



Vol.7 No.1 (2024)

# Journal of Applied Learning & Teaching

ISSN : 2591-801X

Content Available at : <http://journals.sfu.ca/jalt/index.php/jalt/index>

---

## Reading between the lines: The necessity of books

Sam Choon Yin<sup>A</sup>

A

*Dean (Academic Partnerships), Kaplan Higher Education Academy*

---

### Keywords

Books;  
educational technology;  
higher education;  
knowledge;  
reading.

---

### Abstract

This opinion piece delves into the unwavering significance of books as an enduring and robust medium of education. It traces the historical trajectory of books, from ancient scrolls to contemporary printed volumes, elucidating their consistent role in education and knowledge dissemination. Books serve as indispensable repositories of human wisdom, culture, and progress, preserving the intellectual heritage of bygone eras and steering society toward enlightenment. Amidst the digital age's proliferation of screens and electronic devices, this paper argues that books in the physical form maintain their charm, captivating readers and learners alike. Their tangible presence and tactile engagement provide a unique haven for knowledge seekers, serving as steadfast companions in the lifelong pursuit of learning. In an era marked by rapid technological advancement, books stand as a testament to the enduring worth of written knowledge. As we embrace innovation, it is crucial to acknowledge the timeless wisdom contained within books' pages, forever prepared to guide us on our journey to comprehension and enlightenment.

---

### Correspondence

choonyin.sam@kaplan.com <sup>A</sup>

---

### Article Info

Received 6 November 2023

Received in revised form 29 November 2023

Accepted 3 January 2024

Available online 5 January 2024

**DOI:** <https://doi.org/10.37074/jalt.2024.7.1.2>

If you want to be a writer, you must do two things above all others; read a lot and write a lot. There's no way around these two things that I'm aware of, no shortcut (King, 2012, p. 164).

## Introduction

Unlike food, human beings do not need to read to survive. The question arises: Why do we read? Book readers would argue that delving into the pages of a book propels us into the imaginative worlds created by others while simultaneously cultivating our unique perspectives. In this sense, reading nurtures our imagination, exposing us to a spectrum of experiences far removed from our personal lives.

Indeed, reading bolsters our cognitive abilities. As we immerse ourselves in diverse literary landscapes, our academic and professional capabilities flourish. We begin to challenge established norms, decipher news with greater insight, and communicate the implications of current events to others. As a result, dictators have historically sought to suppress reading and ban books as they understand their potential to empower and embolden individuals (Ferner & Meyns, 2021). This is also why, for years, slaves were forbidden to learn to read, and girls in some nations have suffered violence in response to their pursuit of education (Cornelius, 1991; GCPEA, 2019; Whitehead, 2016). The gift of education and books shines a beacon of hope, especially to those facing adversity, illuminating a path toward a brighter future.

This paper focuses on the tangible form of books as the medium for reading. These books, consisting of collated sheets bound along the spine and encased in protective covers, facilitate multifaceted engagements with their content. In an age dominated by digital screens and electronic devices, we contend that physical books continue to exert their appeal, enchanting readers and learners alike. Their tangible presence and tactile engagement offer a unique sanctuary for those seeking knowledge, serving as unwavering companions in the lifelong quest for learning. In a time of rapid technological progress, books stand as a testament to the lasting value of written knowledge. As we welcome innovation, it is paramount to recognise the timeless wisdom encapsulated within the pages of books, always ready to lead us on our path to understanding and enlightenment.

I approach the subject by studying the historical context of books to reveal how they have adapted and coexisted with emerging technologies. Exploring the historical trajectory of books and writing provides invaluable insights into their enduring significance in our contemporary world. A historical perspective also unveils the evolutionary journey of the written word, illuminating its profound impact on human culture, communication, and knowledge dissemination. This perspective underscores the unique qualities of physical books, such as the sensory experience of holding a printed page, which digital formats cannot fully replicate. Amidst the digital revolution, the question lingers: What is the role of physical books in the contemporary world? This exploration leads us to conclude that, even in the digital age, books in their traditional form retain significant relevance. To read

one's work, the work has to be written. It makes sense to begin our story with writing.

## Writing

Writing was likely pioneered by the Sumerians in Uruk, although it also emerged independently around five thousand years ago in Egypt and China. Uruk was a major urban and cultural hub of Sumerian civilisation (Graeber & Wengrow, 2022). The city played a significant role in shaping Sumerian culture, trade, governance, and religious practices. It is likely that cuneiform script began to take shape in Uruk around 3300 BCE, with early manifestations evident in numerical tablets and administrative notations. Initially, the primary function of writing in the city's temples was bookkeeping. Over the course of millennia, Uruk's temples became the very sites where cuneiform script eventually became obsolete, having evolved to document a wide range of matters, including the earliest recorded literature and legal codes in the world (see Rowe & Levine, 2006; Fischer, 2021).

The Sumerians and, later, the Egyptians used rudimentary symbols to convey basic ideas and concepts. However, as societies grew more complex, the need for a more efficient and simpler writing system became evident. Around 2000 BCE, the Phoenicians, a seafaring people from the eastern Mediterranean, introduced a groundbreaking innovation – the alphabet (see Vallejo, 2022). Unlike the intricate hieroglyphs of the Egyptians or the cuneiform script of the Sumerians, the Phoenician alphabet consisted of just 22 characters, each representing a consonant sound. This compact system allowed for greater speed and flexibility in writing, making it suitable for various languages. Alphabets were used extensively by traders to keep track of what was bought and sold.

