

# Chapter 1

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## Introduction

### 1.0 Brief Overview

In today's digital age, navigating and effectively utilizing digital technology has become essential for individuals to succeed in various aspects of their personal and professional lives. As such, the concept of digital literacy has gained significant attention as a crucial component of education and workforce development. Digital literacy involves the technical skills to use digital tools and the ability to evaluate and critically analyze digital information. Focusing on the importance of digital literacy as social capital for identifying and evaluating the digital competencies of undergraduate students at the University of North Bengal is assumed to provide new insights into digital literacy. With the increasing use of digital technology in higher education, assessing students' digital literacy skills is imperative to ensure their preparedness for the modern workforce. This research may be hoped to provide insights into the role of digital literacy as social capital and its impact on student's overall academic success and future career prospects. Ultimately, this study aims to contribute to the ongoing conversation on the importance of digital literacy and the need for continuous skill development in the ever-evolving digital landscape.

### 1.1 Statement of the Research Problem

The research problem identifies and evaluates the digital competencies of undergraduate students in the affiliated colleges under the University of North Bengal, focusing on digital literacy as a form of generation of social capital. The

study aims to investigate the level of digital literacy among undergraduate students at the University of North Bengal and to identify if social capital is generated and what digital literacy provides in terms of their digital competency.

### 1.2 An Extended View of Digital Literacy

Digital literacy is a term debated in various fields – such as education and knowledge studies – and has different meanings depending on whom one asks. Digital literacy is the ability to read and comprehend hypertextual and interactive texts. Information literacy and digital literacy, he said, were critical issues for lifelong learning, knowledge management, and the development of the information society. According to the **American Library Association**, digital literacy entails using technology effectively, such as interacting and collaborating with peers and colleagues and comprehending the relationship between technology and society. Several authors have attempted to describe digital literacy (Digital Literacy) and identify the requisite knowledge skills to outline the profile of a digitally literate individual. (**Andretta,2007**) provides national perspectives on knowledge literacy in several European countries, while (**Eshet-Alkalai, 2009**) presents a conceptual framework for Digital Literacy (**Tyner,1998**) and examines Digital Literacy and its educational implications. (**Pervolaraki et al. 2015**) Characterize Digital Literacy and provide a chronology of meanings and skills over the last three decades. As quoted by Martin, Digital Literacy requires “individuals' awareness, attitude, and ability to use digital tools and facilities appropriately to locate, access, manage, integrate, assess, analyze, and synthesize digital resources, to produce new information, media expressions, and to communicate with others, develop new knowledge, create media expressions, and

communicate with others is referred to as Digital Literacy” identifying, accessing, managing, integrating, evaluating, analyzing, and synthesizing digital resources, developing new knowledge, and creating media expressions, and communicate with others, in the context of the Internet” (Martin,2006).

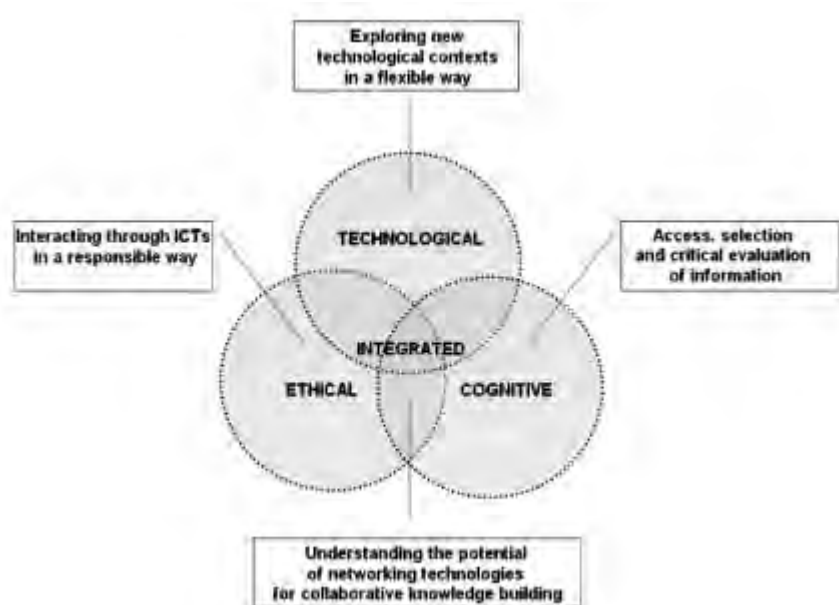


Figure F1.1: Intersecting Areas of Digital Literacy (Calvani, Fini, and Ranieri, 2009)

According to (Calvani, Fini, and Ranieri, 2009), Digital Literacy is a set of tangible and intangible skills. (Figure 1). Digital Literacy is characterized as the ability to investigate and encounter new technical situations flexibly, as well as to analyze, evaluate, and critically think about them, evaluate data and information, exploit technological potentials to represent and solve problems and build shared and collaborative knowledge, all while cultivating awareness of one's responsibilities and reciprocal rights/obligations.

### 1.2.1 Digital Literacy- Competencies

The confident and critical use of digital technology for work, recreation, and

communication is referred to as digital competence. It is based on basic information and communication technology (ICT) skills, such as using computers to retrieve, evaluate, preserve, create, present, and trade data and to interact and participate in collaborative networks via the Internet. This competence necessitates the acquisition of specific knowledge, abilities, and attitudes. Digital competence necessitates a thorough awareness and knowledge of ICT's nature, role, and opportunities in everyday situations, including personal and social life and the workplace (Claro and Jara, 2020). Moreover, competence includes basic computer applications like word processing, spreadsheets, databases, information storage, and management, as well as an understanding of the Internet and electronic media communication (email, network tools) for work, leisure, information sharing, and collaborative networking, learning, and research. Individuals should also be aware of the challenges surrounding the validity and dependability of available information and how digital technology may assist creativity and innovation. ICT usage necessitates a critical and introspective approach to available knowledge and appropriate use of interactive media. This competency is bolstered by a desire to participate in communities and networks for cultural, social, and professional reasons.

### 1.2.2 Digital Literacy Law

Digital Literacy law defines "electronic responsibility for actions and deeds." Put another way, digital law governs what one is and is not permitted to do while using the Internet. Ethical use of the Internet refers to all online activities that adhere to social norms. Therefore, all activities on the Internet that violate society's laws are classified as unethical use (Moreno-Leon, Roman-Gonzalez, and Robles 2018).

Illegal and unethical Internet behaviour and actions can result in legal consequences and severe punishments and include the following:

- Infringement of intellectual property rights
- Plagiarism
- Illegal downloads of music, games, and movies, among other things
- Piracy
- Stealing someones identifies
- Bullying on the Internet
- Sending phishing emails

### **1.2.3. Digital Literacy -Social Cohesion**

Social cohesion is an essential factor in economic governance. Individuals' tendencies to connect with others and participate in political and civic activities are both “objective” components of social cohesion, as are their perceptions that others can be trusted and relied upon in times of need. Other people and the government are included in the term "others." There are two positive benefits of social cohesion. First, the quality of institutions, and consequently economic growth, is directly influenced by social cohesion. Furthermore, feeling a part of society and knowing that one will not be forgotten in a crisis has a favourable subjective and objective impact on one's well-being. Therefore, the necessity of having a set of factors related to managing digital strategies aimed at increasing social inclusion and cohesion was discovered when it came to digital policies aimed at achieving greater social cohesion because of the multiple elements involved in its definition, such as political, economic, cultural, administrative,

technological, pedagogical, and organizational aspects, technological, pedagogical, and organizational variables (Luque 2019).

### 1.2.4 Digital Literacy Framework

The Digital Literacy framework fosters Digital Literacy, including three major components: access to technology, education, and culture. The need to provide people with access to a wide variety of technology to increase their familiarity with it; the necessity of investing in the implementation of digital skills into curricula at all levels of education; and the inevitability of changing the mindset of those who are still digitally phobic or dysfunctional are the three core aspects of the foment of digital competences.

