numerous initiatives to strengthen digital literacy in india.

Some of the endeavors are:

1) Bharat Net Project: In an effort to ensure that all telecom service providers in the nation have equal access to broadband connection, Bharat Net—one of the biggest rural telecom projects in the world—was gradually implemented to all 2.5 lakh Gramme Panchayats. On October 25, 2011, the project was authorised by the Union Cabinet. On April 30, 2016, the project was given the green light to be implemented in three stages by the Telecom Commission.

2) National Digital Literacy Mission (2014): In 2014, the Ministry of Communication and Information Technology's Department of Electronics and Information Technology began an IT mass literacy campaign with the goal of providing every household with a digital literacy expert. The opportunity to acquire the knowledge and abilities necessary to thrive in an increasingly digital environment.

3) Digital Saksharata Abhiyan: Government employees such as ASHA, Anganwadi workers, and Ration vendors were among the 42.50 lakh individuals targeted by the second phase of the NDLM scheme, Digital Saksharata Abhiyan (DISHA), which began in December 2014. The programme for digital literacy training has certified 53.46 lakh individuals by October 2016 and taught over 87.68 lakh.

4) Digital India: On July 1, 2015, Prime Minister Narendra Modi, in collaboration with the Ministries of Finance and Electronics and Information Technology, began the Digital India initiative. By bolstering the nation's online infrastructure and increasing internet access, this initiative aims to make the country digitally empowered electronically.

5) Internet Saathi Program: Google India and Tata Trusts, in collaboration with the Indian Ministry of Electronics and Information Technology, established this initiative in 2015. Raising the level of digital literacy among rural women is the primary goal of this programme. Women in rural areas get internet literacy training, digital tools, and opportunities to act as digital mentors, enabling them to assist other women in their communities in navigating the internet and reaping its benefits.

6) The Pradhan Mantri Gramin Digital Saksharta Abhiyan: In 2017, as part of the Digital India Programme, the Ministry of Electronics and Information Technology launched PMGDISHA with the goal of increasing digital literacy among 6 crore people living in rural regions. From 14 to 60 years old, if no one in the family is tech savvy, just one individual from that home will be eligible for training.

Conclusion: We live in a digital world where it may be difficult to do many jobs without the proper knowledge, skills, and equipment. Regardless of one's age, region, caste, or financial standing, everyone should be able to utilise digital technology to do a variety of tasks. Based on the paper's analysis, our government has launched a plethora of programmes aimed at boosting digital literacy, yet the problem persists due to factors such as inadequate infrastructure, low levels of awareness, widespread illiteracy, and so on. To overcome these obstacles and establish all-encompassing digital literacy programmes in India, a multi-faceted strategy is needed, including public education initiatives, improvements to the country's digital infrastructure, engagement from the corporate sector, and training in digital skills.

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