ANALYSIS OF THE UTILIZATION OF MAIN MATERIAL BOOKS AND VIRTUAL READING ROOMS TO ENHANCE THE ACADEMIC LITERACY OF NONPENDAS STUDENTS AT THE UNIVERSITAS TERBUKA

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Abstract

Previous studies on distance education at open universities have generally examined the role of Main Material Books (Buku Materi Pokok/BMP) and the Virtual Reading Room (Ruang Baca Virtual/RBV) separately, without analyzing their integrative potential. This study addresses that gap by investigating how the combined use of BMP and RBV can systematically strengthen the academic literacy of non-education program (NonPendas) students at Universitas Terbuka (UT). Using a descriptive qualitative approach, the research synthesizes 28 secondary documents published between 2018 and 2024, including peer-reviewed journal articles, institutional reports, and digital education publications. Thematic content analysis, guided by academic literacy theory, reveals that BMP provides a structured and curriculum-based foundation for systematic reading and writing, while RBV enhances digital literacy, information evaluation, and collaborative learning through diverse scholarly resources. Their integration not only supports self-directed learning but also cultivates critical and reflective skills essential for success in online higher education. Conceptually, this study contributes a blended academic literacy model that bridges print-based structure and digital exploration. Practically, it offers recommendations for embedding RBV resources within BMP modules, enhancing tutors' roles as digital literacy facilitators, and strengthening digital literacy training. However, as the study relies exclusively on secondary sources, the findings remain conceptual. Future empirical research is needed to validate the effectiveness of the BMP–RBV integration in diverse distance education contexts.

Keywords**:** Main Material Books, Virtual Reading Room, Academic Literacy, Distance Learning, NonPendas Students

1 INTRODUCTION

The rapid development of information and communication technology has transformed higher education, particularly in the context of distance learning. As Indonesia's pioneer of open and distance education, Universitas Terbuka (UT) continues to innovate in providing adaptive and inclusive learning resources. Two key resources are the Main Material Books (Buku Materi Pokok/BMP), which serve as structured and curriculum-based learning guides, and the Virtual Reading Room (Ruang Baca Virtual/RBV), a digital library that offers access to scholarly references, e-books, and interactive forums. Both resources are essential in supporting the

independent learning needs of non-education program (NonPendas) students, who often face challenges related to limited study time, employment responsibilities, and geographical constraints in remote or disadvantaged (3T) regions.

Previous studies have examined BMP and RBV independently. For example, Widodo et al. (2025) highlighted the structured pedagogical value of BMP in fostering systematic literacy, while Parry and Shrestha (2023) emphasized the role of digital libraries such as RBV in enhancing academic performance in open universities. Similarly, Franco and Bidarra (2023) stressed the importance of RBV in promoting reflective and collaborative academic literacy, and Amirtharaj et al. (2023) demonstrated the motivational effects of interactive e-books for distance learners. However, these studies generally focused on either BMP or RBV in isolation, without exploring how their integration can systematically strengthen students' academic literacy skills. This gap in the literature underscores the need for research that conceptualizes BMP and RBV not as separate tools but as complementary components of a blended academic literacy model.

A literature map of prior studies (Table 1) illustrates this gap. Most existing research either concentrates on the pedagogical functions of BMP or the digital affordances of RBV, with limited attention to their synergy in shaping holistic academic literacy.

Table 1. Positioning of Previous Studies on BMP, RBV, and Academic Literacy

Study	Focus Area	Key Contribution	Limitation
Widodo et al. (2025)	BMP	Structured conceptual literacy	Ignores digital integration
Parry & Shrestha (2023)	RBV	Academic performance in digital libraries	No link to print-based BMP
Parry & Shrestha (2023)	RBV	Academic performance in digital libraries	No link to print-based BMP
Franco & Bidarra (2023)	RBV	Reflective and collaborative literacy	Limited to online contexts
Amirtharaj et al. (2023)	Digital e-books	Motivation and comprehension	Not connected to UT's BMP–RBV model

Following the table, **Figure 1** provides a literature map that visually illustrates the relationships among these studies. Research on BMP (Widodo et al., 2025) emphasizes conceptual structure, while studies on RBV (Parry & Shrestha, 2023; Franco & Bidarra, 2023) highlight digital access and reflective learning. Additionally, research on interactive e-books (Amirtharaj et al., 2023) supports the role of digital resources in enhancing motivation and comprehension. However, as the map indicates, these studies converge on a notable gap: the absence of research on the **integration of BMP and RBV** as complementary tools for strengthening academic literacy in the context of open and distance learning.

