



VARIOUS ASPECTS OF DIGITAL LITERACY IN INDIA

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ABSTRACT:

Recently technology plays a crucial role in every sector. The research shows that ongoing obstacles such as illiteracy, poverty, lack of infrastructure, and low awareness of technology hinder the advancement of digital literacy in India. Digital literacy refers to the ability of individuals and communities to comprehend and utilize digital technologies for meaningful actions in various life situations. The global pandemic, such as COVID-19, has finely tuned awareness of technology and digitalization worldwide. In simple terms, it means being able to access computers, mobile devices and the internet for daily activities and staying connected with others online. During the pandemic, students and all stakeholders became increasingly optimistic about online education; many leading institutions have created their own platforms to provide academic resources. If the public is well-informed about digital literacy, they can truly benefit from digitalization.

Over the past few decades, India has experienced remarkable growth in technology-driven sectors like the Unified Payment Interface (UPI) and Aadhaar, which require not just literacy but also active participation in daily life. This research article aims to explore the significance of digital literacy and analyze the initiatives taken by the government to enhance digital literacy in India, the challenges they face and suggestions for overcoming these obstacles. Digital literacy empowers citizens to effectively exercise their rights and responsibilities. It is transforming India into a more transparent and responsible society.

Keywords: *Digital literacy, UPI and Transforming India.*

INTRODUCTION :

Currently digitalization is changing every part of society therefore 21st century is observed to be a digital era. Digital literacy is essential for social and economic growth. Digital literacy refers to a person's ability to engage with different digital platforms. According to Bawden in 2008 Digital literacy is nothing but an “essential requirement for life in a digital age”

Technology offers a chance to change the teaching and learning process, which creates a need to continually update and improve education models to meet the demands of this fast-changing technological era. The research examines digital literacy, including computer knowledge, operating skills, Unified Payment Interface (UPI) and web-related abilities of everyday people. Digital literacy enables the public to access government programs available to all citizens. Adequate thrust is required to

tackle this issue, especially in developing nations. Digital literacy enables people to fully engage in the digital world, communicate, find information, solve issues, and take part in online learning.

In 2020 Covid-19 has transformed the educational background, making virtual reality the new norm in our current times, bringing about numerous changes and challenges. Prior to the Covid pandemic, teachers weren't prepared to teach online using various platforms like Zoom and Google Meet. Many had never conducted classes online and students often needed reliable internet access; some might have even left their laptops behind when they went home. However, the outbreak of the coronavirus made it essential to adopt a new educational approach known as hybrid learning,

which combines both online and offline platforms for education.

As per the International Telecommunication Union's (ITU) ICT Development Index (IDI) 2024, countries like Singapore, Denmark and Sweden have shown remarkable advancement in offering universal and significant connectivity to their citizens. The IDI evaluates the ICT development of countries based on factors such as broadband access, mobile subscriptions, internet usage, and digital skills. The most recent report shows that while high-income countries are still at the forefront, low-income countries are making notable progress in enhancing their ICT infrastructure and digital literacy. As of 2024, around 68% of the global population, which is about 5.5 billion individuals are internet users. This represents a considerable rise from 53% in 2019. Nevertheless, there are still gaps, with 2.6 billion people remaining offline, mostly in low-income areas, as reported by the ITU.

The projected digital literacy rate in India for the year 2025 is around 38% at the household level, highlighting a notable disparity between urban and rural regions: 61% in urban settings compared to 25% in rural locales. This clearly indicates that rural India exhibits a comparatively lower level of literacy among the citizens of our nation due to lack of technical skills related to digital literacy. The peoples from village area are not familiar with advanced technologies due to their limited understanding of technology.

Digital literacy is transforming the current issues in administration and is leading to social changes across the country. In terms of digitalization, this affects hospitals, banks, government offices, local authorities, and other non-governmental organizations. It indicates that digitalization is a part of our everyday work and life, it's important to understand the significance of digital literacy, especially in education. We also need to consider the efforts

made by the government to enhance digital literacy, along with the challenges and solutions involved.

Objectives of digital literacy:

- i. To facilitate the use of digital devices, such as smartphones and computers, for the execution of everyday activities.
- ii. To offer the capability to locate, access, and utilize information from digital resources, including the internet.
- iii. To assure that individuals can navigate digital platforms in a safe and responsible manner, while knowing issues such as cybercrime and copyright.
- iv. To enable citizens to engage with government and various online services, including e-governance platforms.
- v. To provide fundamental ICT skills that align with the trainees' needs, thereby equipping them to utilize IT and associated applications for active participation in the democratic process and to improve their livelihood opportunities.

Need of Digital literacy:

Over the last few decades, the advancement of digital technology has progressed remarkably. This transformation in digital technology has altered the manner in which we are living with our environment and carry out everyday activities. Activities such as education, shopping, processing payments, using internet and communicating with others have been entirely transformed due to technological innovations. Digital literacy was once considered optional; however, it has now become a necessity of the current era. In 2011 UNESCO has acknowledged digital literacy as a crucial life skill.

The advancement in technology use in educational field changes educational methods. Technology has become a key learning tool, especially during the covid-19 pandemic. Schools and universities have started using ICT platforms like computers, tablets, and the

internet more than ever before. Nowadays, many cybercrimes are going to observe more in developing countries. To prevent these crimes, we need digital awareness and good digital security. Understanding simple ideas like input and output, how applications work, and recognizing hardware devices can help with everyday tasks.

