

Beyond Literacy: Enhancing Gerakan Literasi Nasional

Januar J. Tell¹,

¹*Pennsylvania State University*

INTRODUCTION

Education plays a pivotal role in shaping the trajectory of civilizations, and a robust proficiency in reading constitutes a fundamental element in both a student's academic attainment and personal development. Governments worldwide have instituted diverse initiatives to bolster children's reading capabilities, underscoring their recognition of the pivotal role literacy plays. Nevertheless, it is imperative to critically examine the efficacy and comprehensiveness of these programs in fostering higher-order cognitive skills, which are indispensable in nurturing critical thinking, problem-solving prowess, and a lifelong appetite for learning. In essence, literacy transcends the mere ability to decode and encode text, encompassing a broader scope that involves deeper comprehension and intellectual engagement with content.

The Indonesian government has embarked on a national literacy initiative known as Gerakan Literasi Nasional (GLN) in 2017, with the primary objective of enhancing students' literacy skills across the nation. As an integral part of this comprehensive endeavor, educational institutions have adopted Gerakan Literasi Sekolah (GLS) (Kementerian Pendidikan dan Kebudayaan, 2015), a program that incorporates a dedicated 15-minute reading session before regular lessons. Although the emphasis on promoting reading habits is commendable, an increasing recognition exists that literacy instruction must transcend mere reading comprehension. To prepare students for the complexities of the world, a pivotal aspect involves equipping them

with critical and creative thinking abilities.

This paper underscores the significance of nurturing critical thinking skills in the context of students' literacy activities within educational settings. By drawing upon Bloom's taxonomy and integrating Higher-order thinking questions (HOTs), educators can foster students' cognitive capacities and engender a deeper level of engagement with literary texts. Bloom's taxonomy, developed by Bloom and colleagues in 1956, provides a systematic framework for classifying educational objectives and skills according to a hierarchical structure of cognitive processes (Anderson & Krathwohl, 2001). The taxonomy comprises six levels, ranging from lower-order thinking skills like remembering and understanding, to higher-order thinking skills such as applying, analyzing, evaluating, and creating. By strategically incorporating these levels into the design of literacy activities, teachers can effectively guide students towards higher-order cognitive processing, encouraging them to engage in critical and creative thinking in their interactions with texts.

Furthermore, the integration of higher-order thinking questions constitutes a potent pedagogical tool for stimulating students' thinking capabilities and problem-solving proficiencies. These questions extend beyond surface-level comprehension, compelling students to delve into profound analysis and reflection. By formulating queries that prompt students to assess evidence critically, establish connections between concepts, and synthesize information,

educators can foster a classroom culture that prioritizes critical thinking. Moreover, encouraging students to generate their own higher-order thinking questions empowers them to take ownership of their learning journey, thereby fostering their creative and independent thinking skills.

RESULT AND DISCUSS

This study employs a literature review methodology, which entails a systematic analysis and synthesis of existing literature, research papers, books, and other scholarly sources relevant to the research topic (Ridley, 2012). Through a rigorous, systematic, and logical approach, the ideas derived from these sources are meticulously integrated to present a comprehensive perspective on the subject matter. The motivation for undertaking this research stems from the national literacy program initiated by the Indonesian government, prompting the selection of pertinent research articles and books to advocate for the incorporation of Bloom's taxonomy and Higher-order thinking as supplementary frameworks to enhance the literacy proficiency of Indonesian students.

National Literacy Movement

The issue of literacy in Indonesia has garnered significant attention due to the findings from various research studies (Organization for Economic Co-operation and Development, 2019; Central Connecticut State University, 2016; Thompson et al., 2012), indicating a low level of literacy among Indonesian students. As a consequence, both the government and the public have become increasingly aware of the critical nature of this topic. To address this concern, the Indonesian government initiated and promoted a comprehensive literacy program known as the National Literacy Movement (Gerakan Literasi Nasional, 2017), referred to by Indonesians as

Gerakan Literasi Nasional. This literacy movement encompasses programs targeting schools, families, and society with the overarching objective of enhancing the literacy skills of the Indonesian younger generation, encompassing efforts not only within educational institutions but also within families and society at large. Furthermore, the National Literacy Movement classifies literacy into six primary domains, including Read and Write Literacy, Numerical Literacy, Science Literacy, Digital Literacy, Financial Literacy, and Cultural and Citizenship Literacy.

