

Cultivating Sustained Deep Reading Habits among University Readers through Flow Experience: A Reflective Analysis

Tianling Guan^{1,a}, Zhong Li^{2,b,*}

¹Library, Guangdong Ocean University, Yangjiang, China

²Library, South China University of Technology, Guangzhou, China

^agtl@gdou.edu.cn, ^b503232803@qq.com

*Corresponding author

Keywords: Deep Reading, Information Age, University Readers, Flow Experience, Reading Habits

Abstract: This article investigates the challenges university readers face in practicing deep reading. Grounded in the mechanisms of flow experience, it proposes innovative strategies to cultivate sustained deep reading habits. The study analyzes factors impeding deep reading in the information age and synthesizes prior scholarly contributions to the field. By applying the principles of flow theory, it offers a reflective analysis across four critical dimensions: the cognitive recognition of deep reading, the development of dedicated reading spaces, the establishment of clear reading goals, and the implementation of feedback mechanisms. Ultimately, this research presents a suite of strategies designed to overcome these challenges and foster robust deep reading habits among university readers.

1. Introduction

"Deep reading" is an active, engaged reading process characterized by intensive and meticulous engagement with texts to enrich one's knowledge and develop critical thinking^[1]. It entails not only a profound understanding of the author's ideas and emotions but also the capacity for critical thinking that transcends the literal meaning of the text, holding significant importance for the holistic education of university students. In 2020, the relevant department issued the Guidelines on Promoting National Reading, emphasizing the need to "guide the public in enhancing reading interest, cultivating reading habits, and improving reading skills." The objective is to strengthen ideological, ethical, scientific, and cultural competencies, fostering well-rounded socialist builders and successors who are developed morally, intellectually, physically, aesthetically, and labor-wise, thereby providing robust spiritual motivation and intellectual support for realizing the Chinese Dream. As key contributors and successors to China's socialist cause, university students should not only focus on quantitative improvements in reading but also prioritize reading quality and effectiveness. Guiding them toward deep reading is essential for advancing social civilization, establishing lifelong reading habits, and achieving comprehensive personal development^[2].

However, in today's information age, superficial reading behaviors are prevalent, leading to the

marginalization of deep reading. According to the 21st National Reading Survey Report (2023), 80.3% of Chinese adults engaged in digital reading, a 0.2 percentage point increase from 2022 ^[3]. This indicates that digital platform-based reading has become a mainstream practice. Digital reading, which relies on electronic devices to access online information, offers advantages such as rapid acquisition and convenience, meeting readers' needs for quick information access and stress relief ^[4]. Moreover, this screen-based mode of reading often features recreational and entertainment-oriented characteristics, aligning with the fast-paced lifestyle of the new media era. Over time, this trend inhibits the development of deep-thinking habits, making it difficult for readers to immerse themselves in reading. Instead, they tend toward casual consumption of content, fostering a mindset of instant gratification that can lead to intellectual inertia and stagnation in academic research^[2].

From the perspective of university libraries, this study centers on optimizing readers' outcomes by applying the principles of flow experience. It proposes strategic initiatives across four dimensions: cognitive understanding of deep reading, construction of dedicated reading spaces, identification of purposeful reading goals, and implementation of effective feedback mechanisms. These strategies aim to facilitate immersive deep reading experiences, cultivate sustainable deep reading habits, and holistically enhance critical thinking and innovation capabilities. Ultimately, this approach seeks to instill lifelong reading habits, providing strong talent support for the nation's high-quality development.

2. The Definition of Flow Experience

Flow experience is a concept first introduced in the 1970s by Hungarian-American psychologist Mihaly Csikszentmihalyi. It occurs when an individual engages in an activity with clear goals and a level of challenge that matches their skill level, leading to a state of highly focused attention and self-forgetfulness ^[5]. Flow theory is widely observed in daily contexts such as writing, artistic creation, software development, and gaming. During these activities, individuals concentrate intensely on mentally demanding tasks, producing high-quality and efficient outcomes that yield satisfaction while simultaneously entering a state of mental and physical enjoyment.