The Phoenician alphabet served as the foundation for numerous other scripts. As documented in Irene Vallejo's (2022) *Papyrus*, the Greeks adopted and adapted it, adding vowels and refining the characters to suit their language. This Greek alphabet, in turn, passed on to the Romans. The Latin alphabet spread across the Roman Empire and eventually became the basis for many modern European languages. Writing meant that rulers could create legal codes and religious leaders could spread ideas through religious texts. The Arabic alphabet, derived from ancient scripts, was widely adopted across the Islamic world (Goody, 2006).

Meanwhile, other civilisations were developing their own writing systems. In India, the Brahmi script emerged around the 3rd century BCE, paving the way for various scripts across the Indian subcontinent, including Devanagari and Tamil. In East Asia, Chinese characters evolved over centuries, with each character representing a syllable or a concept. These characters formed the basis for Japanese Kanji and Korean Hanja (see Ferner & Meyns, 2021; Fischer, 2021).

The invention of writing has been criticised by various scholars. Socrates, for instance, warned that writing could lead to ignorance and, ultimately, death of memory as we

no longer feel responsible for remembering knowledge. Writing was also seen as a means to convey information without truly imparting knowledge, giving the illusion of wisdom without necessarily imparting true understanding. Indeed, in ancient times, oral history held a superior level of reliability, allowing ideas to adapt and evolve naturally, as they would during spoken exchanges. Throughout much of history, even well into the 11th century, confidence in written records did not manifest immediately or unconditionally (Cohen, 2023). When individuals sought information about the past, they did not turn to books or scrolls. Instead, they relied on the wisdom passed down through generations, shared by their elders.

But clearly without writing, we would wake up each morning with fading memories of yesterday and no way to plan for tomorrow, let alone the day after tomorrow. The advent of writing liberates us from the constraints of memory, transforming the repository of knowledge into a tangible archive capable of limitless expansion. In addition, the transition from spoken to written language helps to crystallise the ephemeral nature of one's identity into a concrete and lasting manifestation. Through the act of writing, words cease to be transient vocalisations and solidify into a tangible representation, thereby extending the longevity and impact of the speaker's identity beyond the temporal confines of verbal communication. Writing, being more enduring and constant than speech, ensures that the legacy of heroes endures. Their feats continue to live on through written accounts, ensuring their presence in our consciousness to this day.

Unlike oral traditions, which tend to favour familiar forms and established ideas for the sake of audience recognition, the written word beckons us towards uncharted intellectual horizons. Intellectuals play a crucial role in materialising thoughts and ideas by expressing them through writing, books, and various forms of records and documents. This transformation from the intangible thoughts and ideas to the tangible facilitates their continued existence, and enables ideas and concepts to evolve over time. In the absence of such tangible forms, thoughts and ideas risk fading into oblivion, losing their reality as if they had never existed. With writing, readers are also afforded the luxury of time, permitting contemplation and introspection upon novel concepts. We can visually behold words and ponder them at our own pace, free from the rushing current of spoken discourse.

## Books

Early evidence of writing in the form of pictorial images and paintings emerged in the caves of Lascaux in southwest France, dating about 15,000 BCE and Cueva de las Monedas in Spain in the Ice Age (Lyons, 2013). Cuneiform, an ancient writing system, emerged around the close of the 4th millennium BCE. It involved inscribing signs and numbers onto clay tablets with a pointed stylus. These tablets, comparable in size to modern credit cards, were then left to dry in the sun. This method of recording, as described by Lyons (2013), was prevalent in Mesopotamia and employed for documenting taxation and legal affairs.

The transition of ancient Egyptians from prehistory to history was marked by the innovation of a medium beyond stone, metal, or leaves for inscription. They ingeniously harnessed the potential of the papyrus plant stem, abundant in the Nile delta, which previously served various purposes like crafting furniture, baskets, ropes, and boats (Vallejo, 2022). The Greeks referred to this plant as *biblos*, a term that eventually evolved into the English word 'book,' illustrating the profound impact of this innovation on the evolution of written communication. Papyrus was used to record signs and numbers in Egypt, Greece, Rome and all over the Mediterranean world. Plato, Thucydides and Cicero all wrote on papyrus (Lyons, 2013).

In the year 105 CE, Cai Lun, a eunuch of the imperial court in China, revolutionised the world by inventing paper. His method, which involved using old rags, hemp, tree bark, and fishing nets, laid the foundation for the papermaking process still employed today (Smith, 2022). This innovative art of papermaking, originating from China and subsequently adopted by the Arabs, spread across the Islamic world during the first millennium.

A major revolution of the book was the invention of the codex, which originated in the Christian world of the 2nd and 3rd centuries (Duncan, 2022). Books became a collection of separate sheets loosely attached or sewn to each other. The key advantage of parchment codex is that writers were able to write on both sides of the sheet. Parchment codex had a sturdy individuality, allowing for easy storage. Concurrently, the concept of an index emerged. The index is an invention of the codex era, serving as a time-efficient tool akin to a map that mediates the relationship between authors and their readers. Its role is significant, offering a navigational aid that enhances the accessibility and utility of written works. Reading a book from cover to cover is an investment of hours, something we have to make time for. With the aid of a good index, checking a reference is the work of seconds. Notably, the concept of the index parallels the modern-day concept of a webpage index. In the contemporary digital landscape, when we conduct a Google search, we are not directly exploring the entirety of the internet. Rather, as Duncan (2022) told us, we are navigating Google's curated index of web content.