- *Access to Technology*

The existing digital gap is impeding the development of Digital Literacy. Many countries have inadequate access to technology in general, while others, despite having a reputation for being technologically adept, have minimal access patterns. In these countries, the divide exists between a high level of access and a low level across social and economic levels and genders. (Buckingham, 2007)

- *Education*

To ensure that digital skills are successfully integrated into the curriculum, it is critical to provide the conditions for instructors to feel competent and confident. In addition, educational institutions must develop procedures for efficient technology integration planning. Both students and teachers struggle to build Digital Literacy due to a lack of planned technical learning goals. In other circumstances, the effort of specific individuals who are digitally oriented and commit their own time to establish strategies for digital integration drives digital

advancement within academia. (Jones & Flannigan, 2006)

- *Culture*

Users' attitudes and perspectives about technology and its use significantly impact their ability to learn the skills required to exploit its benefits fully. The user's mentality is crucial in applying and acquiring digital skills that must be cultivated and acknowledged. (Ala-Mutka, 2011).

### 1.2.5 Digital Literacy -Higher Education

In higher education, Digital Literacy profoundly transforms teaching and learning, with the rapid rate of technological development worsening the challenge. In addition, because of the COVID epidemic, all higher education institutions are being pushed to abandon traditional teaching and learning systems that no longer respond to the difficulties of fast-changing educational contexts. Higher education institutions are still grappling with digitalization and attempting to figure out how to get the most out of the benefits, such as increased student involvement, integrating the traditional classroom into a virtual landscape, and improving the student learning process. (Gupta et al. 2020; Rabah 2015). As a result of the recent global crisis, notably the COVID pandemic, higher education institutions are now looking into accelerating the digitalization process and the transition from on-campus teaching to technology-enhanced learning—with an increased focus on the move towards online and distance learning. Several higher education institutions have already transitioned to address this rising challenge, albeit in a hasty and unplanned manner, and are now fine-tuning systems, analyzing, and making changes. Digital Literacy has become a vital aspect of modern education's daily activities, and the usage of such technology tools as subject-specific learning

tools, interactive whiteboards, desktop or mobile videoconferencing, mobile applications/computer software, gaming consoles, tablets, and smartphones has become a vital element of daily activities in modern education. Furthermore, learning management systems such as Moodle and Blackboard have recently gained prominence as crucial tools within the field of education despite already being in use (Carvalho et al., 2011). Learning management systems (LMS) assist in creating, deploying, and maintaining digital forms of education and provide users with a meaningful e-learning experience. LMS offers several benefits and advantages to both teachers and students. Digital Literacy is essential for problem-solving, critical thinking, and lifelong learning in higher education. Both veteran educators and new generations of students found that incorporating ICT into their lessons and improving their pedagogical skills and digital competence impact ICT integration into education.

### 1.2.6 Digital Literacy In The Workplace

Digital Literacy has become prevalent in the workplace, particularly among office workers. With the help of technological and social breakthroughs, new working modes emerge, both individually and collectively. The digital revolution, affecting work environments and society, has resulted in changes in workers' Digital Literacy competencies. Skills are often associated with efficiency and effectiveness principles, but they also address issues of inclusivity and wellness. ICT-enabled effort activities such as collaborative writing at a distance tend to blur the barriers between work and play professional and personal lives, and the office and home, necessitating efficient and effective management of diverse competencies. (Zilian and Zilian, 2020).

### 1.2.7 Digital Literacy Skill-Blended Learning Model

Educational institutions are leveraging developments in Digital Literacy, such as online applications, mobile devices, and telecommunications, to engage students in various teaching and learning styles. Blended learning is one paradigm that integrates technologies into the learning delivery process and, presumably, overcomes some of the constraints of face-to-face classroom learning (**Porter et al., 2014**). Blended learning allows students to learn wherever, whenever, and however they want in this digital age. However, implementing blended learning does not always result in a better student learning experience (**Cortizo et al., 2010**). Educators should be wary of thinking that technology-based learning delivery systems will help students learn more effectively. Because digital technology is such an essential part of blended learning, students must have a certain level of Digital Literacy to study effectively (**Eshet, 2004**). As a result, educators must advocate for the Digital Literacy skills required to succeed in a blended learning environment. In terms of blended learning types and levels (**Graham, C. R. et al., 2005**), previous research has suggested that blended learning strives to achieve the following objectives:

There are three different types of forms of blended learning:

- **Enabling Blends:** This allows students to enjoy a variety of learning experiences in various ways. Learners can, for example, listen to guest speakers present through online meeting rooms rather than engage in a presentation given by a person in business in the hall.
- **Enhancing Blends:** This permits us to enhance pedagogical activities while keeping the teaching approaches the same. Traditional face-to-face learning, for

example, remains unchanged, while learning resources or additional experiences may be accessed via online channels.

- **Transforming Blends:** This enables us to change our instructional practices. For example, thanks to digital technology, the learning model has shifted from passive learners to active learners who build their learning schedule, actively access knowledge through interactions, and employ learning advisory facilities/learning results analysis.

### 1.2.8 Digital Literacy Skills

**Eshet, 2009** claims to have created a unified conceptual model for Digital Literacy encompassing most of the cognitive skills that users and academics engage in digital settings, giving a robust framework and design guidelines for researchers and designers of digital environments.

The five Digital Literacy skills are represented in the model:

- **Photo-visual literacy skill**

To generate photo-visual communication with the environment, modern scholars must apply cognitive skills of "using vision to think" as digital environments evolve from text-based, syntactic, to graphics-based semantic settings. The photo-visual skill is a unique Digital Literacy skill that allows users to instinctively and freely "read" and grasp instructions and information in a visual-graphical format.

- **Reproduction literacy skill**

By reproducing and modifying texts, pictures, and audio pieces, modern digital technology presents scholars with new opportunities for creating art and scholarly work. Aside from the ethical and philosophical issues surrounding the boundaries and requirements for legitimate—in genuine—use of digital reproduction, modern

scholars must acquire a unique type of Digital Literacy known as “reproduction literacy.” The ability to combine prior, independent pieces of information in any media to produce new meanings or interpretations is digital reproduction literacy (Text, visual, or audio). Reproduction literacy is essential in two important fields: writing, in which preexisting words may be used, and reading, in which preexisting words may be restructured and rearranged to produce new meanings, and visual art, in which preexisting audio or visual pieces can be edited and manipulated to create new creative works.

- **Branching literacy skill**

Because of the non-linear nature of modern hypermedia technologies, computer users were exposed to new ways of thinking required to make intelligent use of this complex technology. In the past, constrained, non-hypermedia-based computer settings favoured a more linear learning style mandated by non-flexible operating systems and the fact that users were accustomed to reading books and expected to engage with digital environments similarly. As a result, users have much freedom in navigating between knowledge domains in modern hypermedia settings, including the Internet, multimedia environments, and digital databases. However, at the same time, it presents them with challenges that necessitate non-linear and branching information-seeking techniques and the construction of knowledge from independent shreds of data obtained non-orderly and non-linearly. The cognitive flexibility theory, developed by **Spiro et al. and Rouet and Levonen**, described the importance of branching multidimensional thinking skills in constructing a meaningful knowledge of complicated processes, which resulted in the creation of a new form of Digital Literacy talent known as "branching

literacy skill."

- **Information literacy skill**

With the exponential expansion in available information, consumers' ability to filter out subjective, biased, or even fraudulent information has become a crucial challenge in teaching people to be savvy information consumers. Information is assessed in every task we perform in digital contexts, such as data inquiries and web navigational decisions. The users' knowledge of their decisions determines the quality of the information-generated conclusions, perspectives, opinions, or models. Information consumers' ability to make intelligent assessments necessitates a unique interaction.

- **Socio-emotional literacy skill**

The growth of the Internet and other digital communication platforms has opened up new dimensions and opportunities for learning through information-sharing groups, discussion groups, knowledge communities, chat rooms, and various other forms of collaborative learning. However, these new prospects present users with problems that require them to apply sociological and emotional abilities to "understand the rules of the game" and "survive" the obstacles that await them in cyberspace mass communication. Such difficulties include imparting formal information and sharing emotions in digital communication, detecting Pretentious people in chat rooms, and avoiding Internet traps such as hoaxes and deadly Internet viruses. These necessitate users possessing a relatively new type of Digital Literacy ability known as 'Socio-emotional skill' because it primarily encompasses emotional and sociological aspects of operating in cyberspace. Among the various Digital Literacy abilities outlined here, socio-emotional literacy is most likely the

most advanced and sophisticated.