At present, numerous studies focus on immersive reading experiences, which differ in emphasis from flow experiences. Immersive experiences often prioritize the creation of virtual reality (VR) environments, enabling readers to interpret and encode information in a manner that closely simulates reality. For example, in 2018, during World Book Day, the Ningbo Library launched a "When Literature Meets VR" viewing activity, offering readers VR film experiences based on literary works ^[6]. Similarly, the National Library of China developed a VR cultural resource on the Yongle Encyclopedia, using virtual reality technology to reconstruct historical scenes and narratives from ancient texts^[7]. Xu proposed that the metaverse—enabled by 3D technologies such as virtual reality, augmented reality, mixed reality, extended reality, and digital twinning—could allow individuals to transcend time and space, such as by appearing in ancient Athens to engage in dialogue with Socrates^[8]. These virtual reality scenes primarily stimulate readers through visual and auditory senses, emphasizing sensory engagement rather than active intellectual involvement. Readers often passively receive information presented in virtual space, with limited connection to their personal goals. Moreover, creating such VR environments tends to involve high costs, technical complexity, and often results in suboptimal user experiences. Once university readers graduate and enter society, they typically disengage from such specialized reading setups, highlighting the lack of sustainability in this approach.

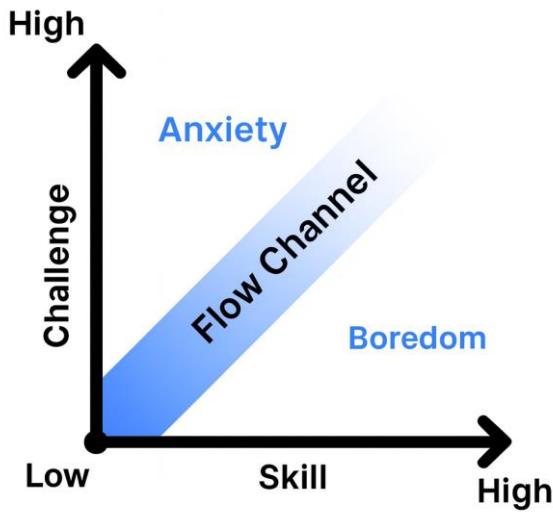


Figure 1: Flow Experience Model Diagram^[9]

As shown in Figure 1, readers possess varying levels of reading skills, and achieving a flow experience requires the challenge level of the task to be appropriately matched to their individual capabilities. When the task difficulty falls below a reader's skill level, the information and knowledge acquired fail to generate intrinsic satisfaction or a sense of accomplishment, often resulting in boredom. Conversely, when the challenge exceeds the reader's proficiency, it tends to evoke frustration and anxiety, leading to aversion toward the reading activity.

3. The Necessity of In-depth Reading for College Readers in the Information Age

3.1. Deep Reading Helps College Readers Acquire Academic Knowledge

Deep reading serves as a crucial pathway to achieving a profound command of academic knowledge. Academic literature, replete with specialized terminology and theoretical concepts, demands sustained concentration and deliberate contemplation—capacities that are difficult to cultivate through today's fast-paced and fragmented reading practices. The realization of the value inherent in academic knowledge is contingent upon users' engagement in deep reading.

As an extension of knowledge towards refinement, depth, and specialization, deep reading of academic content capitalizes on the inherent interconnectedness and layered structure of scholarly journal articles. This practice fosters a stronger attachment and identification with the journal brand among users, thereby enhancing reading engagement and loyalty^[10]. Through deep reading, readers consistently invest their focus and patience, analyzing and comprehending the text meticulously. By delving into the author's arguments, evidence, and the underlying logical reasoning, they achieve a comprehensive grasp of fundamental theories and research methodologies pertinent to academic issues, ultimately establishing a solid knowledge foundation.

3.2. Deep Reading Helps College Readers Develop Independent Thinking

Deep reading cultivates readers' capacity for independent judgment and cognitive divergence. Guiding students toward deep, reflective reading serves as a vital means of shaping personal character and nurturing autonomous thinking^[11]. Throughout the deep reading process, readers are required not only to comprehend the author's perspectives but also to evaluate and critique them—analyzing the

coherence of arguments, the sufficiency of evidence, and the validity of conclusions. This rigorous engagement enables them to effectively identify logical fallacies and biases within texts, thereby developing a learning system that aligns with their academic discipline and personal growth while avoiding uncritical acceptance of authoritative claims.

Building on the formation of independent perspectives, readers learn to synthesize knowledge and theories across disparate fields. Through intellectual branching-out, they generate novel research questions and innovative solutions, uncovering scholarly achievements with broader societal and economic benefits. For instance, AI algorithms emerged precisely from the integration of biological principles and mathematical disciplines, propelling technological innovation. Artificial intelligence has now permeated diverse sectors of society, elevating production paradigms to new levels and thereby accelerating the advancement of human civilization.