Following are the key importance of digital literacy:

- i) A population that is digitally literate encourages innovation, entrepreneurship, and engagement in the expanding digital market.
- ii) Digital literacy in India enables people to use government services, pursue online education, and find job opportunities.
- iii) Providing women with digital skills can boost their involvement in the workforce and in decision-making activities.
- iv) Digital literacy helps people to identify and safeguard themselves against online risks such as phishing scams and cyberbullying.

Role of Government schemes to expand digital literacy:

- 1) The Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA): It is a program that wants to teach one person in every eligible rural home how to use digital technology. The goal is to help 60 million rural households get digital skills.
- 2) National Digital Literacy Mission (NDLM): This program, which was once called Digital Saksharta Abhiyan (DISHA), was created to help at least one person in every household in India learn digital skills.
- 3) The New India Literacy Programme (NILP) is the National Education Policy (NEP) 2020 and makes digital literacy a key part of its life skills training for peoples.
- 4) PM eVIDYA and NISHTHA: These programs aim to improve digital learning for both students and teachers. NISHTHA offers online training modules specifically for teachers.

5) Digital India: This is a main program that focuses on making sure people know how to use digital tools. It has different parts that help with online education, health services and government services using things like BHIM and DigiLocker.

6) Mission Karmayogi: This program aims to improve the computer skills of government workers by teaming up with companies such as Microsoft.

Various Digital programs in education:

- 1) DIKSHA (Digital Infrastructure for Knowledge Sharing): This is a national platform that has digital resources, e-content and QR-coded textbooks for students at all education levels.
- 2) PM e-VIDYA: This is a big program that brings together all digital learning efforts in one place such as TV channels, online classes and radio.
- 3) SWAYAM: This is a platform for Massive Open Online Courses (MOOCs) that covers everything from school to postgraduate studies, and it even allows for credit transfer to students.
- 4) National Digital Library (NDL): This is an online library that provides a variety of learning materials like articles, books and videos.
- 5) SWAYAM Prabha: This is a collection of DTH channels that show educational programs all day and night, covering everything from school to higher education.
- 6) NISHTHA (National Initiative for School Heads' and Teachers' Holistic Advancement): This is a program that helps teachers keep learning and growing in their jobs.
- 7) e-Pathshala: This is a website that provides online educational resources for schools, making it easier for students and teachers to access learning materials.

Challenges in digital literacy:

Digital literacy faces certain Challenges including awareness among students and peoples, lack of teacher training and safety issues in online mode.

1) Awareness in Digital Technology: It has been observed that certain parts of the population, particularly women and older adults, are not very aware of digital technology and also less interested. This emphasizes the need for targeted programs to promote digital literacy in these groups.

2) Infrastructure problems: Not everyone has the same access to devices, dependable internet, and digital resources, which is often caused by differences in money or location.

3) Online safety and responsibility: Students face dangers such as cybercrime, false information, and content that isn't suitable for their age, so they need help learning how to be good digital citizens.

4) Economic Differences: India has big economic differences. A lot of people find it hard to buy digital devices and get internet connections, which limits their chance to join in digital literacy programs.

5) Illiteracy and Basic Education: A significant portion of the Indian population continues to face challenges with basic literacy. Lacking skills in reading and writing makes it hard for people to interact with digital technologies and content.

Solutions for challenges in digital literacy:-

To solve above challenges of Digital literacy in India, following are some solutions:

1) Campaigns for Public Awareness: Implement public awareness initiatives aimed at informing and educating individuals regarding the benefits of digital literacy and the potential risks associated with the online environment. The primary goal of these efforts should be to enrich understanding of responsible internet usage, safe online practices and data privacy.

2) Development of digital infrastructure: Increase internet bandwidth and strengthen network security, broaden broadband access to rural regions and create community technology hubs that are easily accessible.

3) Integrate digital literacy into core curriculum: Include digital literacy in school programs also add digital literacy, responsible internet use and critical thinking abilities into every subject, starting from early childhood education and continuing through all phases of life.

4) Digital Skills Training: Introduce digital skills training programs in schools and colleges to help students gain a basic understanding of computers and online internet safety. Programs aimed at adult education can be formed to teach older individuals who might not have had much experience with digital technologies.

5) Association with Private Sectors: Promote teamwork with IT organizations, non-profits, and private businesses to enhance digital literacy programs. These partnerships can provide knowledge, valuable resources and funding to boost digital literacy initiatives.

CONCLUSION:

From study of current status of Digital literacy it is tough to get things done without using digital tools and having the right skills and knowledge. The whole world is shifting towards artificial intelligence, and technology is surpassing human intelligence. It's important for everyone to be digitally literate so they can carry out various activities using technology, no matter their age, socioeconomic background or geographic location. As technology spreads into every field, if people are not aware of digital literacy, they won't be able to thrive in our current tech-driven world. Digital India is an initiative launched by the Indian government to help all citizens engage effectively in the economy. Even people in rural areas are gaining knowledge about technology and reaping its benefits. Technology is offering innovative solutions to improve human life. We need to use it wisely; otherwise, technology could disrupt our lives.

With the conclusion that our government has launched many initiatives to enhance digital

literacy, there are still several challenges to overcome, such as lack of awareness, infrastructure problems and illiteracy. To tackle these issues, a multi-faceted strategy is needed, which includes improving digital infrastructure, awareness campaigns, providing digital skills training and engaging the private sector to create effective digital literacy programs in India.

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