Building upon the growing importance of the national literacy movement in Indonesia, research studies focusing on literacy-related topics have been burgeoning. A study conducted by Hartaty, Fitria, and Wahidy (2022) investigated the preparation and operation of a literacy program in SMP Negeri 1 Talang Ubi, a junior high school in South Sumatera. Employing a combination of interviews, observation, and documentation, the researchers observed that the school demonstrated satisfactory preparation concerning infrastructure, administration, and book collection. The library, serving as the designated building for this study, was well-appointed and conducive for students, offering distinct areas for reading, book collection, and officer space. The interior and exterior arrangements further contributed to a comfortable reading environment. The school meticulously managed a collection of 1750 fiction and non-fiction books, thoughtfully curated for 12-15 year-old readers. Collaborative efforts from the management, principal, teachers, and administrative staff effectively socialized the literacy movement and facilitated literacy activities within the school. Yearly mentoring and semester monitoring procedures were implemented to ensure the quality of the literacy movement

program. Nonetheless, the study also revealed room for optimization in the school's literacy movement program. The 15-minute reading activity was not conducted daily, and participation was limited to students, with instructors and staff not actively engaging in the activity.

Another research study by Kristyaningrum and Ismanto (2020) explored the disparity between Indonesia's national literacy program and the literacy movement program established by Salatiga's Anak Terang Middle School. Utilizing interviews, documentation, and observation, the researchers noted that the school effectively executed its literacy movement program, but identified four significant gaps requiring attention. These areas encompassed the need to train teachers in designing students' literacy activities regularly, the establishment of appropriate evaluation instruments for the literacy program, the application of literacy activities across all subjects for optimal effectiveness, and the allocation of sufficient budgetary resources for the literacy program.

Similarly, Kurniawan, Sriasih, and Nurjaya (2017) conducted a study on a literacy movement program at SMA Negeri 1 Singaraja, a senior high school in Bali. Through observation and interviews, the researchers concluded that the school had successfully implemented 20 out of 26 indicators of literacy development activities. However, they also identified several challenges faced by the school's literacy movement, including students' lack of seriousness during the 15-minute reading sessions, a tendency for students to engage in conversations rather than reading, and some students' reservations about the extended school hours due to the literacy program. Furthermore, some students expressed the belief that reading textbooks from all subjects held greater importance than reading non-textbook materials such as novels and short

stories. Teachers of morning classes also expressed concerns that the 15-minute reading activity impeded the flow of their class sessions. Additionally, budgetary constraints presented challenges in supporting students' reading journals. Despite these challenges, the researchers highlighted positive impacts resulting from the school's literacy movement program, noting improvements in students' reading habits and eagerness to produce written pieces, such as short stories, poems, or novels. The program also facilitated students' familiarity with various text types across diverse topics, benefiting Indonesian teachers and students alike.

In summary, the issue of literacy in Indonesia has been increasingly recognized as a pressing concern, leading to the establishment of the National Literacy Movement as a response to the challenges posed by low literacy levels among Indonesian students. This development has prompted a surge in research studies exploring literacy-related topics in the country. These studies shed light on the implementation and effectiveness of literacy programs within educational institutions, revealing areas of success and opportunities for improvement in the endeavor to foster proficient literacy skills among Indonesian students.

What is Literacy?

The issue of literacy has gained significant prominence in Indonesia following the government's implementation of the National Literacy Movement, particularly within educational institutions. Before delving into the details of this program, it is essential to provide an overview of the concept of literacy. Traditionally, literacy is defined as an individual's capacity to read and write (Kern, 2000). Similarly, Inglis and Aers (2008) concur that literacy pertains to

reading and writing activities within a specific language. According to their perspective, individuals capable of reading and writing in a language are considered literate, while those who solely engage in listening and speaking without possessing reading and writing skills are classified as illiterate. Another definition by Fitzgibbons (2023) characterizes literacy as encompassing reading and writing skills, where reading involves the constructive process of understanding meaning through engagement with written words, and writing entails the act of communicating intentions using printed words. From these definitions, it can be deduced that literacy can be narrowly defined as the proficiency in reading and writing skills.