3.3. Deep Reading Helps College Readers Enhance Their Cultural Literacy

Deep reading serves as a vital method for cultivating cultural literacy. It enables readers to effectively assimilate knowledge and perspectives from canonical texts, fostering a more sound intellectual character and broader mental horizons. This process facilitates the establishment of effective and robust cognitive schemas, thereby enhancing one's overall cultural literacy.

Firstly, sustained deep reading contributes to a reader's cultural accumulation. Classic works contain not only profound ideas and philosophies but also display a rich tapestry of cultural contexts and landscapes. By engaging in deep reading of classical literature across philosophy, history, and other disciplines, readers gain a deep understanding of the quintessence of cultures from different historical periods.

Secondly, deep reading aids in the development of moral reasoning and values. Literary classics and philosophical writings frequently explore issues concerning human morality, ethics, and value systems. Through deep reading, readers accurately comprehend the intellectual viewpoints of historical literary figures and philosophers. This engagement effectively helps shape their own moral frameworks, stimulates recognition and acceptance of social responsibility, and cultivates noble sentiments and character.

4. The Predicament of Deep Reading for College Readers in the Information Age

4.1. Reading Subject

University readers exhibit a deficient understanding of the concept of deep reading. Firstly, deep reading constitutes a sustained, focused effort to analyze a text's structure, themes, authorial intent, and contextual background. However, many readers frequently alternate between deep and superficial reading during their engagement with texts, often gravitating towards disordered, fragmented, or even misleading forms of superficial reading. This cursory approach prevents them from truly grasping the essence of knowledge.

Secondly, effective deep reading requires clear objectives, a structured plan, and efficient methods for notetaking and reflection. Currently, a significant number of readers in general universities have not mastered the specific techniques and methodologies of deep reading. Compounding this issue, educational models often lack dedicated training in these skills, leaving readers ill-equipped to tackle academic knowledge and, consequently, undermining their confidence.

Finally, deep reading typically demands substantial investments of time and cognitive effort, with significant rewards manifesting only after prolonged practice. However, under the pressures of demanding academic schedules and extracurricular commitments, university readers often prefer reading behaviors that are short-cycle and offer immediate relief from personal anxiety. This

inclination leads them to pursue direct learning outcomes and short-term gratification, making them reluctant to devote time to the long-return cycle characteristic of deep reading.

4.2. Reading Environment

Environmental factors exert a significant and non-negligible influence on deep reading, particularly within the academic learning and research processes of university readers.

Firstly, the comfort of the physical environment directly shapes the effectiveness of deep reading. As learning and reading constitute the core function of libraries, maintaining "quietness" remains a fundamental principle to be observed^[12]. Noisy study spaces, inadequate lighting, or uncomfortable seating often serve as sources of distraction, hindering students' ability to concentrate fully on deep reading. Research indicates that a suitable environment mitigates external interruptions, thereby aiding readers in focusing their attention more effectively and consequently enhancing both reading efficiency and comprehension.

Secondly, the technological environment impacts engagement in deep reading. Fragmentary, superficial reading is a product of the complex interplay between the broader social context and the prevailing information technology environment^[13]. A reading space saturated with digital technologies readily induces superficial reading behaviors. For instance, constant notifications from smartphones and social media platforms expose readers to a continuous stream of external information, frequently interrupting deep reading sessions and fragmenting their concentration.

Finally, the cultural environment and academic atmosphere can produce effects of social facilitation on deep reading. As individuals are products of their social environment, readers within a culture that values academic inquiry and reading are generally encouraged to engage in deep reading and reflective thinking, thereby enhancing its outcomes.

4.3. Read the Information

The information age, characterized by the volume, variable quality, and fragmentation of information, presents significant challenges to deep reading, substantially impacting associated behaviors. Firstly, the development of the internet and the rise of social media have led to an exponential increase in both the quantity and update speed of information, resulting in a state of information overload. This phenomenon significantly increases the cognitive burden on readers during information processing.

Secondly, the quality of available information is highly inconsistent. High-quality information is built upon a reliable knowledge framework; it is typically well-structured, logically sound, and substantively rich, thereby stimulating readers' interest and intellectual curiosity. In contrast, low-quality information often lacks a scientific basis and is characterized by partiality and bias, which can mislead readers' understanding.