Prior to the invention of the movable-type printing press, book production was cost-prohibitive due to sheet-based manufacturing. Consequently, books were predominantly utilised by scholars and for institutional purposes by civil or military officials. In China, beginning with Confucius (551-479 BCE), books primarily functioned as educational tools, serving as vessels of knowledge that spanned philosophy, medicine, astronomy, and cartography. In the Western context, under the rule of Charlemagne (742-814), the inaugural emperor of the West after the fall of Rome in the era of Christian rule, monasteries were assigned the responsibility of producing and disseminating books extensively to promote scholarly endeavours and intellectual development (Pettegree & Der Weduwen, 2021). Apart from the individuals of privilege, the practice of book collecting was primarily confined to the affluent, for whom acquiring and possessing books served more as a means of showcasing wealth and status rather than a pursuit of reading (Vallejo, 2022). This means that the

collector could not afford his books to look inexpensive. He had to invest in the finest copies, decorated with his coat of arms and numerous illustrations, if only to impress upon his visitors the patron's respect for learning and love of books. Amassing books was a privileged undertaking.

From the 12th century onwards, the monasteries in the West gradually lost their hegemony over the production and circulation of books. Serious challenges emerged from new institutions, cathedrals, schools and universities, which grew in towns in France, Germany and England. Growth of courts and universities stimulated literary activity and further intensified the need for books. Niccolo de Niccoli (Italian Renaissance; 1364 – 1437), a book hunter, founded the cursive writing type to allow the pen to move more freely, creating greater efficiency in copying, and new markets including a new class of book dealers, the *cartolai*, as middlemen between scribes and the clients, and traders of books (Pettegree & Der Weduwen, 2021).

New technologies appeared in rapid succession. Johannes Gutenberg, an inventor hailed for his revolutionary contribution, is credited with introducing movable type to the world. This innovation enabled the arrangement of individual letters into coherent forms that could be reproduced numerous times through the application of a printing press. Born around 1400 in Mainz, located along the River Rhine, Gutenberg's background as a goldsmith significantly influenced the evolution of printing. The precision required in crafting fine metal pieces played an instrumental role in creating accurate print impressions. The advent of the printing press marked a monumental shift in the pace of book production. Notably, the Gutenberg Bible, spanning an impressive 1,282 pages, made its debut in 1455 (Smith, 2022). While a significant portion of this Bible was printed on paper, certain sections were rendered on materials associated with traditional manuscript work, such as vellum or calfskin.

Johannes Gutenberg's movable type technology is particularly well-suited for languages that utilised a limited set of alphabetic symbols (Simonds, 2017; Bickerts, 2006). This ingenious method allowed for the arrangement and rearrangement of these symbols to create any desired word. Additionally, he introduced an oil-based ink, a significant improvement over the water-based ink utilised in the manual copying of texts.

While printing had already been pioneered in China centuries earlier, the Chinese approach required the carving of numerous individual characters onto separate wooden blocks. In contrast, Gutenberg's movable type allowed for the reuse of a relatively small set of letters, which could be combined in various ways to create different texts. The impact of Gutenberg's innovation on book production cannot be overstated. Setting up his printing press in the city of Mainz, Gutenberg triggered a transformative shift. Within less than half a century of his invention, nearly 300 cities across Europe had embraced printing presses, leading to the production of an astonishing twenty million copies of various books (Grayling, 2022). This rapid expansion and replication of texts marked a remarkable leap in the dissemination of knowledge and information throughout the

continent, revolutionising the way information was shared and accessed by people from all walks of life. Innovation in production and distribution, the steam press and the railways, multiplied the quantity of books available and helped bring printed materials to consumers. The sheer quantity of books in circulation drove prices down (Pettegree & Der Weduwen, 2021). The proliferation of books also heralded the inception of spectacles, a technological marvel that brought distant objects astonishingly close. This innovation revolutionised visual perception, enabling people to perceive faraway entities as if they were within arm's reach. Moreover, this era witnessed the dawn of the chapter system, a structural innovation that divided books into smaller, manageable segments (Duncan & Smyth, 2019). This division facilitated uninterrupted reading, allowing individuals to immerse themselves in a book for an extended period and pause at designated intervals for reflection and contemplation.

### **The emergence of books as a potent weapon**

Books became a powerful medium to convey and spread ideas. The act of contemplating the world and engaging in profound thought owes its existence to the existence of books, writing, and the act of reading itself. The Protestant Reformation encouraged the spread of vernacular languages in print, and the first major printed text to be translated from Latin to vernacular languages was the Bible (Lyons, 2013). Protestant leaders believed that the message of the Bible should be accessible to all Christians in their own languages – Martin Luther's ideal of the "priesthood of all believers", a world in which ordinary people could consult the word of God for themselves, without the guidance and interpretation of the clergy. Luther's "Ninety-Five Theses" would not have spread so far and wide without a printing press to publish his posters. When Luther's "Ninety-Five Theses" emerged, as noted by Brian Cummings (2022), only a few thousand individuals encountered a copy of the broadsheet. Nevertheless, authorities apprehended the challenge of eradicating it, underscoring the pervasiveness of writing and printed books.