### 1.2.9 Digital Literacy Competencies

The most recent concept for identifying technology-related skills is digital competence. Several phrases have been used in recent years to characterize the skills and expertise required to use digital technologies; in recent publications, the term competence has been utilized more than skills, indicating a need for notions with broader and more profound content. “A competency is more than just knowledge and abilities,” says one definition of the relationship between competence and skills. It entails satisfying complicated demands by utilizing and mobilizing psychosocial resources in a given situation.” The Organization for Economic Cooperation and Development (**OECD,2005**) published a report in 2005 that digital competence encompasses digital abilities and social and emotional aspects of using and comprehending digital devices, according to the broadest and most recent definitions based on policy-related publications and reports. Digital competence is described by the European Commission (**Punie & Cabrera, 2006**) as the secure and critical application of Information Society Technology for work, pleasure, and communication. Basic ICT skills are the foundation for digital competency. Although technology has become a fundamental element of student life, digital competency is not usually taught in higher education classrooms. (**Nelson, Courier, & Joseph, 2011**). The growth of digital competencies will not happen by itself. As a result, it is critical to cultivate digital competencies in students to communicate and convey their thoughts effectively via digital media (**Chan et al., 2017**). One method to begin is incorporating digital products into literacy compositions and instructions, which

will aid in advancing Digital Literacy (Traxler, 2018). As a result, students in higher education need to understand the value of Digital Literacy competencies (Biasini & Proudfoot, 2018). Students at that level are consumers of digital products that can be used as a learning tool for students, and their skills can be used in their future careers. When students in teacher education become teachers, they can put their digital skills to use. Teachers must use technology to create a set of abilities in the learning process and use it for practical purposes (English, 2016).

### 1.2.10 Digital Literacy-Search Engine

The Internet has given us access to limitless, real-time information, providing unprecedented educational opportunities. Unfortunately, despite frequent use, students struggle to find information in an overwhelming environment and engage in detrimental search behaviours. According to research, these behaviours are rarely met with explicit search instructions. Furthermore, little is known about the potential benefits of providing such explicit instruction to students and how students perceive their role when searching online. The operation of web browsers such as Bing, Google, and Yahoo to find relevant and required information is known as search engine use. The use of search engines is increasingly replacing other forms of communication. Information seeking (Schroeder, 2014) has been linked to many educational advantages. (Schroeder, 2015; van Deursen & van Dijk, 2010), Higher scores in instantaneous sources. Reading (Barrett, 2012) and math (Casey, Layte, Lyons, & Silles, 2012) tests, as well as improving the ability to read (Barrett, 2012) and establishing cognitive scaffolding (Johnson, 2010). Search engines are not the same as traditional educational institutions. Tools,

however, are not passive entities (like a pencil or a rubber band) that unwittingly follow you. A search engine's relationship with an online information seeker is complex. Similarly, the author/audience relationship is not what it used to be. Researchers have warned that today's 'No longer [can] a student be a passive entity that processes a single text mode in a linear sequence.' (Yus,p. 49, 2011). Whereas more traditional educational resources, such as books, already have a message, Search engines require students to identify their work, which an absent author created for the student.

### 1.2.11 Digital Literacy-Social Media

ICT, which combines hardware like computers and software for institutional, professional, or even personal use, has already become a part of people's daily lives. This technology is referred to as digital media. Sound, images, videos, photos, texts, and other types of content are all uploaded to digital media. (Herlina, 2019). There are numerous sorts of digital media, referred to as "platforms," to distinguish the various types of digital media. These platforms include content-based websites like kompas.com, search engines like google and Yahoo, user-generated content like Wikipedia and multiple blogs, social media like Instagram and Facebook, etc. (Herlina, 2019, p.125-126). Social media is the most popular digital media channel, particularly YouTube, WhatsApp, Facebook, and Instagram. WeAreSocial's 2020 digital data for Indonesia suggests that there were 160 million active social media users in January 2020, with 99 percent of them using smartphones. (Kemp, 2020). It is also recommended that active social media users have high Digital Literacy skills. Social media users, for example, cannot adequately use digital tools or facilities to identify and analyze the

information they get if they lack the necessary abilities. Over the last decade, social media has evolved into a critical tool for gathering and disseminating information in various fields, including business, entertainment, crisis management, and politics. The growing popularity of social media raises several issues about why we use it so much and what factors impact our behaviour.

### 1.2.12 Digital Literacy-young Children

Young children will engage in Digital Literacy exercises on practically every given occasion. Television, DVDs, MP3s, Touch/iPhones, computers, video games, mobile phones, innovative toys, and other digital media provide them with numerous possibilities to observe, investigate, play with and learn from (**Critcher, 2008; Drotner & Livingston 2008; Hasebrink, Livingstone, Haddon, & Olafsson, 2009; Linebarger & Piotrowski, 2009**). These educational possibilities arrive at a crucial time in their growth. Neurons establish and reinforce connections with practically every event, making their brains extremely supple. Until recently, the rise in digital-media-based learning opportunities for young children drew little attention. Unfortunately, this is no longer true (**Glaubke, 2007; Lemish, 2008**). It is difficult to tell what is going on because little is known about the effects of digital media on the development of Digital Literacy skills. Television is nearly universally available in developed countries, as is access to computers, the Internet, cell phones, video games, DVDs, mobile music/video players, podcasts, e-books, computerized toys, and other technologies. Young children are "gadgets," according to (**Warren Buckleitner, 2008**), and possibilities to learn from digital media abound. The extent to which young children are involved in digital media was reported in a Kaiser Family Foundation survey research, the Role of

Electronic Media in the Lives of Infants and Preschoolers, infants and preschoolers (2003), and a follow-up survey study. Young children are not only submerged in a sea of digital media—they use it for up to two hours a day—but they also use it. Many people have access to computers and can visit age-appropriate websites. These are just a few of the computers built specifically for preschoolers. They all include USB ports, wireless capabilities, and fully working operating systems. All of them are created with young children in mind. Except for the Aspire One, all have touch displays (**Children Technology Review, May 2009**). Many young children are learning how to use digital media.

### **1.2.13 Digital Literacy In The Workplace**

Individuals' awareness, mindset, and ability to confidently use digital workplace tools responsibly and effectively to solve problems, be productive, support well-being, and thrive at work by processing and applying information and data, creating content, connecting and collaborating with others, and reflecting on and adapting one's digital literacies are all examples of Digital Literacy in the workplace. Being proficient in the digital world entails much more than knowing how to use a computer. To flourish in an increasingly digital workplace, today's workers must possess diverse digital skills. The degree of literacy required for some vocations is evolving as our work changes. In the next five years, 90% of the workforce will require at least essential computer capabilities, such as email and company software. Over half of the workforce must be competent to utilize, configure, and build digital systems in the next few years. Those not digitally literate may soon find themselves at a considerable disadvantage. It is essential to encourage everyone to be productive, competitive, and prepared for the demands

of the workplace; Digital Literacy is required in a tech-driven future. Digital Literacy is transforming workplaces. Digital transformation, according to **(Hess et al.,2016)**, is a complex issue that affects many or all of the company's departments. Managers must simultaneously analyze the exploration and exploitation of the company's assets to obtain organizational agility, which is critical to the success of digital transformation in their organizations. As a result, the rise of digital technology, such as the Internet, computers, mobile phones, and other digital platforms, is altering employee responsibilities in the workplace to improve individual and organizational performance. Because of the combination of the information era and the industrial revolution, the identification of work and essential roles of Human Resource Development (HRD) specialists in providing optimal performance of people, organizations, and processes has altered dramatically **(Benson et al., 2002)**. As a result, technological advancements in the workplace highlight the need for individuals to acquire new digital skills and knowledge. In addition, more skill sets are required to maintain complex equipment, and there is an increasing demand for knowledge workers with high-level mental talents who can think about symbolic and abstract concepts **(Grubb, 1984)**. Digital technologies bring advances but do not always lead to better technology utilization. According to **(Davis et al. (1989)**, computer systems cannot improve organizational performance unless used efficiently. Unfortunately, many employees in many firms may reject using digital technologies. As a result, many executives and managers are resistant to end-user solutions. To clarify, explain, and promote technological acceptability among workers, we must determine why people accept or reject digital technologies

(Davis et al., 1989). According to previous studies (e.g., Prenski 2001a; Bennett 2012; Nikou et al., 2018; Nikou et al., 2019), many employees belong to a generation that is largely resistant to change. In addition, the theory of technology acceptance model includes the constructs of perceived ease of use and perceived usefulness as elements that can influence an individual's attitude toward utilizing technology. Martin Fishbein and Icek Ajzen created the theory of reasoned action in 1975, which shows that one's attitude toward technology can directly impact performance behaviour, such as technology use.