Finally, the issue of information fragmentation is becoming increasingly severe. Modern information is often presented in fragmented formats—such as short videos, infographics, and microblog posts—that deliver content in concise, condensed forms. These formats typically lack systematic organization and depth, ultimately impeding the development of systematic thinking and even reinforcing cognitive patterns associated with superficial reading.

5. Innovative Strategies for Cultivating Deep Reading Habits Among College Readers in the Information Age

5.1. Cognitive Deep Reading

Concept serves as the forerunner of practice. It is essential for university readers to comprehend the concept and value of deep reading, objectively analyze their existing reading challenges and areas for improvement, and cultivate a self-motivated desire for deep engagement with texts. Libraries can promote this awareness through multi-channel online and offline initiatives.

For online outreach, platforms such as Douyin and official WeChat accounts can disseminate engaging short videos and image-rich articles that advocate for deep reading. Partnerships with news media outlets can also be established to publish relevant reports and feature articles, leveraging the credibility and reach of these platforms to enhance public recognition and appreciation of deep reading.

Offline, libraries can organize book clubs or discussion forums, inviting scholars and experts to share insights and practical experiences related to deep reading. Alternatively, arranging for specialists to provide personalized reading strategy guidance offers readers valuable learning resources, bolsters their confidence, and inspires a proactive and positive mindset.

Through these multifaceted promotion and outreach efforts, readers can be guided to understand the concept and benefits of deep reading, empowering them to proactively develop and implement personalized deep reading strategies. This, in turn, elevates their knowledge proficiency and enhances their cognitive abilities.

5.2. Construction of Deep Reading Space

Deep reading, as an active cognitive process, necessitates a supportive and immersive literary environment. Within the context of today's fast-paced society, where mounting life pressures and diminishing emotional connections prevail, individuals exhibit a strong desire for interior spaces that offer meaningful emotional experiences^[14].

Firstly, the design of a reading-conducive environment can enhance readers' sensory engagement—including olfactory, visual, and tactile elements. The aesthetics and overall atmosphere of such a space can stimulate positive psychological anticipation, transforming reading from a mere task into an enjoyable activity, thereby facilitating a state of flow during deep reading.

Secondly, a space intended to support deep reading and flow experience should actively shield readers from external distractions. Superficial reading, often mediated by technological devices such as news feeds and social media content, tends to be recreational and diverting in nature. When environmental conditions permit competition between deep and shallow reading behaviors, the latter tends to prevail, thereby undermining sustained deep reading.

To mitigate this, libraries may consider implementing measures such as disabling internet access and power outlets in designated areas, providing personal storage lockers at the entrance, or installing signal jammers within the space. These physical interventions help isolate readers from the intrusive flow of digital information, thereby creating conditions more favorable to deep reading and the attainment of flow experience.

5.3. Look for Deep Reading Targets

Establishing clear reading goals and formulating corresponding challenge strategies. Guided by the mechanisms of flow experience, setting well-defined objectives provides readers with focus and direction, enabling them to concentrate their energy and resources to complete tasks both efficiently

and effectively. For long-term or highly challenging reading goals, these can be broken down into a series of manageable tasks calibrated to match the reader's current ability level.

On one hand, libraries can implement advanced reading recommendation systems. These systems primarily utilize the feature extraction capabilities of Convolutional Neural Networks (CNNs) to mine semantic tags from book thematic information and calculate reader preferences. Subsequently, multi-layer neural networks transform this information into reader feature vectors and book feature vectors. By computing vector similarity, books with the highest scores are recommended to the reader^[15]. This personalized approach helps uncover high-quality resources relevant to the reader's needs, thereby stimulating reading interest.

On the other hand, readers themselves can tailor reading goals based on their academic requirements and career aspirations. By decomposing these overarching goals into specific, multi-stage challenges, they can manage their time and energy more effectively. This process of progressively completing tasks enables continuous improvement of personal competency.

5.4. Read the Immediate Feedback Deeply

Immediate feedback constitutes a core element of the flow experience in deep reading. Such real-time feedback allows readers to quickly gauge their performance, adjust their approach promptly, and maintain focused control over the reading process. This mechanism of immediate response facilitates continuous refinement and optimization of one's engagement, thereby enhancing both the sense of involvement and accomplishment.