Figure 1. Literature map showing the positioning of previous studies on BMP and RBV in relation to academic literacy

By presenting the table and the literature map consecutively, this study positions itself within the existing body of knowledge while also establishing its novelty. The integrative perspective proposed here addresses a critical gap in the literature and highlights the urgent need for innovative learning models that combine structured print-based foundations with dynamic digital resources to support NonPendas students at Universitas Terbuka.

2 METHODOLOGY

This study employed a descriptive qualitative approach aimed at gaining an in-depth understanding of the utilization of Main Material Books (Buku Materi Pokok/BMP) and the Virtual Reading Room (Ruang Baca Virtual/RBV) in enhancing the academic literacy of NonPendas students at the Open University (Universitas Terbuka/UT). This approach was chosen because it enables the contextual and comprehensive explanation of phenomena without relying on statistical measurement.

The data used in this study were secondary in nature, obtained from official institutional documents, evaluation reports from the Open University, national and international scholarly journal articles, as well as other publications relevant to the themes of distance education and academic literacy. Data collection was conducted through a document review process by searching academic databases such as ScienceDirect, SpringerLink, DOAJ, and the UT institutional repository.

The criteria for document selection included:

1 **Thematic relevance**: documents must contain information on BMP, RBV, academic literacy, or distance education.

2 **Credible sources**: priority was given to indexed journals, official institutional reports, and reputable academic publications.
3 **Publication year**: limited to the period from 2018 to 2025 to reflect the most current developments in digital education.

In total, approximately 28 documents were analyzed, comprising 12 scholarly journal articles, 6 annual reports and academic guidelines from the Open University, 4 open education e-books, and 6 other publications such as conference proceedings and literature reviews.

To ensure the validity of the secondary data, the researcher applied source triangulation techniques, which involved cross-checking information from various types of publications to confirm content consistency and relevance. Only documents with clear and verifiable author or institutional attribution were included.

Data analysis was conducted using **thematic content analysis**, which followed a systematic process consisting of several steps. First, the researcher conducted **familiarization** by repeatedly reading the documents to capture their main ideas. Second, **initial codes** were generated by identifying meaningful segments related to BMP, RBV, and academic literacy (e.g., *"BMP as structured foundation," "RBV supports collaboration," "digital literacy gap"*). Third, these codes were **clustered into preliminary themes**, such as the role of BMP in academic literacy or the benefits of RBV in digital learning. Fourth, the themes were **reviewed and refined** to ensure coherence and eliminate overlap. Fifth, each theme was **defined and named** clearly (e.g., *Role of BMP in Academic Literacy, RBV as Digital Literacy Enabler, Integration of BMP–RBV, Implementation Challenges, Strategic Implications*). Finally, the findings were **reported** by linking the themes to academic literacy theory and digital pedagogy, supported by tables and conceptual models.

The interpretation process was therefore conducted inductively and contextually, ensuring that patterns and conceptual relationships were grounded in the data. This study was non-interventional and did not involve direct participants, yet adhered to ethical research principles, including proper citation of all sources and respect for copyright.

3 FINDINGS AND DISCUSSION

The following is an analysis of the utilization of Basic Teaching Materials and the Virtual Reading Room to improve the academic literacy of non-education program students at Universitas Terbuka.

3.1 The Role of Main Material Books (BMP) in Academic Literacy

The Main Material Book (BMP) is the primary learning resource for non-education students at Universitas Terbuka, who often face time constraints due to work and family responsibilities. BMP plays a crucial role in enhancing academic literacy by fostering skills in reading scholarly texts, analyzing arguments, and producing critical writing. Its systematic structure provides a solid foundation for independent learning and consistent outcomes.