President Franklin D. Roosevelt eloquently emphasised the influential role of books as tools of empowerment, stating that they wielded a potency akin to formidable weaponry. He likened books to battleships, attributing them with the sturdiest armour, the longest operational range, and the most formidable artillery (Smith, 2022). In a concerted effort, the American Council of Books in Wartime authored over 1,300 titles intended to fortify the intellectual and emotional resolve of the American populace with enduring tools of enlightenment and strength. These volumes were distributed in paperback format, conveniently sized to fit within a soldier's uniform pocket. As highlighted in Smith (2022), the books served multifaceted purposes: nurturing determination, unveiling the true nature of the adversary, disseminating technical knowledge relevant to training and combat, providing a source of relaxation, instilling inspiration to bolster morale, and elucidating the war's objectives. Throughout this period, a diverse range of literary genres was employed as ammunition, spanning poetry, mystery novels, serious non-fiction, humour, and contemporary bestsellers. The sentiments of soldiers further underscored

the importance of books, as they were received with the same welcome as letters from home and even revered akin to pin-up images.

The utilisation of paperback books during wartime not only popularised innovative publishing practices but also galvanised advancements in publishing, including the production of affordable books. Visionary publishers such as Allen Lane of Penguin Books and Robert de Graff of Pocket Books played instrumental roles, particularly in the 1930s. Their efforts not only challenged entrenched copyrights and distribution monopolies but also set the stage for broader transformations in the publishing industry (Smith, 2022).

As books got cheaper, more people were able to afford to buy their own books and build their own collections. The book industry in the 1960s experienced a boost with the growing influence of television and cinemas. Novels began to be adapted into movies, and writers responded by producing biographies of movie stars. Universities supported the growth of highly specialised fields of knowledge to keep pace with the incoming data, leading to the growth of the number of skilled professionals (Rumsey, 2016). The sheer growth of book titles and information in general led to demand for information management infrastructure – libraries, museums and skilled staff to manage the assets. More than ever, there was a need for libraries and librarians to help readers find what they needed. In the United States, Andrew Carnegie founded the modern American public library, offering a space for individuals to seek entertainment and education. Rumsey (2016) reported that in 1836, the Library of Congress in the United States housed 24,000 volumes, four times more than it had 20 years earlier. The British Museum (now the British Library) had 180,000 titles.

Books, like writing, have been a subject of criticism. History, as the saying goes, is written by the winners, hence creating biased stories and narratives. The fact is that authors write books about almost everything, even if they could not yet be completely sure of what it was. "The Theory of Everything" as the legendary Charles Handy (1995, p. 17) wrote, "is a fallacy in a possibility of perfection." Even esteemed writers can unconsciously overlook the pursuit of objective history, instead opting to include what aligns with the particular agenda they have chosen to follow. In their narratives, they reveal truths that were perceived through their own lenses, reflecting their individual experiences. These books are often birthed from a myriad of emotions – despair, anger, the yearning for revenge, the pursuit of power, or a sense of personal calling that guides them through each chapter. Edward Said (1994) aptly coined this literary perspective "Orientalism", highlighting the complex interplay between history, identity, oppression, and personal motivation.

Writing and books are like chronicles of our history, keeping alive memories of times, a wellspring of hope, solace, and empathy. Our roles as engaged citizens, whether during peaceful periods or in times of turmoil, can be seen as an extension of our reading. In this regard, books hold the power to inculcate values and transform behaviour through storytelling and knowledge dissemination. By presenting characters facing moral dilemmas and showcasing their choices and consequences, books provide readers with

vicarious experiences that prompt reflection on their own values and decisions. They offer insights into diverse perspectives, fostering empathy and understanding. Furthermore, books can present well-researched arguments and evidence, influencing readers' beliefs and attitudes. Over time, the accumulation of knowledge and exposure to different ideas can lead to profound shifts in individual behaviour, as readers internalise new values and perspectives encountered in their literary journeys.

On that note, the fear of books inculcating wrong values has resulted in the burning of books. Qin Shi Huang (259-201 BCE), the emperor of the Qin dynasty (reigned 221-210 BCE) in northwestern China, orchestrated the burning of books as part of his efforts to shape the ideology of the newly unified Chinese empire. This decree, which occurred around 221 BCE, involved the destruction of all books not related to agriculture, medicine, or prognostication. Notably, historical records of the Qin state and books housed in the imperial library were spared from the flames (Ferner & Meyns, 2021). In the evening of 10 May 1933, book burning took place in 34 university towns across Germany organised by Nazi student groups as the climax of their campaign of "Action Against the Un-German Spirit". Thousands of books were transported and piled up for destruction. Works by more than 50,000 authors whom the German leaders considered degenerate were gathered for burning, including works by Einstein, Freud, Marx, Kafka, and Hemingway. Copies of the Hebrew scriptures were also burned. Eleanor Roosevelt, in a newspaper piece "My Day", published on 11 May 1943, cited freedom of speech and thought as crucial to democracy and noted that book burning had the opposite effect; banned authors' "contributions to the thinking of the world are probably greater than they would have been without Hitler's effort at suppression" (cited in Smith, 2022, p. 147). Book burning has become the most highly charged and visible form of attacks on culture.