Upon completing a phase of reading challenges, readers should engage in immediate self-assessment to analyze difficulties and shortcomings encountered during the process. This enables targeted adjustments, preventing divergence from learning objectives. Libraries can promote the concept of immediate feedback in deep reading through multiple channels, embedding this principle into readers' awareness and encouraging its consistent practice.

For instance, readers may conduct self-reflection and synthesis by compiling reading journals, summarizing key points, and critiquing their own comprehension after each reading session—identifying and documenting areas for improvement. Alternatively, participation in reading groups, study circles, or discussions with mentors and peers provides interactive feedback that reveals blind spots in understanding. Furthermore, utilizing assessment tools such as online quizzes and reading comprehension exercises helps evaluate knowledge mastery and supports timely adaptation of learning plans.

By emphasizing the incremental achievements gained through navigating reading challenges, feedback generates a profound sense of satisfaction. This reinforces motivation for continued effort and promotes ongoing refinement of reading behaviors and strategies.

6. Conclusion

This study addresses the challenge of cultivating sustained deep reading habits among university students in the information age and proposes a systematic intervention strategy based on flow experience theory. It emphasizes that deep reading is essential for academic knowledge acquisition, independent critical thinking, and the enhancement of cultural literacy, yet its development is hindered by prevalent superficial reading behaviors, environmental distractions, and information overload. Accordingly, the paper constructs a flow-centered intervention framework across four dimensions: cognitive awareness, spatial construction, goal-setting, and immediate feedback.

Through the coordinated application of cognitive guidance, immersive spatial design, personalized goal decomposition, and real-time feedback mechanisms, this framework aims to facilitate readers' entry into and maintenance of a focused and pleasurable state of deep reading. Such an approach not

only helps students overcome fragmented reading tendencies and establish sustainable deep reading habits, but also lays a solid foundation for the lifelong development of their critical thinking and innovative capacities, thereby better preparing them to navigate the challenges of a knowledge-driven society.

References

- [1] Wang, X., & Yu, C. (2021). *Research on deep reading promotion in libraries under the omnimedia environment*. *Journal of Documentation and Data*, 3(4), 84–95.
- [2] Zhu, J. (2021). *Reading salon: One of the best ways for public libraries to promote deep reading*. *New Century Library*, (11), 21–25.
- [3] Xinhua News Agency. (2024, April 23). *Results of the 21st national reading survey released*. Retrieved May 27, 2024, from https://www.gov.cn/yaowen/liebiao/202404/content_6947066.htm
- [4] Chen, A. (2020). *Practice and reflection on "deep reading" promotion activities in university libraries in the new media era: A case study of Jiangsu College of Nursing Library*. *Library Work and Study*, (S1), 23–28.
- [5] Sun, D., & Bai, L. (2022). *The dimension and path of red archives inheriting the red gene from the perspective of flow theory*. *Archival Science Bulletin*, (01), 15–22.
- [6] Bai, L., & Guo, B. (2019). *Enlightenment of reading variety shows on immersive reading activities in public libraries*. *Library Research and Work*, (05), 60–63.
- [7] Luo, Q., & Long, Y. (2024). *Construction and optimization strategies of library immersive reading promotion model: A case study of Changsha Library*. *Library Work and Study*, (04), 98–104.
- [8] Xu, S. (2022). *Reading and publishing in the metaverse era*. *Science-Technology & Publication*, (04), 5–10.
- [9] Wang, Y. (2023). *Allow yourself to be yourself* (C. Xu, Trans.). *Democracy and Construction Press*.
- [10] Zhao, Q. (2020). *Construction of precise dissemination platforms and content recommendation for academic journals*. *China Publishing Journal*, (05), 23–27.
- [11] Zhang, L. (2015). *Analysis of contemporary university students' reading behaviors and countermeasures*. *Library and Information Service*, 59(S2), 105–107.
- [12] Shen, R. (2022). *Research on library space reconstruction based on the urban third space*. *New Century Library*, (04), 54–58.
- [13] Liu, C., Gong, H., & Cao, G. (2021). *The formation mechanism of users' information anxiety behavior in the context of fragmented reading: An exploratory study based on grounded theory*. *Documentation, Information & Knowledge*, 38(3), 144–153.
- [14] Li, X. (2018). *Research on the application of emotional design in interior space*. *Industrial Design*, (08), 103–104.
- [15] Li, X., Ying, S., & Zhou, Y. (2019). *Research on network book recommendation model based on user interest migration*. *Research on Library Science*, (22), 56–65.