



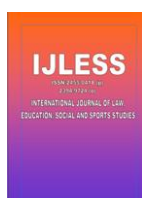
A Study on Digital Literacy and Mental Health Among Preservice Teachers

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Abstract

In the rapidly evolving digital age, digital literacy has become an essential life skill for learners in the 21st century. The dominance of technology in our daily lives emphasizes the significance of digital literacy not only for adults but for children as well. As technology redefines communication, education, and work, citizens need to acquire the competence to navigate, assess, and produce digital information responsibly. Competence in navigating, assessing, and producing information effectively utilizing digital technologies is vital for educational success, career preparation, and civic participation. The age of digital that is full of so many technological breakthroughs in most areas of life alters the effects of learning as in the way of how to connect with each other. Digital literacy capacity is one of the important skills among our current students. Students are required to express their ideas through digital media. Digital literacy refers to an individual's ability to search, scan, and make information accessible to others through a keyboard and other media in different digital environments. Digital literacy opens life to continue daily routines like banking, study, search for information, job prospectus, work opportunity, education, search for new lifestyle, transport infrastructure, weather forecast, even to discover minute facts one must be digitally literate. This paper delves into the idea of digital literacy, its essential elements, and its importance in contemporary education and everyday life. It also touches on the challenges in becoming digitally literate and suggests solutions to improve it among students. It concludes that incorporating digital literacy as a life skill into education systems is necessary to equip people with a technology-influenced future.

Keywords: Digital Literacy, Life skills, Technology, Communication.

Introduction

With technological evolution over the years, we now are living in a world that is both enriched and burdened by computers and gadgets. The reign of technology in our daily lives' places digital literacy

on a pedestal of need not only for adults but even children. The digital world promises great dividends and benefits to all, yet, without apt usage and mastery of technology, the digital world can be overwhelming and even dangerous. Digital literacy skill is one of the necessary skills for our today's students. Students need to convey their thoughts in digital media. Previous research indicates that students need to empower the skills of reading digital text and expressing ideas in digital media to communicate with others (Frazel, 2010; Jolls, 2008; Kress, 2003; Kress & Van Leeuwen, 2006; Ohler, 2008). Digital literacy and media literacy and information literacy has a significant contribution to make to primary, secondary and higher education (Koltay, 2011). This is supported by the views promoted on the website of the "Framework for 21" Century learning" (Partnership for 21" Century Learning, 2015). The model unveiled the definitions and meanings of competences and skills needed the 21st century with focus on educational needs (Voogt & Robin, 2012). The individual employing digital tools in the age of information have become participative and active individuals who collect process and generate information (Sharkey & Brandt, 2008). Digital literacy fosters inquisitiveness and creativity and also allows the individual to analyze the information that has been collected critically. By developing the capacity for utilizing digital materials, digital literacy makes people feel comparatively safe regarding technology use (McLaughlin, 2011). This paper explores as why digital literacy is a fundamental life skill and how it can be cultivated to prepare learners for future challenges.

Meaning of Education:

"Education is the most powerful weapon we can use to change the world," said Nelson Mandela. It the transmission of civilization. Education is a continuous process that modifies and refines human behaviour and shows the way towards development.

In the words of James S Ross, "The whole of education-intellectual, moral and physical consisted in leading out the innate knowledge, virtues and powers of the child, making the potential actual."

The term 'Education' has different meanings. Each person interprets it in terms of his experience, his needs, his interests and purposes. The parents, teachers, administrators, religious leaders, politicians and artists interpret the word 'education' in their own words.

We can say that education is a continuous process of human development, adjustment and enlightenment. It makes man progressive, civilized, cultured and humanized.

Meaning of Literacy:

Literacy is the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society. Generally, literacy also encompasses numeracy, the ability to make simple arithmetic calculations. The concept of literacy can be distinguished from measures to quantify it, such as the literacy rate and functional literacy. **Source: UNESCO Institute for Statistics**

NAAL (National Assessment for Adult Literacy): Literacy is using printed and written information to function in society, to achieve one's goals, and to develop one's knowledge and potential.