### 1.2.14 Digital Literacy Practices: A Worldwide Journey

(Scott, 2007), conducted an ethnographic case study of 15-16-year-olds from various Melbourne schools. They proposed the relationship between home and school and 53 other spaces that young people use and created by reframing and rethought. They drew on Bakhtin's views about dialogic negotiation and Bourdieu's concept of habitus, which implies that texts, meanings, and practices are interconnected and derived from comprehensive life experiences. Language, learning, and technology among young people can be considered a dialogic negotiation of diverse texts and practices used in schools, homes, and other settings. Given the rapid changes in information and communication technologies, it is no longer enough for language and pre-service teachers to be familiar with existing digital tools. They must also be digitally literate to critically evaluate and use such tools and platforms safely, wisely, and productively. Language teachers can assist students in developing Digital Literacy skills as part of their language learning experience; according to Dudeney (Hockly, 2016), by incorporating technology into responsibilities and activities, they can only ensure their pupils'

success with Digital Literacy skills if they are digitally literate. As a result, they argue that pre-service and in-service teacher education programs should aim to provide teachers with the technical skills they need and an understanding of technology, its importance, and how to use it in language teaching. The success of educational programs is determined by how students manage their Digital Literacy practices in their classes. It is a multi-methods report. The Digital Literacy practices that emerge when the course assignments are due are the subject of a PhD study (**Bhatt,2012**). The Pew Internet and American Life Project is investigating significant literacy activity. Individuals ' online writing abilities teach them to navigate user agreements, personal information, and rhetorical circumstances. This is due to the social, technological, and structural elements that influence online environments and writing practices on these sites. This article applies Brooke's "ecology of practice" concept to writing in digital contexts. It examines one undergraduate student's Digital Literacy practices via the lens of his self-presentation tactics. Writing researchers and educators can gain a better understanding of literacy practices outside of the classroom, and their experiences can aid them in social networking sites (**Buck,2012**)

### 1.3 Digital Literacy – Teachers

**Richard Hoggart, 2009** pioneered Digital Literacy, which has aided educational and popular cultural progress for the past 50 years (**John Hartley,2011**) and contributed to digital media research. As a result, modern journalism, fiction, science, and entertainment have gone global. Hartley reexamined historical and global, commercial, and cultural dynamics, the use of digital in the creative industries, digital storytelling, YouTube, journalism, and mediated fashion,

encouraging participation in knowledge evolution. (Street,2005), Examined the available online resources and learned the skills needed to read them. According to the author, electronic resources are essential for students. Students frequently utilize the Internet to complete school assignments. In today's classrooms, Internet access is becoming more prevalent. In the United States, 99 percent of schools have Internet access. Teachers should know that technology has accepted using electronic and printed materials in literary works. In his study (Evangeline, 2001) proposed the perspectives of young people who utilize digital technology in social literacy practice. According to the author, young people use digital tools in their practices. A study conducted at Victoria University in Melbourne, Australia (Ralph Kiel,2015) emphasized Digital Literacy and new roles for libraries. This aided in developing new project planning and implementation initiatives at similar academic libraries. Since the 19th century (John, 2008), formal and informed learning disparities have resulted in widespread literacy. They looked at three case studies: digital storytelling, Flickr photo sharing, and massively multiplayer online games (massively multiplayer online games). The author explored challenges arising from demand-driven learning, including a procedural rather than proportionate model of knowledge, a vernacular and informal model of creativity, and a "navigator" and entrepreneurial model of consumer employing Digital Literacy, as well as how it should be taught.

### 1.3.1 Digital Literacy -portfolio series

According to the definition, a Digital Literacy portfolio is an intentional collection of work documented electronically that displays individual efforts, growth, and achievements in one or more fields. The Exhibitions Project, an endeavour of the

Coalition of Essential Schools, looked at how schools began to employ authentic assessments in the early 1990s and came up with the idea for the Digital Literacy portfolio. Digital Literacy portfolios, which include music and text, show an individual's progress over time through diagrams, drawings and other snapshots of processes and results. Digital Literacy video/audio testimony or explanations from the portfolio creator or others are also included. Furthermore, animation, voice-over explanations of areas of performance, and scanned photos of completed projects or goods can all be used in electronic portfolios. The extent of an individual's involvement in the selection and design processes is one of the key benefits of establishing any portfolio. Creating a Digital Literacy portfolio necessitates active engagement from the beginning. Individuals must decide which media to capture essential occasions and which software to use to manage files for current and future use. Because viewers can explore a portfolio by clicking on buttons on the main menu of Digital Literacy portfolios, the individual creator must pick the most effective ways to allow the viewer to see, hear, and review the artefacts that show the creator's performance. Making decisions regarding what to put in a hard copy portfolio versus what to include in a video or audio format necessitates careful consideration by the portfolio designer (David,1997). A meaningful difference with Digital Literacy portfolios offer five aspects that must be handled and managed: 1) what the individual should know and be able to do, 2) how the individual can demonstrate his or her vision, 3) what types of hardware and software are required, and how reliable are these items, 4) what are the issues with artefact selection and how they will be used in the portfolio, and 5) what is the culture in which the portfolio will be reviewed.

### 1.4. Social background of Digital Literacy and digital competencies

A sociocultural approach to literacy has grown from broader sociocultural theory, which grew out of Soviet psychologist **L.S. Vygotsky's views** (1962; 1978). The notions of (1) genetic analysis, (2) social learning, and (3) mediation have all contributed to a new interpretation of literacy in sociocultural theory (**Wertsch 1991**), (**Wertsch 1995**), (**Säljö 2001**) emphasized the social construction of knowledge and how learning occurs in various social contexts in sociocultural learning theory. According to the sociocultural viewpoint, knowledge is a product of social constructs and customs. Learning is taking part in the cultural activities of communities that create significance. Social customs (such as knowledge development) are built around common aims and through the application of technology. Cultural and technological tools are available in the community's information environment (**Bruner 1990**). Our research uses a sociocultural approach to gain a more in-depth and contextually situated understanding of Digital Literacy practices, such as how digital technology and media are incorporated into our daily lives and how they read, write, and communicate with digital devices in their homes (**Vygotsky, 1978**). According to the sociocultural perspective, it is a collaborative process in which social practices and artefacts, such as digital devices and content, work together to produce a standard semiotic system for joint involvement, modes of thinking, and learning (**Kumpulainen and Renshaw, 2007**). History and broader sociocultural contexts shape and give meaning to children's Digital Literacy practices from this standpoint (**Coiro et al., 2008**). As a result, individual and community values, beliefs, and attitudes influence Digital Literacy practices on a cultural and social level (**Gee, 1999**).

Previous sociocultural research has found that different social environments have distinct rules, goals, time structures, social interactions, and people structures, impacting Digital Literacy practices and learning opportunities (**Sairanen and Kumpulainen, 2014**).

### 1.4.1 Social activism

Social activism has unquestionably influenced the development of modern society. "It allows students to identify, explain, assess, analyze, and think critically about civic issues" (**Vander Veldt & Ponder, 2010**). Students can use social activism to speak up and speak out about social issues. Most importantly, it serves as a mechanism that permits the general public, rather than a small group of elites, to choose how society evolves. For progress to continue, succeeding generations must be educated about the history of social activity, its value to each individual, and society's future. Incorporating social activism into the classroom aids elementary pupils in developing their character and increasing their empathy for one another in their community. Moving forward, teaching the six principles that serve as a solid framework when teaching social activism is critical. Self-love, knowledge, respect for others, social injustice, social movements and social change, awareness raising, and social action are some of these elements. This framework is intended to give students a better understanding of social activity by addressing these six elements of social justice education in the elementary classroom. "Teachers lead students to value themselves, respect the diversity of the world around them, understand how diverse people have been treated differently and often unjustly, recognize that ordinary people have worked to address such injustice and take action themselves" (**Picower, 2012**). A course on

social movements must bring the stories of activism to life and be meaningful to a generation that has yet to establish themselves as active participants in the collective political process to be effective (Cornelius, 1998). In other words, when students' comprehension permits them to relate to the subject being taught, they can begin to grasp the genuine meaning of social activism. From social justice to knowledge to love, there is something for everyone. These lessons should hopefully instil in each pupil a drive to take action on their initiative.

