International Journal of Research in Library Science (IJRLS)

ISSN: 2455-104X

DOI: 10.26761/IJRLS.12.2.2026.2100

Volume 12, Issue 2 (April-June) 2026, Page: 101-106, Paper ID: IJRLS-2100

From Scrolling to Deep Reading: Navigating the Digital Shift in Indian Colleges

Dr. Konduru Jamuna

Librarian, Government First Grade College, Devanahalli, Bengaluru Rural, Karnataka, India

jamunakraju@gmail.com

ABSTRACT

The shift from print to digital media has significantly transformed reading practices in higher education. While digital platforms have increased access to information across the world, they have also been associated with reduced attention spans and fragmented learner engagement. Research highlights patterns such as shallow processing, non-linear reading, and reduced memory and ability to recall in digital environments. This paper talks about this shift and proposes strategies to improve comprehension and retention in digital reading environments for both students and librarians.

KEYWORDS: Reading Styles, Strategies in the digital age, Reading goals, Digital Media, Deep Reading, Indian Colleges, Libraries, Educators.

INTRODUCTION

Digital technologies have reshaped how students engage with academic texts, shifting reading from a linear and sustained activity to a more fragmented and screen-based experience. In today's age, a typical reading session may begin with a PDF for an assignment but quickly shifts toward notifications, short-form content, or multiple open tabs, turning focused reading into intermittent scrolling. Students now frequently move between documents and digital stimuli, which can interrupt attention and make it harder to maintain concentration. While digital formats have expanded access to information and introduced flexible, multi-modal ways of learning, they have also changed how readers process and engage with text.

These changes raise important questions about the quality of reading in digital environments. Students may spend significant time interacting with academic content, yet still struggle to retain and recall key ideas. The issue is no longer access to information, but the depth of engagement with it. Understanding how reading behaviour has shifted in digital contexts is therefore essential to improving comprehension and learning outcomes. The following section examines this shift in greater detail, focusing on how digital environments influence reading patterns and information processing and comprehension.

THE SHIFT FROM DEEP READING TO SCANNING

Reading on screens is different from reading on paper. Research shows that when we read digital text, our eyes often follow an "F-shaped" pattern. We read the first few lines, and scan down the page, and rarely go through each line carefully. This works when we are searching for information quickly, but it does not support learning in subjects that require depth and clarity of information.

This behaviour is linked to what researchers call as "shallow processing". Since digital content feels easy to access and revisit, readers tend to download or save that information and assume they can come back to it later instead of fully understanding it in the moment (Delgado et al., 2018; Li & Yan, 2024).

Another challenge is the loss of spatial memory. When reading a physical book, many people remember where information was located on a page. This mental mapping also helps with recalling information. Scrolling removes that structure and turns content into a continuous stream, making it harder to retain information.

These patterns contribute to what is often described as a "screen inferiority effect", where comprehension can be slightly lower on screens than on paper, especially for informational text.

UNDERSTANDING DIGITAL READING BEHAVIOURS

Digital reading is not one single activity. It exists on a range:

- **Surface reading**: skimming, scanning, casual browsing
- **Navigational reading**: moving between sections or sources with a purpose
- **Deep reading**: careful analysis, reflection, and note-making

Most students operate in surface mode by default. Skimming is useful when deciding whether something is relevant, but it becomes a problem when it replaces deeper reading entirely.

Digital environments also allow for non-linear reading, where readers move between links, media, and documents. This can make learning richer, but it also increases mental effort and can break the concentration flow. To manage such large volumes of information, students need to evaluate and combine ideas from multiple sources carefully.

What the Research Shows

Recent studies present a balanced view of digital reading.

A systematic review of 88 studies found that print has an advantage for understanding informational texts, especially among older students (Hare, 2024).

A 2026 analysis comparing devices found that comprehension tends to be lower on smartphones and computers, particularly when scrolling is involved. Tablets and e-readers perform closer to print (Clinton-Lisell, 2026).

Another meta-analysis found no overall difference between print and digital reading, but highlighted that digital reading becomes less effective when tasks require sustained attention (Li & Yan, 2024).

At the same time, digital formats offer important benefits such as accessibility, flexibility, and support for different types of learners.