Despite the United States' assertion of unrestricted reading rights as an embodiment of press freedom and liberty, the reality stands in stark contrast to this claim (see McAllister & Harati, 2023). There is the element of fear, fearful of misinterpretation of everything read in unfamiliar ways, leading to 'undesirable' outcomes. Instances of book bans have emerged, as succinctly highlighted by Smith (2022). Theodore Dreiser's "An American tragedy" fell victim to censorship in Boston, as the Boston District Attorney sought to counter books deemed perilous to the morals of youth. Likewise, Ernest Hemingway's "The sun also rises" encountered censorship in Boston during 1930 due to its language, profanity, and unflinching exploration of themes such as sex, promiscuity, and societal decadence. John Steinbeck's "The grapes of wrath" faced the burning flames of opposition in 1930s California, ignited by a group of farmers resisting labour law reform. The novel was not only incinerated but also exiled from libraries in Illinois, Kansas, and New York State. A more sinister figure, Adolf Hitler, authored "Mein Kampf" during his prison stint in Munich in the early 1920s. The book, a two-volume autobiographical manifesto dedicated to the casualties of the failed November 1923 Nazi party coup, was published in 1925 and 1926. However, it was not until 1933, when Hitler ascended to power, that it morphed into a single-volume bestseller. In

that same year, an abridged American edition translated by E. T. S. Dugdale stirred widespread outrage. The publisher, Houghton Mifflin, faced vehement criticism for providing a platform for Hitler's ideology. This backlash culminated in a petition that condemned the publisher for propagating Hitler's propaganda. The repercussions were tangible, as Houghton Mifflin lost its public contract for textbooks in New York schools.



Figure 1: Print book sales in the United States (million units sold). Source: McLoughlin (2023).

While books have faced criticism and burning, printed books persist and thrive. Peter Drucker (1999) distinguished four Information Revolutions, with the second one sparked by the advent of written books, which significantly expanded the dissemination of knowledge, enabling independent information access and exploration, thereby nurturing a culture of learning and intellectual advancement. Accurately tallying the number of printed books proves challenging due to diverse publishing channels, the surge in self-publishing, global variations in practices, the influence of digital formats, incomplete reporting, and the industry's dynamic nature. Nonetheless, there are some indications available. Google calculated that by 2010, 129,864,800 books had been published since Gutenberg and Google wanted to digitise them all (Pettergree & Der Weduwen, 2021). Google does not consider books published post-2010, and it also omits self-published titles. This results in the omission of a substantial number of books from the records. Zaid Gabriel (2004) observed that more than 50 million books had been published. Danny McLoughlin (2023) documented that in 2022, the United States witnessed the sale of over 788.7 million printed book copies. This figure ranked as the second-highest sales record for printed books in the 21st century, coming slightly behind the record-breaking sales of 843 million copies in 2021 (Figure 1). Adult nonfiction remains the dominant category, contributing significantly with over 289 million copies sold, making up 37.8% of all print book sales. Following closely is the adult fiction category, securing the second spot with 189 million copies sold in the same year, constituting 24.7% of print book sales.

## Digital reading revolution: challenges and implications for teaching and learning

The rise in the number of books can be partially attributed to the emergence of e-books, or electronic books. While e-books existed in the early 1970s, it was not until the late 1990s and early 2000s that e-books started to gain significant popularity and become more widely available to the general public. One of the contributing factors was the introduction of dedicated e-readers, such as the Amazon Kindle, which made it more convenient for readers to access digital books. These devices, with their E-ink displays and long battery life, helped popularise e-books and changed the way people read. Since then, e-books have become an integral part of the publishing industry, offering readers a convenient and portable way to access a wide range of literature and other written materials.

E-books mirror their printed counterparts with the number of words arranged on each line. Texts are displayed vertically on e-readers, which are designed in a portrait format. To navigate through the content sequentially, pages are flipped from right to left, and users can conveniently bookmark or underline specific passages. E-books also allow readers to carry an entire library on portable devices, breaking down geographical barriers and enabling instant access to a wide range of content. Additionally, e-books offer features like adjustable font sizes, interactive elements, and search functionalities that enhance the reading experience. The rise of e-books has democratised publishing, enabled self-publishing and increased the availability of diverse voices.

Futurists, like Ray Kurzweil, predicted that with e-books, the printed books would be rarely used (Kurzweil, 1999). It is worth noting that predictions about the decline of books had circulated long before this point in time. In the 19th century, there was a prevailing belief that the advent of daily newspapers would signal the decline of books (Carr, 2016). The argument was that books could not compete with the immediacy of morning and evening papers. Similarly, in the 1950s, as television gained popularity in the Western world, many believed it would spell the end of printed books. With the emergence of computers, printed books are considered a passive medium, lacking the interactions of websites and apps and all other online activities we are accustomed to. There was a widespread expectation of a digital revolution in book publishing. Indeed, as told by Nicholas Carr (2016), at the 2011 Edinburgh International Book Festival, Scottish novelist Ewan Morrison predicted that the digital revolution would lead to the extinction of paper books within the next 25 years.