Despite its importance, BMP remains limited by its static and non-interactive format, which does not always meet diverse learning needs. To address this, BMP should evolve into a more dynamic digital format with integrated visual, audio, and multimedia features. Combining BMP with the Virtual Reading Room (RBV) and other digital platforms is therefore essential to adapt to students' changing learning behaviors and technological demands.

With continuous innovation, BMP can be transformed into a hybrid medium that is engaging, adaptive, and effective in strengthening academic literacy while preparing students to navigate the challenges of the digital era.

3.2 The Benefits of the Virtual Reading Room (RBV) as a Digital Literacy Enabler

The **Virtual Reading Room (RBV)** is a strategic innovation of Universitas Terbuka's distance education system that strengthens students' **digital literacy** and academic learning. As a digital library, RBV provides access to e-books, journals, instructional videos, and discussion forums, allowing NonPendas students—who often balance work, family, and study—to learn flexibly and independently. Its role extends beyond access to information, fostering essential academic skills such as evaluating source credibility, analyzing complex texts, and applying information literacy in a sustainable manner.

RBV also enriches the **social dimension of learning**. Through online discussions, students collaborate, debate readings, and build shared understanding, which promotes critical and reflective thinking within a virtual academic community. This aligns with contemporary views that academic literacy development requires not only individual reading skills but also collaborative engagement and reflection. Studies further confirm that interactive digital reading environments can significantly improve academic performance in open education contexts.

Beyond access, RBV encourages students to become **active explorers** of knowledge rather than passive recipients. By enabling exploratory learning habits, RBV fosters adaptability and prepares students for the demands of digital academic literacy. However, research highlights

that while e-books enhance surface-level comprehension, print materials may still support deeper understanding. Thus, RBV works best when **integrated with other media** such as the Main Material Books (BMP), ensuring both breadth and depth in student learning.

Looking forward, RBV has the potential to evolve into a **comprehensive digital literacy ecosystem**. With tools such as annotation features, intelligent search, and integration with other platforms, it can support multimodal and adaptive learning experiences. In this way, RBV becomes more than a repository of resources—it transforms into a dynamic learning environment that facilitates access, collaboration, and the continuous creation of academic knowledge.

3.3 Synthesis of the Roles of BMP and RBV in Academic Literacy

The BMP and RBV play complementary roles in developing students' academic literacy. The table below presents a functional comparison of the two:

Academic Literacy Aspect	Role of BMP	Role of RBV
Critical Reading	Provides structured conceptual texts	Access to current and diverse scholarly sources
Academic Writing	Writing guidelines, argumentative exercises	Discussion forums and digital reference sources
Information Evaluation	Analysis of scientific narratives in the material	Exploration of journals, e-books, and source validation
Independent Learning	Scheduling and self-study guidelines	Flexible access and independent exploration

The synergy between the two has proven to enrich students' learning experiences. Technical integrations, such as embedding hyperlinks from the BMP digital module to the RBV and assigning RBV-based tasks, are recommended for broader implementation.

3.4 Challenges of Implementation and Institutional Barriers

While the integration of the **Main Material Books (BMP)** and the **Virtual Reading Room (RBV)** has shown positive contributions to improving academic literacy, its implementation still encounters significant barriers. These challenges arise from both students, as end users, and the institution, as the provider of digital learning services. Broadly, they fall into three

categories: **digital literacy gaps, infrastructure limitations, and weak pedagogical support.**

First, **digital literacy disparities** among students hinder effective RBV use. Digital natives adapt quickly to online platforms, while students from older or less technologically exposed generations often struggle, experiencing confusion, anxiety, or resistance. This gap reduces students' confidence and limits their participation in RBV-based learning.

Second, **technological and infrastructural constraints** are particularly problematic for students in remote and disadvantaged (3T) regions. Many lack adequate devices such as laptops or smartphones, while unstable and costly internet connectivity further restricts access. Unequal access creates disparities in how students engage with RBV and, consequently, in learning outcomes.