### 1.4.2 Social capital

The connections between people who live and work in a given society allow that society to survive and thrive. Individuals must trust one another and participate in building social capital - the social capital of the middle-class child whose father knows the firm director is reported to be higher. In a wide range of social science areas, the notion of social capital is becoming increasingly popular. An increasing number of sociologists, political scientists, and economists have used the notion of social capital to find answers to a growing number of questions in their respective professions. The study of families, youth behaviour problems, schooling and education, public health, community life, democracy and governance, economic development, and general issues of collective action has been informed by social capital—roughly defined as the goodwill engendered by the fabric of social relations, and that can be mobilized to facilitate action (Jackman & Miller, 1998). One of the first scholars to fully conceptualize social capital was **Pierre Bourdieu**. To comprehend how social power relations are perpetuated over time, he developed four types of capital: economic, cultural, symbolic, and social. The resources made available by 'institutionalized ties of

mutual familiarity and recognition – or, in other words, membership in a group...’ are referred to as social capital (**Bourdieu, 1986**). Bourdieu's central claim is that social capital tends to be exclusionary, perpetuating class inequalities. These forms of capital are placed within Bourdieu's more significant concerns about the link between structure and agency. Our ability to act on a type of capital – for example, to mobilize the cultural capital required to make a taste judgment – may be something we learn early in life, and it becomes profoundly ingrained and embodied. The embodied socio-cultural abilities made available by one's access to forms of capital, which demarcate one's position within specific social strata, are referred to as an individual's 'habitus' (**Bourdieu 1984**). (**Coleman,1988**) seminal work on social mobility, which followed Bourdieu's, began to reshape how social capital is viewed and used. Coleman considered social capital as something marginalized groups should cultivate to transcend the constraints of their social contexts and improve their communities (**Putnam,2000**) and carried on a more positive assessment of the notion. Putnam sees the accumulation of social capital as a critical factor in how communities come together and thrive. He makes an essential distinction between bonding and bridging social capital: the former refers to resources derived from strong links, such as personal support; the latter refers to resources derived from weak ties, such as financial support. **Putnam** emphasizes bridging social capital because it necessitates the development of trust, collective norms, and a broader sense of reciprocity, functioning as a kind of social glue that leads to a more tolerant and compassionate society. Putnam explains how television viewing habits, suburban living, greater work pressure, and a lack of generational solidarity have all contributed to a drop in bridging social capital in

America (something earlier wartime generations possessed). As a result, while **Bourdieu** is primarily concerned with how social capital articulates social stratification processes, Putnam values social capital in general and believes that we must increase it. Putnam's work has had an enormous impact and has been eagerly adopted by both the public and private sectors. Social capital has been emphasized in the literature on community resilience (**Aldrich, 2012**) and in the literature on community health and well-being. Facebook employs advanced algorithms to manage primary social surveillance contexts such as the News Feed, alerts, graph search, privacy settings, and how users traverse the service. This software's relevance cannot be emphasized, as it regulates the modes and rhythms of surveillance that allow users to discern the nature of connection performance, the claims on intimacy, and whether or not they may engage in a social capital exchange. Like other media, these algorithms, such as images and videos, promote a kind of intimate gaze (**Lury, 1998**).

### 1.4.3 Social cognitive

The approach to Digital Literacy is informed by Bandura's Social Cognitive Theory ( **Bandura,1977**). According to this view, an individual's functioning results from cognitive, behavioural, and contextual interactions. It emphasizes the relevance of observation and the social context of learning. Learning and the manifestation of what has been taught are independent in contrast to a behaviourist view, so learning entails the acquisition of new actions and knowledge, cognitive abilities, concepts, rules, values, and other cognitive constructs (**Bandura,1988**). Social cognitive theory (SCT) lays the groundwork for therapies aimed at improving people's learning. A few major SCT principles explain how they relate

to our instructional techniques. – Observational Learning/Modeling is a learning method based on observation. According to SCT's most basic instructional implication, learners need access to models of the knowledge, abilities, and behaviours they should learn. Multiple models (e.g., instructors, peers) and different modelling types (e.g., cognitive, linguistic, mastery, coping) should be used. Learners' participation in observational learning must be supported by instruction. Each learner is paired with an instructor in our BASIC program. Tutors serve as role models for behaviour, problem-solving, and exploration. Our students must understand that learning to get answers is frequently more important than knowing the answer itself. Tutors also play out their emotions when they do not know the answer. Tutors must show students that, while it is natural to get frustrated when something is difficult to understand, they do not need to be concerned; there are ways to discover a solution and recover from mistakes. - Expectations for the result. People should be able to observe how situated learning and demonstration of that learning lead to personally valued or meaningful outcomes through instruction. We invite learners to come to us with their individual needs rather than delivering pre-planned training sessions. Our one-on-one tuition sessions are then tailored accordingly. While addressing the learner's specific issue, there are often opportunities to address specific Digital Literacy competencies. In this approach, our teaching abilities are linked to personal concerns for our students. Our students are also welcome to bring their gadgets to our tutoring sessions. Exertion at a moderate level in learners who develop or support their own goals has a more significant impact on their behaviour than those prescribed goals. As previously said, our tutoring sessions are guided by our

students' wishes and objectives. Even when students declare a vague aim of "learning about computers," our tutors talk to them about their lives to uncover prospective computing requirements and create learning goals most relevant to their lives. – Self-Efficacy as Perceived. When people feel confident in their abilities to execute things successfully, they will be more engaged, effortful, and effective learners. Instruction should be designed to help learners develop and sustain self-efficacy, the belief in one's ability to plan and carry out the actions required to deal with potential problems. Our classes are hands-on, and we encourage learners to "drive" whenever possible. Although we may model behaviour by displaying a series of actions, our tutors urge students to repeat the procedures independently to guarantee they can solve the problem at home. As previously said, our teachers may not always have the answers to a learner's concerns and may need help from another tutor or online. We think that by doing so, we can demonstrate that even "experts" require assistance in getting answers and that having questions about using a computer or a handheld device is normal.

Self-Regulation. All pupils should be encouraged to develop self-control as a learning strategy. Self-observation (watching one's activities and outcomes), self-judgment (determining whether one's actions are effective), and self-reaction are the three processes involved (responding to the self-evaluations by changing, rewarding, or discontinuing the behaviour). Instructors can encourage self-observation by using tools like checklists to teach students how to track different parts of their learning behaviour. Our program currently only provides modest self-regulation support. By providing role models, tutors can help students practice self-observation, self-judgment, and self-reaction.

### 1.4.4 Social comparison

Social comparison has long been used as a method of self-evaluation and self-assessment (Tesser & Collins, 1988; Wheeler et al., 1997). People are prone to comparing themselves to others in every aspect of their lives. People may have two very different reactions due to such a comparison. Some people may value others' superiority and be inspired to improve themselves to reach the same level. Second, some people may get demotivated and exhibit harmful feelings and actions. Envious feelings induced by social comparison could be one explanation for this precise link between social comparison and behaviour. Envy is unquestionably a result of social comparison when one thinks of another as superior and craves that supremacy (Parrott, 1991). A recent study has distinguished between two types of envy: benign and malevolent envy. As a result, individuals who showed benign jealousy may want to elevate themselves, while those who expressed malicious envy may attempt to degrade those who are superior to them (Van de Ven et al., 2009). In this sense, the current study adds to the body of knowledge by examining both subtypes' roles. According to the social comparison hypothesis (Festinger, 1954), many people evaluate their beliefs and abilities by comparing themselves to others. This is particularly true when there is no objective assessment standard, such as intelligence, and people must rely on social comparison to determine their degree of competence in contrast to others. Because social comparison is a natural part of human nature, much research has been done to determine its effects (Buunk et al., 1990; Vogel et al., 2015). Regrettably, past research on the impact of social comparison has generated mixed results. On the one hand, social comparison is advantageous to individuals

since individuals can use it as a coping mechanism to reduce the adverse effects of various life events (**Taylor et al., 1990**). As a result, research has found that social comparison offers various benefits, including improved academic achievement, increased social competence, and reduced depressed symptoms (**Fu et al., 2018; Wehrens et al., 2010**). On the other hand, upward and downward social comparisons are the two forms of social comparisons (**Festinger, 1954**). Upward social comparison is defined as comparing oneself to those regarded to be superior in some dimensions. In contrast, downward social comparison is defined as comparing oneself to those perceived inferior in specific dimensions. Although the types of social comparison may be a possible reason for the discrepancy, research has shown that both types have positive and negative impacts (**Burleson et al., 2005**). As a result, the jealous sensation induced by social comparison implies a mediator in the social comparison–behaviour link.