However, even as new forms of communication and information sharing have emerged, the codex, in the form of printed books that we are familiar with today, has managed to stand the test of time. Nicholas Carr (2016, p. 88) wrote that, in the United States, "e-book sales, which skyrocketed after the launch of Amazon's Kindle in late 2007, have fallen back to earth in recent months, and sales of physical books have remained surprisingly resilient. Printed books still account for about three-quarters of overall book sales in the United States, and if sales of used books, which have been booming, are taken into account, that percentage

probably rises even higher" (Carr, 2016, p. 88). In his book, "Book wars," John Thomson (2021) highlights the ascent of e-books in the American market, which began in 2008-2009 following the introduction of the Kindle. Sales steadily climbed until 2012, at which point they plateaued before experiencing a decline. In contrast, printed books maintained their dominance, consistently representing the majority of total sales. From 2015 onward, printed books accounted for between 80% and 85% of total sales. Drawing on the Pew Research Center survey conducted from 25 January 2020 to 8 February 2021, Michelle Faverio and Andrew Perrin (2022) reported that Americans exhibit a continued affinity for print books, with 65% of adults having read a print book in the past year, making it the most popular reading format. While 30% have explored e-books in the same timeframe, print books maintain their dominance. Interestingly, a majority of readers (33%) engage with both print and digital formats, highlighting a balanced approach. 32% exclusively favour print books, underscoring the enduring appeal of traditional reading. A mere 9% restrict their reading to digital formats, omitting print entirely.

There are two main reasons for this. First, storing facts in digital devices and personal computers sometimes get in the way of "thoughtful concentration and problem solving", Abby Smith Rumsey (2016, p. 12) wrote. In electronic reading, readers develop the 'grasshopper mind', hopping from point to point (Wiegel & Gardner, 2009), getting distracted by the hypertexts and detouring from the path of linear thought, therefore affecting comprehension. "Evaluating links and navigating a path through them (hypertexts)", wrote Nicholas Carr, "involves mentally demanding problem-solving tasks that are extraneous to the act of reading itself. Deciphering hypertext substantially increases readers' cognitive load and hence weakens their ability to comprehend and retain that they're reading" (2011, p. 126).

Substantial empirical evidence exists on this subject. For instance, Canadian scholars David Miall and Teresa Dobson (2001) conducted a study in 2001 where 70 individuals were asked to read a short story. The participants were divided into two groups; one group read the story in a traditional manner, while the second group read the story with links as we would find on the Internet. Miall and Dobson found that the second group of readers took a longer time to read the story, and yet more of them reported the inability to understand the story. They were more confused about what they read as compared to the first group (for further insights into the negative impact of screen-based media on cognitive abilities, see Horowitz-Krause & Hutton, 2018; and Meri et al., 2023).

One contributing factor is that reading on the Internet is different. Research conducted by Liu Ziming (2005, 2012), a professor at San Jose State University who tracked eye movement, found that web users hardly followed a line-by-line way of reading (the "E" style). A vast majority of the respondents skimmed the text quickly and skipped lines as they went along, resembling the letters "F" or "T". The eyes would move so quickly across the screen that one could only wonder if the article was read at all or with a zig-zag style, with some reading on the first few lines of the screen, then a little in the middle and a few lines at the end. The lack of

'cognitive patience' has an adverse effect on critical analysis in the deep-reading circuit, which demand patience, time and effort.

Even avid readers are not spared. Susan Blum (2016), a cultural, linguistic, and psychological anthropologist at University of Notre Dame has said that she could not concentrate on reading as much as she used to do with all the digital devices, applications and contents. Nicholas Carr (2016, p. 231) wrote, "Immersing myself in a book or a lengthy article used to be easy. My mind would get caught up in the narrative or the turns of the argument, and I'd spend hours strolling through long stretches of prose. That's rarely the case anymore. Now my concentration starts to drift after two or three pages. I get fidgety, lose the thread, begin looking for something else to do." Bill Gates confessed in a speech his preference for printed paper to computer screens for extensive reading: "Reading off the screen is still vastly inferior to reading off paper. Even I, who have these expensive screens and fancy myself as a pioneer of this Web lifestyle, when it comes to something over four or five pages, I print it out and I like to have it to carry around with me and annotate. And it's quite a hurdle for technology to achieve to match that level of usability" (cited in Darnton, 2009, p. 69). Maryanne Wolf, author of bestsellers "Readers, come home" and "Proust and the squid" admitted that the way she read has changed over the years. "I now read on the surface and very quickly", she writes, "I read too fast to comprehend deeper levels, which forced me constantly to go back and reread the same sentence over and over with increasing frustration" (Wolf, 2018, p. 100). Imagine those who are less devoted to reading.

While it may be accurate to assert that, thanks to the Internet, people today read more than individuals did in the 1970s or 1980s, it is important to recognise that this represents a different kind of reading, underpinned by a distinct mode of thinking. It is a concern that online readers prioritise efficiency and immediacy above all else, potentially compromising our capacity for the profound reading and critical thinking that flourished in the wake of the invention of the printing press.

Deep reading, as facilitated by printed pages, holds immense value. It extends beyond the mere acquisition of knowledge from an author's words; it encompasses the intellectual resonances these words trigger within our own minds. Within the tranquil realms carved by focused, uninterrupted book reading, or any other form of contemplation for that matter, we cultivate our unique associations, formulate inferences and analogies, and nurture our original ideas. In essence, deep reading and deep thinking are inseparable companions. Notably, our ability to interpret text and form intricate mental connections, which develop when we engage in deep, distraction-free reading, is at risk of erosion.