ProLiteracy – Literacy is the ability to read, write, compute, and use technology at a level that enables an individual to reach his or her full potential as a parent, employee, and community member.

Meaning of Digital Literacy:

Digital Literacy is the ability of individuals and communities to understand and use digital technologies for meaningful actions within life situations. Digital literacy is the capability of an individual to locate, analyze, and communicate effectively by typing and other media across multiple

digital environments. Digital literacy, according to the American Library Association (ALA), is defined as the capacity to use information and communication technologies to locate, analyze, create, and communicate information, both requiring cognitive and technical skills."

Meaning of Life Skill:

Life Skills are defined as "psychological abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life. Adaptive means that a person is flexible in approach and can adjust in different circumstances. 'Positive Behaviour' implies that a person is forwards looking and even in difficult situations, can find a ray of hope and opportunities to find solutions. UNICEF defines, Life Skills as 'a behaviour changes or behaviour development approach designed to address a balance of three areas: knowledge, attitude and skills.'

Life skills is a term used to describe a set of basic skills acquired through learning and/or direct life experience that enable individuals and groups to effectively handle issues and problems commonly encountered in daily life.

They include creativity, critical thinking, problem-solving, decision-making, and the ability to communicate and collaborate, along with personal and social responsibility that contribute to good citizenship – all essential skills for success in the 21st century, both for healthy societies and for successful and employable individuals.

The World Health Organisation has defined life skills as, "the abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life".

Here 'adaptive' means that a person is flexible in approach and can adjust to different circumstances and 'positive behaviour' implies that a person is forward-looking and even in challenging situations, can find a ray of hope.

Digital Literacy as a Life Skill:

Our Prime Minister is conceptualizing the new courses and planning strategies based on Skill India. To have a successful life, one must be skilled. Being skilled is the need of the hour. Life skills can be defined as the skills for adaptive and healthy behaviour which enable individuals to cope successfully with the demands and challenges of everyday living. Adaptive is a person who is adaptable by nature and can change as per the requirement. Positive behaviour implies that a person is forward-looking and even during adversity can see a spark of hope and room for solutions. Life skills are those abilities that assist in the promotion of mental and social well-being. and competence in early childhood to manage the challenges of life. Digital literacy is the survival skill of this time. It is playing a crucial role in every part of one's life. It is the demand of the society. One Digital literate person is capable of matching speed with the changing demand of the society. Digital literacy is the answer to lead a productive life to engage in daily activities such as banking, study, search information, job search, employment, education, search new lifestyle, transport facilities, weather forecasting, even to search minute information one must be digitally literate. In the class if the teacher is aware of his subject but not digitally literate, he/she won't be able to share his/her knowledge accordingly in front of digitally literate students. It is not an option to be digitally literate, but it is the requirement of the global educational sector to be digitally literate. A digitally literate person can elevate his standard of life too. The categories to which digital literacy is most imperative are ICT users, e-business professionals, and ICT professionals. A learned man is not learned if he is not well armed with new digital technology. In the current digital age, digital literacy can be defined as a life skill which is not desirable but the requirement of shifting need of this digital age.

Like reading and writing, digital literacy:

- **Supports lifelong learning:** It is the need of the hour, digital literacy as a skill enables individuals to acquire new skills and knowledge throughout life.
- **Promotes independence and empowerment:** Being digitally literate enhances self-efficacy and participation in modern society.
- **Bridges social and economic divides:** Equitable access to digital tools and skills helps reduce inequality.

Need of Digital Literacy for 21st Century Learners:

- Academic Achievement

- **Access to Online Resources:** Since the world was going through Pandemic, it was needed for an alternate mode of education and this is when online mode of education came into existence, that is digital literacy became mandate. Digital literacy enables students to use databases, e-learning platforms, and educational tools.
- **Self-Directed Learning:** Now, it is not only the regular classes by self-directed online courses through MOOCs, instructional videos, and online assessments which enable students to take charge of their education.
- **Increased Participation:** Interactive digital content accommodates a variety of learning styles, including visual, auditory, and kinesthetics.