The conclusion is clear: digital reading is not inherently worse, but it requires stronger habits and better strategies.

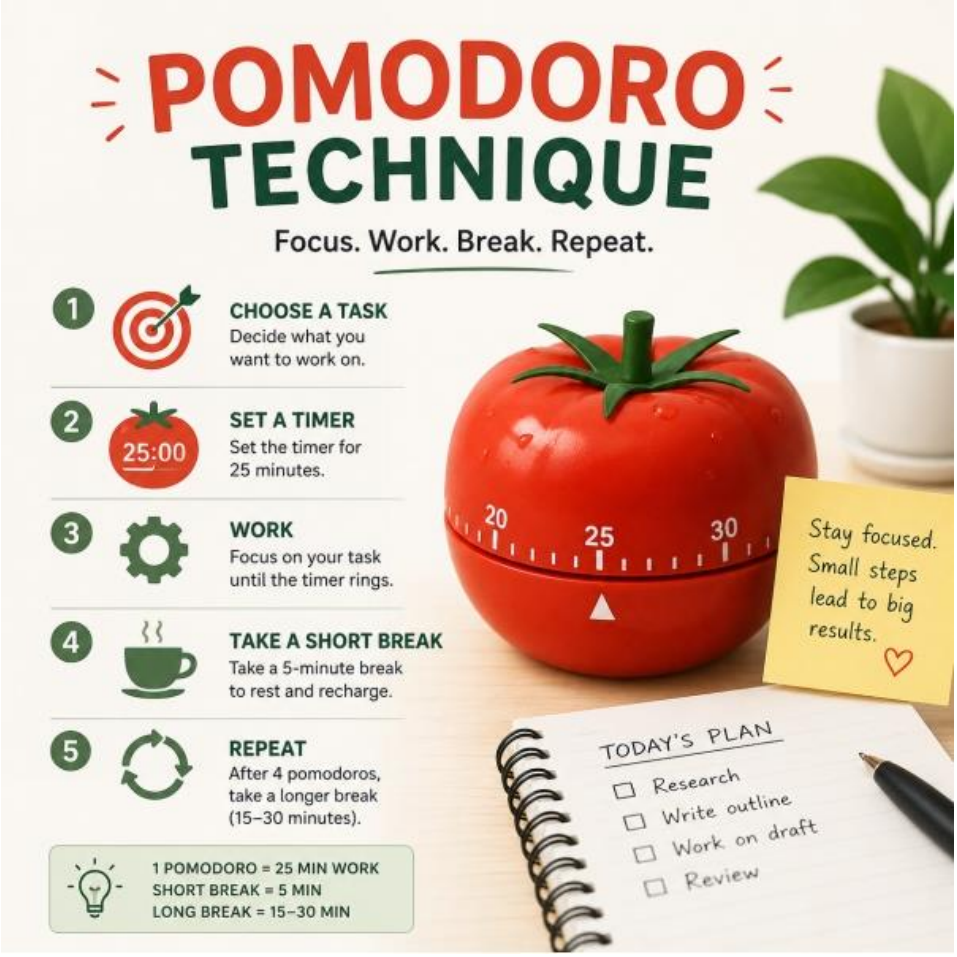
PRACTICAL STRATEGIES AND TECHNIQUES FOR BETTER DIGITAL READING

The gap in understanding can be reduced with simple but intentional practices.

1. Use the Pomodoro Method

One of the most effective ways to improve focus is to break reading into timed intervals. Students can read for **25 minutes with complete focus**, followed by a **5-minute break**.

This method helps reduce fatigue and makes large reading tasks feel manageable. For lengthy chapters or journal articles, 3 to 4 cycles can be far more effective than one long, distracted session.



2. SQ3R method (Survey, Question, Read, Recite, Review)

This method, developed by Francis P. Robinson, can be especially effective for digital reading, where distractions and scrolling often reduce focus. Students can survey by quickly scanning headings and layout on a screen, question by noting prompts in a note's app or comment tool, and read with purpose using features like highlights or focus mode. The recite step can be done by briefly closing the document and recalling key ideas, while review can involve revisiting highlights or annotations. Used this way, SQ3R helps turn digital reading from passive scrolling into structured, intentional learning.