Third, the lack of **pedagogical support** compounds the issue. Tutors and academic supervisors are not yet fully integrated into RBV-supported systems, leaving students without proper guidance on how to use RBV strategically, evaluate sources, or develop effective information-seeking skills. Without such scaffolding, students often perceive RBV as a passive repository rather than a tool for active, reflective learning.

In addition, **low self-directed learning motivation** reduces consistent RBV use. Without structured incentives, training, or moderated forums, many students fail to sustain engagement. The absence of strong information-filtering skills also exposes students to unreliable sources in an era of overwhelming digital information.

Therefore, the challenges in implementing BMP and RBV are not merely technical but also **social, cultural, and pedagogical**. To address them, Universitas Terbuka must adopt adaptive strategies that bridge digital divides, strengthen infrastructure, and create a supportive learning ecosystem tailored to the diverse needs of adult learners across different regions.

3.5 Strategic Implications of Integrating BMP and RBV

The integration of the **Main Material Books (BMP)** and the **Virtual Reading Room (RBV)** offers significant strategic potential for enhancing the academic literacy of NonPendas students at Universitas Terbuka. Rather than substitutes, the two resources complement each other: BMP provides a structured, curriculum-based foundation, while RBV enriches learning with access to up-to-date references, interactive media, and collaborative forums. Together,

they encourage students to become active participants in knowledge construction, not just passive recipients.

Effective implementation requires **instructional design** that aligns BMP and RBV content—for example, embedding RBV hyperlinks into BMP modules, using annotation tools, and assigning tasks that demand RBV-based references. This approach supports blended learning models that integrate print and digital resources flexibly.

The **role of tutors** is also critical. Beyond facilitating learning, they must act as digital literacy guides, helping students navigate RBV, evaluate sources, and synthesize information. Strong academic support is particularly vital for independent learners facing access and organizational challenges.

Additionally, a **data-driven monitoring system** is needed to track usage patterns, learning preferences, and access frequencies. Such analytics allow institutions to design targeted interventions, improve features, and provide digital literacy training.

Ultimately, the strategic implications extend beyond pedagogy to **management and policy**. Coordinated efforts among curriculum developers, digital platform managers, and tutors are essential for fostering a culture of integrated learning. Without systemic support in content, infrastructure, and human resources, the potential of BMP and RBV to strengthen academic literacy cannot be fully realized.

4 CONCLUSION

This study demonstrates that the integration of the Main Material Books (Buku Materi Pokok/BMP) and the Virtual Reading Room (Ruang Baca Virtual/RBV) has strategic potential to strengthen academic literacy among NonPendas students at Universitas Terbuka. Rather than functioning as separate tools, BMP and RBV are complementary: BMP provides a structured and systematic conceptual foundation, while RBV expands digital access to scholarly resources, encourages collaborative learning, and cultivates critical and reflective skills. When combined, they form an integrative model that can better equip students to meet the demands of open and distance education in the digital era.

The contribution of this study is twofold. **Theoretically**, it offers a conceptual model of BMP–RBV integration as a framework for developing academic literacy that bridges print-based structure and digital exploration. **Practically**, it provides recommendations for open

universities to strengthen implementation, such as embedding RBV hyperlinks into BMP modules, designing RBV-based assignments, enhancing tutors' roles as digital literacy facilitators, and establishing monitoring systems to analyze students' usage patterns.

Nevertheless, this research has clear limitations. As it relies exclusively on secondary sources, the findings remain conceptual rather than empirical. Without primary data or direct student involvement, the effectiveness of BMP–RBV integration cannot yet be measured objectively in practice.

Future research should therefore move beyond conceptual analysis toward empirical validation. Three directions are particularly urgent: **(1)** testing the effectiveness of BMP–RBV integration through large-scale quantitative surveys of NonPendas students; **(2)** conducting classroom experiments to evaluate the impact of RBV-based learning on academic performance and writing skills; and **(3)** analyzing RBV log data to identify patterns of student engagement, preferences, and challenges. Such studies will provide stronger evidence for refining the model and ensuring its sustainable application in diverse distance education contexts.

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