- Workforce Availability

- **Digital Competence:** Employers are increasingly requiring basic digital skills.
- **Adaptability:** In fast-paced workplaces, the capacity to learn and adapt to new tools is essential.
- **Remote Work:** Teleworking and global teams require digital tools for collaboration and communication.

- Skills for Daily Life

- **E-Governance and Online Transactions:** Digital skills are needed to use services like online banking, applying for jobs, and filing taxes.
- **Health and Wellness:** Digital navigation is required for telemedicine, fitness apps, and health records.
- **Digital Shopping and Payments:** Digital literacy makes it possible to make safe and knowledgeable online purchases.

- Civic Engagement

- **Engaged Citizenship:** People can participate in civic life by signing petitions, joining online forums, or campaigning using digital tools.
- **Critical Engagement:** Digital literacy enables individuals to evaluate information sources and participate constructively in a world rife with misinformation.

Principles of Digital Literacy: The ability to comprehend digital media is at the heart of digital literacy. This is made possible through meaningful and long-lasting ways to consume and create, which make it easier to be a part of a real community. Digital literacy is a skill that every human being needs to be able to use. It requires the ability to analyze, prioritize, and respond to the numerous digital media that people of the 21st century encounter every day.

1. Understanding: Understanding is the capacity to comprehend the whole thing. The ability to derive, implicitly and explicitly, ideas from a media is the very first principle of digital literacy.

2. Interdependence: Interdependence is the second digital literacy principle—how one medium interacts with another, whether metaphorically, literally, or in some other way. With the intention of isolating the audience, little media is produced and made more widely available than ever before. Because there are so many kinds of media, they all complement one another and coexist.

3. Social Factors: Sharing is no longer just a way to identify oneself. neither distribution, but rather the capacity to generate its own messages. Who shares what with whom, and through what channels, can not only determine the length of term media success, but it can produce organic ecosystems of obtaining, distributing, storing, and, ultimately, repackaging media.

4. Curation: The act of curating is a popular method of digital communication. For educators who are involved in online learning and teaching (Thompson, 2015), the ability to curate content and images at a high level is rapidly becoming a necessity. Digital archiving is the process of creating, maintaining, managing, and authenticating digital content through a series of procedures and actions.

Highlights of New Education Policy 2020 for Digital Education:

The new education policy (NEP) 2020 released by education ministry has emphasized on the growing need of online education in India. The NEP 2020 envisions a technology-enabled education system that will not only make learning more enjoyable, but it will also make it easier for students to learn on their own terms and close the digital divide. The curriculum will include digital education, with a focus on enhancing digital literacy, critical thinking, and problem-solving abilities.

The NEP 2020 emphasizes the use of technology to provide students from all over the world with high-quality education. This is especially important for students who come from rural areas and may not be able to get a good education. In order to provide all students with equal educational opportunities, the policy suggests making use of digital platforms like online classes and e-learning resources.

Beginning at the primary level, digital education will be gradually incorporated into the curriculum under the NEP 2020. At the high school level, students will have access to a range of digital resources, including interactive learning tools, simulations, and online assessments. Students will be able to learn at their own pace and engage with the material more interactively and deeply because of this.

In addition, the NEP 2020 emphasizes the necessity of developing digital infrastructure in schools, which includes digital content, high-speed internet connectivity, and digital devices like tablets and laptops. To guarantee that each school has access to the necessary resources, this will necessitate significant investments on the part of both the public and private sectors.

Another important aspect of digital education under the NEP 2020 is the development of digital pedagogy. Digital technologies and tools will be taught to teachers so they can create engaging and interactive learning experiences for their students. This will necessitate a significant shift in teaching strategies and an emphasis on the improvement of digital teaching abilities.

The NEP 2020 also recognizes the need to develop digital citizenship among students. This includes responsible use of digital devices and online resources, as well as digital safety and security. How to use digital technologies and tools safely and responsibly, as well as how to safeguard personal information online, will be taught to students.

The NEP 2020 emphasizes digital education, with a focus on teaching students' digital literacy, critical thinking, and problem-solving skills. The policy emphasizes the need for investments in digital infrastructure and teacher training and acknowledges the significance of technology in ensuring that all students have equal educational opportunities.