3. Preview Before Reading

Before diving into the text, spend 2 to 3 minutes scanning the headings, subheadings, highlighted terms, and summaries.

This creates a mental framework for what is coming and improves comprehension because the brain already has a structure to fit the information into.

4. Active Annotation

Use highlighting, comments, and notes while reading. This keeps you engaged and improves understanding (Máth et al., 2024).

Students should not treat PDFs as untouchable documents. Mark them up just as you would a textbook.

5. Pause and Recall

After each section, stop and summarise what you have read in your own words.

A highly effective technique is to close the document and write down **three things you remember**. This retrieval practice strengthens memory and helps identify what has not yet been understood.

6. Reduce Distractions

Turn off notifications and use focus or reading modes.

A practical trick for students is the **two-device rule**: use one device only for reading and keep messaging or social media apps on another device. If this is not possible, log out of distracting apps during study time.

7. Recreate Structure

Use headings, bookmarks, or notes to organise what you read. When possible, choose formats that show clear page structure.

This helps rebuild the spatial memory that is often lost while scrolling.

8. Set Clear Goals

Before starting, ask yourself:

What am I trying to learn from this reading?

Reading with a purpose improves focus and retention.

For example:

- Understand the methodology
- Identify the author's main argument
- Find examples for an assignment

9. Adjust Your Screen

Change the font size, brightness, or colour settings to reduce strain.

Comfortable reading conditions support longer attention spans and reduce the tendency to stop midway.

10. Explain It Out Loud

One of the simplest but most powerful methods is to explain what you read to someone else, or even to yourself.

If you cannot explain it simply, you have probably only skimmed it.

This technique converts reading into understanding.

THE ROLE OF LIBRARIES AND EDUCATORS

Libraries today play an important role in shaping how students read. They are not just sources of information but also spaces for learning how to engage with that information.

They can support students by:

- Teaching digital reading and note-making strategies
- Demonstrating how to evaluate sources critically
- Providing access to platforms that support structured reading

- Encouraging goal-based reading practices

As digital content continues to grow, there is also a need to promote better design in reading platforms so that they support understanding rather than distraction.

From Habit to Skill

Reading effectively in a digital environment is not just about discipline. It is also about intention.

Instead of vague goals like reading more, students benefit from specific actions such as:

- Reading full articles instead of only summaries
- Keeping a simple reading journal
- Discussing readings with peers
- Using focused reading techniques consistently

Clear goals and consistent practice help turn reading into a skill rather than an occasional activity (Hare, 2024).

CONCLUSION

The move from print to digital reading is a major shift in how we learn. It does not reduce our ability to understand. Instead, it changes the way we interact with information.

Screens themselves are not the problem. The habits they encourage, such as skimming, multitasking, and distraction, are what affect comprehension.

The solution is to bring focus and intention into digital reading.

For students, this means developing better reading habits.

For educators and libraries, it means teaching how to read in digital environments.

In a world where information is easy to access, the real skill lies in paying attention and understanding it deeply.

REFERENCES

[1] Clinton-Lisell, V. (2026). *Decoding digital reading: A network meta-analysis of comprehension across devices.* https://link.springer.com/article/10.1007/s10639-025-13843-8

[2] Delgado, P., et al. (2018). *Don't throw away your printed books: A meta-analysis on reading media and comprehension* https://doi.org/10.1016/j.edurev.2018.09.003

[3] Hare, S. (2024). *Children's reading outcomes in digital and print mediums: A systematic review*. https://doi.org/10.1111/1467-9817.12461

[4[Li, M., & Yan, J. (2024). *Paper vs. digital reading: A meta-analysis.* https://doi.org/10.1016/j.teler.2024.100142

[5] Máth, J., et al. (2024). *The effect of reading strategy use on online reading comprehension*. https://doi.org/10.1016/j.heliyon.2024.e24281

[16] Kucirkova, N., et al. (2024). *Reading in the Digital Age*. https://doi.org/10.18261/njdl.18.4.6

[7] Bruggink, M., et al. (2025). *Theories of Digital Reading*. https://link.springer.com/chapter/10.1007/978-3-031-75121-9_1