There is another reason why print books have remained popular among the readers. The size of printed books, designed to fit comfortably in one hand, uniquely offers a distinct tactile experience compared to the elongated scrolls or rigid clay tablets of the past. Printed book lovers speak about the feel of the paper, the sound of a page turn, the broad margins to write personal comments and the thickness

of the book to remind us how much we have read and how far we are from the concluding chapter. Notably, physical books are marvels of engineering. They excel at packaging vast amounts of information within their compact pages, allowing for easy reference and navigation. Their ergonomic design makes them a joy to flip through, inviting readers to explore their content at their own pace. These books are also remarkably durable, resilient against wear and tear, and capable of withstanding the test of time without the need for upgrades or downloads. Books, wrote Martyn Lyons (2013, p. 7), “do not need batteries they do not get infected by virus and when you close a book you never need to ‘save’ because you will never lose your data”.

One of the most cherished aspects of physical books is their smell. Book enthusiasts hold this olfactory quality in high regard, often finding solace in the comforting scent of well-worn pages. This aroma is so treasured that many readers resist the allure of odourless electronic books, valuing the sensory connection that physical books provide. Bali Rai said, “No e-reader will ever replace the beauty of the fully formed, 3-D book. Technology has its place, but it would not even exist without books and libraries. I love the feel and smell of libraries” (2012, p. 123).

The assertion that reading physical books is a positive way forward has profound implications for the realm of teaching and learning. In an era marked by rapid technological advancements and the ubiquitous presence of digital media, this conclusion prompts us to reevaluate the role of physical books in education and consider the broader impacts on pedagogy, cognition, and the overall learning experience. At the heart of this assertion lies a fundamental recognition of the unique advantages offered by physical books. Unlike their digital counterparts, physical books engage multiple senses, stimulating a deeper connection with the material. The tactile sensation of turning pages, the faint aroma of ink and paper, and the weight of a book in one's hands create a multisensory experience that digital screens cannot replicate. This sensory engagement is particularly crucial for young learners who are in the process of developing their cognitive abilities.

Incorporating physical books into the learning process provides myriad benefits. As mentioned, one of the most significant advantages is enhanced comprehension and retention. The act of physically flipping pages aids memory retention, allowing students to absorb and recall information more effectively. Furthermore, the absence of digital distractions often associated with electronic devices promotes focused and undistracted reading, a key factor in comprehension.

Beyond cognitive benefits, physical books have a profound impact on the emotional and psychological aspects of learning. The tangible nature of books fosters a sense of ownership and attachment. Students develop a personal connection with their books, treating them as cherished possessions. This emotional bond can motivate students to read more extensively and with greater enthusiasm, fostering a lifelong love for literature.

Physical books also play a pivotal role in creating an optimal learning environment. For one, physical books offer a respite from the constant connectivity and screen-based activities that dominate modern life. The act of reading a physical book encourages individuals to unplug from the digital world, promoting mindfulness and focus. This separation from screens is especially vital for the well-being of young learners, who may already spend significant time engaged with digital devices. The physical presence of books, for example, in libraries, imparts a sense of academic seriousness and reverence for knowledge. Libraries offer a space for quiet reflection, concentration, and scholarly pursuits—an atmosphere that is increasingly rare in the noisy, interconnected world of digital learning.

The assertion that physical books are the way forward highlights the critical role of libraries in education. Libraries serve as repositories of knowledge, offering students access to a wide range of academic resources, including books, journals, and historical documents (Pettergree & Der Weduwen, 2021). In addition to providing access to physical books, libraries foster a culture of exploration and research. The serendipitous discoveries that can occur while browsing library shelves are invaluable to the intellectual development of students. Thus, the continued existence and support of libraries are integral to the advancement of education.

The assertion that reading physical books is the way forward also calls for a *balanced approach* to technology in education. In recent years, digital learning tools and e-books have gained prominence in classrooms. While these digital resources offer undeniable advantages, they should be integrated thoughtfully to complement rather than replace physical books. Striking this balance ensures that students benefit from the strengths of both digital and print media. Digital tools can enhance the learning experience by providing interactive and multimedia content. They offer accessibility features that cater to diverse learning needs, such as text-to-speech functionality for students with visual impairments. Digital platforms also enable real-time collaboration and communication among students and educators. These advantages make digital resources valuable components of modern education. While digital content offers convenience and accessibility, it also poses challenges related to screen time, digital distractions, and concerns about the permanence of digital formats. Physical books, by contrast, provide a timeless and enduring means of preserving knowledge. A balanced approach acknowledges that each medium has its strengths. Educators should carefully select the appropriate format for specific learning objectives. For instance, while a digital platform may facilitate collaborative group projects, a physical book may be better suited for in-depth literary analysis.

## Conclusion

This opinion piece has explored the enduring role of books as a resilient medium of instruction. Throughout history, from ancient scrolls to modern printed volumes, physical books have consistently demonstrated their importance in education and knowledge dissemination. Books have served as invaluable repositories of human thought, culture, and



progress, preserving the wisdom of the past and guiding society toward greater enlightenment. They have played pivotal roles in inspiring change, challenging norms, and encouraging generations to transcend their circumstances. Despite the digital age and the proliferation of screens and gadgets, books continue to captivate readers and learners. Their tangible presence and tactile experience offer a unique sanctuary for those seeking knowledge, serving as steadfast companions in the lifelong journey of learning. In an era of rapid technological change, physical books stand as a testament to the timeless value of written knowledge. As we embrace innovation, let us also acknowledge the timeless wisdom held within the pages of physical books, forever prepared to lead us in our pursuit of knowledge.