### 1.4.5 Social competence

The term "social competence" refers to a broad concept. Thorndike conducted one of the first investigations on the concept of competence as a socially significant category (**Thorndike,1927**) and distinguished between social competence and "social intelligence." Social competency, according to (**White,1959**), is "an organism's ability to interact effectively with its surroundings," and according to (**O'Malley,1977**), social competency is defined as follows:... relationships between a youngster and peers or adults that are useful and mutually rewarding. Productive relationships help children achieve their personal goals, whether short-term or long-term, and they are adaptable in school settings. When goals are achieved, interactions will reward the child and others if actions used to achieve

the goals are accepted benignly or pleasantly. According to (O'Malley,1977), there are three reasons to examine social competence:

1. Social or interpersonal competency is a requirement for social involvement.
2. A higher level of social competence is linked to academic success.
3. Social competence is made up of many interconnected components.

Furthermore, Garbarino claims that competence is "the ability to achieve in the world" and that it must be "the goal of socialization and growth." Garbarino's concept of social competence' became increasingly important over the years (Ogden & Hagen, 2019). According to Guralnick, 1990, social competence is a vital skill "of young children to successfully and correctly identify and carry out their interpersonal goals," similar to Garbarino's beliefs. The knowledge and abilities people gain to deal effectively with life's various choices, difficulties, and opportunities have been termed social competence. "Social competence is indexed by efficacy and appropriateness in human interaction and relationships" (Han and Kemple,2006). According to Gresham, 2021 "the degree to which students can establish and maintain satisfactory interpersonal relationships, gain peer acceptance, establish and maintain friendships, and terminate negative or pernicious interpersonal relationships" (Gresham et al. 2001). He defined social competence. (Orpinas,2010) defines social competence as the ability to manage social relationships effectively. Orpinas defines social competence as "(a) getting along well with others, (b) being able to create and maintain intimate connections, and (c) responding in social settings in adaptive ways." According to Orpinas, social competence results from cognitive ability, emotional processing, behavioural skills, social awareness, and family and cultural beliefs about

interpersonal relationships.

### 1.4.6 Social constructivism

The relevance of culture and context in comprehending what happens in society and building knowledge based on that understanding is emphasized by social constructivism (**Derry, 1999**). The assumptions that underpin social constructivism are specific beliefs about reality, knowledge, and learning. Understanding and utilizing social constructivist-based instructional methods is critical, and it starts with understanding the principles that support them. Reality: According to social constructivists, reality is created by human activity. Members of a civilization collaborate to make the world's properties (**Kukla, 2000**). According to the social constructivist, reality cannot be discovered: it does not exist before it is socially created. Knowledge: Knowledge is likewise a human product, according to social constructivists, and is socially and culturally constructed (**Ernest, 1999**). Individuals generate meaning by interacting with one another and the environment in which they live. Learning: Learning is a social process for social constructivists. It is neither a passive development of behaviours shaped by external stimuli nor does it occur only within an individual (**McMahon, 1997**). When people are involved in social activities, they learn more meaningfully. The context in which learning occurs and the social contexts that learners bring to their learning environment are essential to social constructivists. Within the framework of social constructivism, four broad views guide how we might support learning (**Gredler, 1997**). First, learning cognitive abilities and strategies is the emphasis of the cognitive tools approach. Students participate in social learning activities that include project-based learning and discipline-based

cognitive resources (**Prawat & Folden, 1994**). Third, they collaborate to create a product and then put meaning to it as a group through the social learning process. Fourth, social constructivists who hold this viewpoint believe that social constructivism should be implemented in the classroom as needed (**Gredler, 1997**). Finally, its proponents believe that knowledge, meaning, and understanding of the world can be addressed in the classroom from the individual learner's perspective and the collective view of the entire class (**Cobb, 1995**).

### 1.4.7 Social equity

As Gooden, Myers, Svara, and Brunet point out, social equity is difficult to define. This is concerning for a word that first became popular in the field of public administration in 1968. Social equity is a concept that indicates a calculation of fairness, rights, and justice rather than an express constitutional value (**Nalbandian,1989**). Through explaining its application, we follow the subject from its origins in the discipline to its modern incarnation as social equality in the aftermath of the 1968 Minnowbrook Conference and finally to its current interpretation. Social equity theory was once enshrined in the social contract. For example, according to Jean-Jacques (**Rousseau,1762**), the greatest good of all reduces to liberty and equality, neither of which can exist without the other, and (**John Locke,1689**) maintained that the goal of government is to protect natural rights in significant part. According to **Thomas (Hobbes,1660)**, inequality does not exist in nature but comes from civil rules, and people's recognition of equality by nature is necessary for a peaceful, just society. People all across the world are becoming more interdependent, which is drawing more attention to social fairness in terms of human rights. Economic, environmental, and immigration policies

have ramifications beyond the country's borders and generations. International organizations like the United Nations are essential in keeping social equity issues in the spotlight. They establish worldwide standards and share data on how countries rank regarding social equity. The United Nations Development Programme's Millennium Development Goals

### 1.4.8 Social groups

Sociologists, most of whom imply severe limitations on group size, have proposed several definitions of "social group." The following is a standard but not universal definition, with slight variations: "A group, according to sociologists, is a group of people who engage and communicate with one another; share goals and rules; and have a subjective sense of themselves as "we," that is, as a separate social unit."( Andersen and Taylor,2011). Social scientists have paid much attention to studying the social group as a potential driver of leisure behaviour. According to (Burch, 1964), the type of social group impacts the level of recreation participation. Burch expanded on the theory by presenting a personal community recognizing a social relationship in specific individuals' leisure camping lifestyles. On the other hand, a social category is a group of people who share similar traits or features but do not necessarily interact with one another, such as males, women, the elderly, social security recipients, urban youth, generation X, or generation Y. In the vocabulary of many social psychologists who employ a comprehensive definition of "social groups," almost any social category qualifies as a social group. (Stangor,2004). The term "social group" in economics often encompasses various social categories. These categories may include large entities like jurisdictions, school districts, and populations of students, parents, and teachers. Other

stakeholders, such as tax-paying local property owners and educational academics, may also be considered within an economic analysis focused on the returns to education.

### 1.4.9 Social learning

Human and animal intelligence both rely on social learning. Social learners can acquire complicated behaviour and quickly adjust to new situations by taking signals from the behaviour of experts in their environment. **(Henrich and McElreath 2003)**. Individual learning within a social environment has been defined as social learning in general, processes of interaction that lead to concerted action for change, group learning, and individual learning within a social context **(Blackmore, 2010)**. Social learning considers the shifting affordances of a world where social activity is increasingly mediated and conducted at a distance. It is "based on the assumption that our knowledge of the material is socially formed through interaction," as **(Seely Brown and Adler,2008)** put it. Discussions on the topic and grounded interactions, particularly with others, around challenges or issues actions." Many others have argued for similar ideas, delving into this vast topic in depth: computer-supported collaborative learning research and constructivist educational literature. We have seen a transformation in how people think about online interaction and publishing, thanks to the rise of social networks with millions of users, such as Facebook, YouTube, and Twitter, as well as thousands of smaller versions and speciality applications for certain activities and communities. These social media platforms make it easier to publish, index, and track user-generated content, as well as give easy-to-use collaboration spaces and enable social networking activities like friending, following messaging, and status

updates. Web services enable more sophisticated machine-machine interaction, and mobile devices expand the availability and localization of these services. Standards like straightforward syndication allow information to be shared easily using structured data feeds, while web services enable more sophisticated machine-machine interaction.