Digital education has the potential to revolutionize the Indian education system and provide all students, regardless of location or socioeconomic background, with a high-quality education if the right investments and focus are made.

The new education policy 2020 is designed to maximize the benefits of digital and online education in India while mitigating the downsides. The new education policy has come with some initiatives comprising Pilot studies and installation of Virtual labs.

The highlights of new education policy 2020 for digital education are as follows:

- A series of Pilot studies to be conducted.
- Expansion of existing digital education platforms.
- Establishing a dedicated unit for digital education.
- Emphasis on effective models of blended learning.
- Virtual labs (SWAYAM, SWAYAMPRAKASH and DIKSHA).
- Availability of online courses content in different languages.

Challenges to Attaining Digital Literacy

The Digital Divide

In India, there is social and economic stratification because so many families with low incomes cannot afford the digital devices. As a result, technology fails to realize a significant portion of its potential learners.

- **Access Gap:** Due to unstable internet or no access to internet people in rural or disadvantaged group will not be able to get digital literacy.
- **Quality of Access:** As the cost of internet or broadband is more or due to slow network or less bandwidth people will not be able to get quality access to digital literacy.
- **Device Dependency:** Many of them are using only mobile which might have reduced capacity to develop or handle content in contrast with those who have computers.

Educational Gaps

- **Unequal Curriculum Integration:** All the schools will not be equally equipped with the required needs to integrate digital literacy. They will not be able to integrate it in their school curriculum, so there will be lack of digital literacy for the children.
- **Teacher Readiness:** There is a requirement for teachers training with respect to usage of digital tools. Inservice teachers may be lacking in training, or they may not be confidence enough to use digital tools.

Societal Challenges

- **Misinformation:** Students and citizens are increasingly exposed to false news and biased information.
- **Cybersecurity Threats:** Most are not aware of online safety measures, many of us get into trap of cybercrimes by leaving them open to data breaches and scams.
- **Ethical Concerns:** Problems such as cyberbullying, digital addiction, and screen time management need ethical and balanced digital usage.

Strategies for Encouraging Digital Literacy

Reform of the Education System

- **Curriculum Integration:** Integration of digital literacy should be done in every subject, and not only ICT courses. It should be made a part of the regular curriculum in education.
- **Project-Based Learning:** As a project students should be encouraged to create real-world digital projects like blogs, podcasts, and digital portfolios, which will be of needed for their future accomplishments.

Educating Teachers

- **Professional Development:** A Teacher must create the opportunities to learn digital literacy for him and for students. The process of learning and sharing is digital literacy, so the teacher should learn and then share what they've learned with their students. For the application of this way of teaching in the classroom, teachers need an institution that supports and enables them to teach in this way. Continuous training in digital tools and pedagogy for a teacher is needed. New technology should be seen as a new challenge by teachers. New horizons in digital literacy should be viewed as a challenge by teachers, not only for the classroom but also for their own professional and academic growth.
- **Peer learning:** Nowadays, educators must also be cognizant of promoting digital literacy, utilizing digital technology and tools in a manner that is on par with writing and reading. In digital literacy, students need to be talented and familiar with the system they might use. So a known educator can guide a peer or learning and utilizing digital technology and tools.

Global and Local Initiatives (Examples)

- UNESCO's Global Media and Information Literacy Week: Raises awareness and promotes policy action.
- India's Digital India Programme: Enhances digital infrastructure and promotes literacy through programs like PMGDISHA.
- Estonia's e-School System is a digitally integrated early childhood education system.
- Google's 'Be Internet Awesome': A global initiative to teach kids about online safety and ethics.

Conclusion:

In conclusion, digital literacy is no longer optional—it is essential for survival, success, and self-fulfilment in the 21st century. It empowers learners to think critically, communicate effectively, and participate fully in digital culture. As a life skill, it must be nurtured from an early age and supported through coordinated efforts across schools, families, and society. Only then can we ensure that no learner is left behind in the digital age.

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