## References

Bickerts, S. (2006). *The Gutenberg elegies: The fate of reading in an electronic age*. Farrar, Straus & Giroux.

Blum S. (2016). *'I love learning. I hate school': An anthropology of college*. Cornell University Press.

Carr, N. (2011). *The shallows: What the Internet is doing to our brains*. W.W. Norton and Company.

Carr, N. (2016). *Utopia is creepy and other provocations*. W.W. Norton & Company.

Cohen, R. (2023). *Making history: The storytellers who shaped the past*. Weidenfeld & Nicolson.

Cornelius, J. (1991). *When I can read my title clear: literacy, slavery, and religion in the Antebellum South*. University of South Carolina Press.

Cummings, B. (2022). *Bibliophobia: The end & the beginning of the book*. Oxford University Press.

Darnton, R. (2009). *The case for books: Past, present, and the future*. Public Affairs.

Drucker, P. (1999). *Management challenges for the 21st century*. HarperCollins Publishers Inc.

Duncan, D., & Smyth, A. (2019). *Book parts*. Oxford University Press.

Duncan, D. (2022). *Index, a history of the: A bookish adventure from Medieval manuscripts to the digital age*. W.W. Norton and Company.

Faverio, M., & Perrin, A. (2022). *Three-in-ten Americans now read e-books*. Pew Research Centre. <https://www.pewresearch.org/short-reads/2022/01/06/three-in-ten-americans-now-read-e-books/>

Ferner, A. & Meyns, C. (2021). *The philosophers' library: Books that shaped the world*. Ivy Press.

Fischer, S. (2021). *A history of writing*. Reaktion Books.

Gabriel, Z. (2004). *So many books: Reading and publishing in an age of abundance*. Paul Dry Books.

GCPEA (Global Coalition to Protect Education from Attack) (2019). *"It is very painful to talk about": Impact of attacks on education on women and girls*. GCPEA.

Goody, J. (2006). *The thief of history*. Cambridge University Press.

Graeber, D., & Wengrow, D. (2022). *The dawn of everything: A new history of humanity*. Penguin Books.

Grayling, A. (2022). *For the good of the world: Why our planet's crises need global agreement now*. OneWorld Publications.

Handy, C. (1995). *The empty raincoat: Making sense of the future*. Aarow Books.

Horowitz-Kraus, T., & Hutton, J. (2018). Brain connectivity in children is increased by the time they spend reading books and decreased by the length of exposure to screen-based media. *Acta Paediatrica*, 107(4), 685–693.

King, S. (2012). *On writing: A memoir of the craft*. Hodder.

Kurzweil, R. (1999). *The age of spiritual machines: When computers exceed human intelligence*. Viking.

Liu, Z. (2005). Reading behaviour in the digital environment: changes in reading behaviour over the past ten years. *Journal of Documentation*, 61(6), 700-712.

Liu, Z. (2012). Digital reading: An overview. *Chinese Journal of Library and Information Science*, 5(1), 85-94.

Lyons, M. (2013). *Books: A living history*. Thames & Hudson.

McAllister, G., & Harati, H. (2023). Contending with controversy: Using a decision-based simulation for preservice teacher education on addressing challenged books. *Journal of Applied Learning and Teaching*, 6(Sp. Iss. 1). <https://doi.org/10.37074/jalt.2023.6.S1.7>

McLoughlin, D. (2023, January 30). *Print book sales statistics*. <https://wordrated.com/print-book-sales-statistics/>

Meri, R., Hutton, J., Farah, R., DiFrancesco, M., Gozman, L. & Horowitz-Kraus, T. (2023). Higher access to screens is related to decreased functional connectivity between neural networks associated with basic attention skills and cognitive control in children. *Child Neuropsychology*, 29(4), 666-685.

Miall, D., & Dobson, T. (2001). Reading hypertext and the experience of literature. *Journal of Digital Information*, 2(1). <https://jodi-ojs-tdl.tdl.org/jodi/article/view/jodi-36>

Pettegree, A., & Der Weduwen, A. (2021). *The library: A fragile history*. Profile Books.

The Reading Agency. (2012). *The library book*. Profile Books.

- Rowe, B., & Levine, D. P. (2006). *A concise introduction to linguistics*. Pearson.
- Rumsey, A. (2016). *When we are no more: How digital memory is shaping our future*. Bloombury Press.
- Said, E. (1994). *Orientalism*. Vintage Books.
- Simonds, M. (2017). *Gutenberg's fingerprint: Paper, pixels and the lasting impressions of books*. ECW Press.
- Smith, E. (2022). *Portable magic: A history of books and their readers*. Allen Lane.
- Thomson, J. (2021). *Book wars: The digital revolution in publishing*. Polity Press.
- Vallejo, I. (2022). *Papyrus: The invention of books in the ancient world*. Hodder & Stoughton.
- Whitehead, C. (2016). *The underground railroad*. Doubleday.
- Wiegel, M., & Gardner, H. (2009). The best of both literacies. *Educational Leadership*, 66(6), 38-41.
- Wolf, M. (2018). *Reader, come home: The reading brain in a digital world*. Harper.