- **Social media**

It is argued (**Jacka 2015**) that social media has grown from a collection of tools and websites used by professors and computer nerds to a monster that profoundly alters how people interact with corporations, governments, traditional media, and one another. Organizations and conventional broadcast media monopolized the message before introducing social media. Worst people possessed the skill and desire to keep communications to a simple monologue or, at most, a tightly controlled two-way dialogue. The consumer's capacity to transition from one-to-one to one-to-few as time passed was empowering in the mid-to-late 1990s. The ability of people to have a voice that could be heard outside their immediate area of influence was beginning to increase. The ability for an individual's voice to reach the masses was about to become a reality, thanks to increasingly advanced bulletin board systems, Internet forums, online chat, and personal web sites. While some companies remained in "monologue mode," it was becoming clear that this was becoming a trend that would need to be addressed in the near future. Social media has quickly become an integral element of how people communicate nowadays. In the last seven or eight years, it has evolved from a tool to pass the time to a significant aspect of personal and business culture. This is especially true now that broadband Internet connection is available everywhere. The addition of

audio and video information and the dimension of immediate worldwide access has warped traditional media approaches. This has enabled anyone, regardless of media medium, to become a publisher, creating material and participating in dialogues. While this creates a massive opportunity for organizations to become more connected to their stakeholders, it also introduces a new challenge. It is worth noting that an actual result of implementing these technologies is that they aid in developing human interactions. Whether it is as simple as keeping relatives and friends linked or as complex as enabling deeper connections with customers, employees, vendors, and investors, the worldwide power of these connections is not just astonishing but also transformative. It is rapidly changing. It is also critical that social media is not used for political purposes. For the most part, a new technology that helped promote these interactions did not represent a significant change. While the history and evolution of social media may appear to be nothing more than a set of tools for people to share their favourite recipes, chat online, or look up old high school friends, it has evolved into a corporate imperative that requires a strategic approach as part of a communications plan, as well as tactical implementation and tracking with the right metrics. With processes and policies based on decades-old communications protocols, a full assessment is required to ensure that the business has the governance, risk, and control measures to benefit from these opportunities while being compliant.

- **Social practice**

Due to mutual response to each other's needs, social practices are patterns of learned behaviour that enable us (in the major examples) to collaborate as members of a group in creating, distributing, managing, maintaining, and

removing a resource (or many resources) as perceived through behaviour and the resource(s) in question cultural schemas/shared meanings. Social Practice Theory is one technique to operationalize the evaluation of an intervention 'in context.' This hypothesis has gained traction in environmental research, where it has been used to identify the failure of interventions to change behaviour on a systemic level **(Hargreaves,2011)**. Rather than focusing on persons, institutions, or program theories, Social Practice Theory is concerned with the execution of 'practice bundles,' or collections of interconnected pieces, and how practices are reproduced, maintained, stabilized, challenged, and surpassed **(Hampton,2018)**. Interdependencies between diverse elements such as bodily activities (e.g., exercising), mental activities (e.g., doing crosswords for relaxation), material objects (e.g., using scales for weighing), and their use, background knowledge in the form of shared understandings, states of emotion (e.g., anxiety), and motivational knowledge are all part of social practice **(Shove,2012)**. There are three components to practices: 1) Materials include technology, tangible, physical entities, and the material from which products are formed; 2) Competencies include skills, know-how, and procedures; and 3) Meanings comprise symbolic or shared meanings, social norms, concepts, and collective goals. These are the 'practice building blocks that allow us to explain transformation, diffusion, and circulation processes **(Shove,2012)**. Sustainability practices must attract and retain practitioners willing and able to carry out these integrating processes and keep the practices alive. The value of this approach is that it allows us to map the uneven landscapes of opportunity and unequal patterns of access among participants, allowing us to identify the relatively privileged (those with the physical, cognitive,

or socio-economic means to engage) and the marginalized (those who are socially excluded and lack opportunities to become 'carriers of practice') (Shaw,2017).

- **Socio-emotional skills**

Socio-emotional skills significantly impact success in adulthood, particularly for young people in care (Dworsky & Gitlow, 2017). Many young women who have been in care face this transition with the added responsibility of a child in a climate of adversity, high levels of stress, and economic and employment challenges. Young individuals in care have inferior socio-emotional skills development, which makes them more vulnerable to psychological problems (Lázaro & López, 2010). Several studies have found that these young people have a higher prevalence of externalizing and internalizing disorders (Delgado, Fornieles, Costas, & BrunGasca, 2012) as well as more difficulties in school and social integration (Martin, García, & Siverio, 2012) reality, multiple studies show that when a person's time in a centre is extended, sadness, loneliness, behavioural issues, and violence become more prevalent. Two conditioning factors could be linked to a lack of emotional skill development in care. Separation from family and difficulties forming attachments in the residential care setting (Rushton & Minnis, 2002) may hinder the development of socio-emotional skills on the one hand. On the other hand, foster children's emotional awareness and theory of mind abilities were worse in foster care youngsters (Pears & Fisher,2005). Furthermore, compared to education inside the family setting, the residential environment has significant limits and reflects a social and human capital deficiency.

### 1.5 Significance of the Study

The significance of the study is multi-fold:

**Addressing the digital divide:** In today's digital age, Digital Literacy skills are crucial for personal, social, and professional development. However, not everyone has equal access to digital resources and education. This study aims to identify the level of digital competencies of undergraduate students of the University of North Bengal, which can help identify and address the digital divide.

**Importance of Digital Literacy:** It involves effectively using digital devices and applications, accessing and evaluating information online, and communicating through digital platforms. This study aims to identify and evaluate the level of Digital Literacy among undergraduate students, which is crucial for their academic and professional success.

**Enhancing social capital:** The study focuses on the relationship between Digital Literacy and social capital. Social capital refers to the networks, norms, and trust that facilitate cooperation and coordination within a society. Digital Literacy can enhance social capital by enabling individuals to access and participate in online communities, networks, and social media. Therefore, this study can contribute to understanding how Digital Literacy can impact social capital.

**Informing educational policies and practices:** The study can provide insights into the digital competencies of undergraduate students, which can inform educational policies and practices.

**Improving employability:** Employers highly value Digital Literacy skills in today's job market. This study can help identify the digital competencies that employers demand, which can help improve the employability of undergraduate

students.

The thesis has been carried out with the following hypothesis, validated in Chapter 6 using statistical tests, objectives, and research questions.

### 1.6 Research Questions

Previous discussions on the topic under study thus warrant to be addressed through the following research questions.

- I. What is the socio-demographical context of variables associated with U.G. students' Digital Literacy and digital competencies?
- II. What is the current status of Digital Literacy among undergraduate students?
- III. How can the U.G. students in general and U.G. students of the University of North Bengal, in particular, be identified as digitally competent?
- IV. How does digital competency learned by the students form social capital with the impact of social networks and Digital Literacy?

### 1.7 Objectives of the Study

- I. To identify the socio-demographic variables associated with the Digital Literacy and digital competencies of undergraduate students at the University of North Bengal.
- II. To identify the critical areas of Digital Literacy and assess the current levels of competence among undergraduate students at the University of North Bengal.
- III. To identify how undergraduate students, particularly those at the University of North Bengal, can be identified as digitally competent.
- IV. To investigate the relationship between Digital Literacy and social capital, including the impact of Digital Literacy on social networks and relationships among undergraduate students at the University of North Bengal.

### 1.8 Hypotheses of the Study

**H<sub>a</sub>** = Digital Literacy and digital competency enhance the fostering of social capital.

**H<sub>b</sub>** = Digital literacy/Digital competency developed for extended use of technology for academic excellence.

### 1.9 Scope and Limitation

#### 1.9.1 Scope

The scope of the study appears to be focused on exploring the Digital Literacy skills and competencies of undergraduate students at the University of North Bengal. The study evaluates students' ability to navigate and use digital tools and technologies and their understanding of digital concepts and practices. Additionally, the study examines the relationship between Digital Literacy and social capital, exploring how students' digital competencies might impact their social networks and relationships.

Overall, the study's scope seems to be focused on understanding and evaluating the digital competencies of undergraduate students at the University of North Bengal, with a particular emphasis on the role of Digital Literacy as a form of social capital.

#### 1.9.2 Limitation

The study was restricted to undergraduate students from 52 colleges enrolled with the University of North Bengal, and the data was collected using an online survey distributed via WhatsApp and email. The self-evaluation replies requested in the survey's questions may not accurately reflect the participants' Digital Literacy competencies, as individuals tend to overestimate their skills when answering self-assessment questionnaires. Moreover, only students who completed the online

survey within the study's time frame were included in the research. Additionally, the study's findings may not be generalizable to other populations or contexts beyond the specific sample studied. Furthermore, the study sent the survey link to 1300 students, but the actual student population was 128606, which could also affect the sample's representativeness.

### 1.10 Structure of the Thesis

- **“Chapter 1: Introduction”** presents the background of the study, the importance of Digital Literacy and other factors discussed.
- **“Chapter 2: Review of Literature”** presents the reviews of related literature to get to know what is unexplored and thus identify an area for this research.
- **“Chapter 3: Pivotal Role of the University of North Bengal in Catering Higher Education in the North Bengal Region.”**- The University plays a crucial role in providing higher education in the North Bengal region.
- **“Chapter 4: Relational Embodiment of ICT, Social Capital, Digital Social Capital, Digital Literacy and Digital Competency”** delineates the broader perspectives of Social Capital, digital social capital, Digital Literacy and digital competency.
- **“Chapter 5: Methodology”** presents the tools and techniques used for the present study through different data collection methods.
- **“Chapter 6: Data Analysis and Hypotheses Validation”** is the analysis chapter where the collected data is presented in a tabulated and graphical form with due annotation.
- **“Chapter 7: Finding and Discussion”** deals with the findings and suggestions.
- **“Chapter 8: Conclusion, Suggestions and Scope of Further Study ”**

Concluding Remarks, suggestions and Prospects for Further Research.

### 1.11 Reference Style

The reference style used in this study is the American Psychology Association (APA), 6th edition, as this style is commonly used in social science, including psychology, education and sociology.

### 1.12 Summary

Digital Literacy is a term widely debated in various fields, such as education and knowledge studies, and it has taken on different meanings depending on the context. Digital Literacy is a set of tangible and intangible skills that refer to the ability to investigate and encounter new technical situations flexibly, analyze, evaluate, and critically think about them, evaluate data and information, exploit technological potentials to represent and solve problems and build shared and collaborative knowledge while cultivating awareness of one's responsibilities and reciprocal rights/obligations. It explores the different aspects of Digital Literacy, including its competencies, law, and social cohesion, and provides a framework for fostering Digital Literacy that includes access to technology, education, and culture. Digital Literacy is an essential skill set in the digital age that requires the ability to use technology effectively, comprehend the relationship between technology and society, and be aware of digital activities' ethical and legal implications. Digital competence is based on basic ICT skills and requires acquiring specific knowledge, abilities, and attitudes. Digital law governs what is and is not allowed when using the Internet, while digital social cohesion focuses on increasing social inclusion and cohesion. A framework for fostering Digital Literacy includes access to technology, education, and culture and is critical for

lifelong learning, knowledge management, and the development of the information society. The importance of Digital Literacy skills in a blended learning environment. Blended learning integrates technology into the learning delivery process, allowing students to learn whenever and however they want. However, educators must know that technology-based learning delivery systems may not always produce a better learning experience. There are three types of blended learning: enabling, enhancing, and transforming. Digital Literacy skills are essential for students to succeed in a blended learning environment. The article discusses Eshet's unified conceptual model for Digital Literacy, which includes five skills: photo-visual literacy skill, reproduction literacy skill, branching literacy skill, information literacy skill, and socio-emotional literacy skill. The article concludes that educators must advocate for the Digital Literacy skills required for students to succeed in a blended learning environment. Young children's Digital Literacy highlights the numerous opportunities for children to engage with digital media and the importance of this period of discovery and exploration for their neural development. The abstract also notes the lack of research on the effects of digital media on the development of Digital Literacy skills in young children. Digital Literacy in the workplace, discussing the importance of individuals possessing diverse digital skills to thrive in an increasingly digital workplace and digital transformation, is affecting many or all of a company's departments. It highlights the need for individuals to acquire new digital skills and knowledge. Social activism and social capital are critical concepts that have significantly impacted modern society. Social activism enables individuals to speak out against social injustices and shape society's future.

Educating students about social activism and its six principles can instil in them the drive to take action on their initiative. On the other hand, social capital refers to the web of connections between people that build trust and facilitate action. Building social capital is critical for communities to come together, develop trust, and improve their overall well-being. Both social activism and social capital are essential for developing a more tolerant, compassionate, and inclusive society. Social comparison is a natural aspect of human behaviour, and individuals tend to compare themselves with others in various aspects of their lives. Social comparison can have positive and negative effects on individuals, and envy induced by social comparison could be one reason for harmful feelings and actions. Social competence refers to the ability of individuals to interact effectively with their surroundings and achieve their personal goals. It is a complex concept with multiple interconnected components, including cognitive ability, emotional processing, behavioural skills, social awareness, and cultural beliefs. Finally, social constructivism emphasizes the relevance of culture and context in comprehending what happens in society and building knowledge based on that understanding. It is essential to understand the principles that support social constructivism-based instructional methods. It emphasizes that social learning is a crucial aspect of human and animal intelligence, which enables individuals to acquire complex behaviour and adjust quickly to new situations by taking signals from experts in their environment. Social media has become essential to personal and business culture, transforming traditional media approaches and allowing anyone to become a publisher and participate in dialogues. However, it also presents challenges that require a strategic approach and the right metrics for

tracking progress. On the other hand, social practices are patterns of learned behaviour that enable us to collaborate as group members and create, distribute, manage, maintain and remove resources. Social Practice Theory is a technique used to evaluate interventions in context by focusing on the execution of 'practice bundles' and how they are reproduced, maintained, challenged, and surpassed. These concepts highlight the importance of social interaction and its impact on various aspects of our lives. Social Capital (SC) has been defined, with networks referred to as structural SC, while trust and norms are cognitive SC. Several research studies have examined the correlation between SC and Digital Literacy use, such as email, social networking services, blogs, bulletin boards, knowledge collaborations, and video-sharing systems. Some researchers found that using ICT helps expand and bridge SC over the Internet, and online contact supplements existing offline bonding SC and replace existing offline networks. ICT is a gateway to Digital Literacy since many of the equipment and software utilized in Digital Literacy are based on ICT. SC's crucial features of trust and reciprocity in society may help ease gloomy views on Digital Literacy. Networks might aid the formation of a pessimistic Digital Literacy. People may use ICT to maintain and preserve their existing offline SC. Although the usage of ICT can improve online structural SC, its impact on offline structural SC depends on the circumstance and the ICT content. ICT-created online structural SC primarily improved offline cognitive SC in small groups. Digital Literacy, digital competency, and SC are three critical concepts interconnected in the context of the digital age. The interrelation structure between these concepts is that Digital Literacy and digital competency are both essential components of SC in the digital age. People who

are digitally literate and competent can better participate in online communities and networks, access information and resources, and collaborate with others to achieve common goals. In turn, SC can help to enhance Digital Literacy and competency by providing opportunities for learning, collaboration, and support. Overall, the three concepts are interconnected and reinforce each other in the digital age.

The interrelation between Digital Literacy, digital competency, and SC can be seen in the following ways:

- **Digital Literacy and SC:** Digital Literacy enables individuals to participate fully in digital networks and communities and to contribute to these communities by sharing knowledge and resources. By doing so, individuals can build SC and establish connections with others with similar interests and goals.
- **Digital competency and SC:** Digital competency enables individuals to create and innovate in the digital world and to leverage the knowledge and resources of others to achieve their goals. By doing so, individuals can build SC and establish connections with others who can help them to achieve their goals.
- **Digital Literacy, digital competency, and SC:** Together, Digital Literacy, digital competency, and SC form a powerful combination that enables individuals to navigate and engage with the digital world effectively, to create and innovate in the digital world, and to work together to achieve common goals. This combination is essential in today's digital age, where digital technology is reshaping the way we live, work, and interact with one another.

Digital Literacy, digital competency, and ICT contribute to SC in various ways. Digital Literacy and digital competency enable individuals to access and leverage

social networks and communities in the digital world. At the same time, ICT facilitates communication and collaboration between individuals and groups, which are essential components of SC. Individuals and communities can enhance their SC and improve their ability to thrive in the digital age by developing and improving Digital Literacy, competency, and ICT.

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