Internationally, several organizations, including UNESCO, ELPN, and OECD, also emphasize reading and writing activities in their definitions of literacy (Montoya, 2018). UNESCO defines literacy as learners' competence acquired through dedicated efforts to learn, comprehend, and utilize printed or written resources. This ability enables learners to develop understanding and experiences, achieve life goals, and actively participate in society (Montoya, 2018). The European Literacy Policy Network (ELPN) defines literacy as learners' effective ability to read and write (use) text in various media, including printed, written, and electronic formats (Montoya, 2018). Similarly, according to the Organization for Economic Co-operation and Development (OECD), literacy denotes the capacity to comprehend and employ written material to enhance one's knowledge base, achieve personal goals, and contribute meaningfully to society (Montoya, 2018). Notably, these definitions converge on the aspect of literacy extending beyond mere reading and writing abilities, highlighting the significance of utilizing literacy skills to broaden knowledge, achieve life

objectives, and actively engage in societal contributions. Thus, literacy encompasses not only the proficiency in reading and writing but also the utilization of these skills to foster personal growth, goal attainment, and active social participation.

Classification of Literacy

The concept of literacy has undergone extensive development and diversification, expanding its definition beyond the traditional notion of reading and writing proficiency. Garcia (2013) presents a classification of literacies that encompasses various forms, including digital literacy, computer literacy, media literacy, information literacy, technology literacy, political literacy, cultural literacy, multicultural literacy, and visual literacy. Similarly, Ranaweera (2008) delineates several types of literacy, such as audiovisual literacy, print literacy, computer literacy, media literacy, web literacy, technical literacy, functional literacy, library literacy, and information literacy, among others. The CT State Library (2021) offers a taxonomy encompassing basic literacy, early literacy, civil or social literacy, digital literacy, financial literacy, health literacy, and legal literacy. Additionally, the Gaspesie Literacy Council (2022) enumerates a range of classifications, including reading and writing, numerical literacy, digital literacy, health literacy, financial literacy, media literacy, cultural literacy, and emotional/physical literacy.

Literacy and Critical Thinking

Critical thinking has been a subject of longstanding scholarly interest, prompting various scholars to offer their distinct definitions to explicate this concept. McPeck (1990) posits that critical thinking emanates from skepticism and engenders a set of activities aimed at substantiating claims. Paul (1992)

characterizes critical literacy as an active and independent mode of thinking that strives to attain the highest standards of thought within a specific area or field of knowledge. It transcends basic comprehension and entails deeper levels of analysis, evaluation, and interpretation. Moreover, critical literacy is considered a more intricate notion that extends beyond cognitive capacities alone. The term "critical literacy" denotes the ability to make well-informed decisions through the use of analysis, assessment, inference, and reflection. Such judgments are shaped by engaging in critical cognitive processes while taking into account specific criteria, contextual factors, and personal beliefs (Bailin et al., 1999; Ennis, 1985; Facione, 1990; Lipman, 1988).

Lai (2011) synthesizes various scholars' perspectives on the multifaceted nature of critical thinking abilities. Individuals with critical thinking abilities possess the capacity to carefully scrutinize and evaluate a myriad of occurrences, relying on well-reasoned arguments, substantiated claims, and compelling evidence (Ennis, 1985; Facione, 1990; Halpern, 1998; Paul, 1992). Furthermore, those who have honed their critical thinking skills are adept at distinguishing unsupported assumptions from factual information (Ennis, 1985; Paul, 1992). They also demonstrate proficiency in drawing logical conclusions and exercising sound judgment in challenging situations (Case, 2005; Ennis, 1985; Facione, 1990; Lipman, 1988; Paul, 1992; Tindal & Nolet, 1995). Such individuals possess the ability to formulate predictions based on available evidence while maintaining a balanced perspective when analyzing contentious issues (Tindal & Nolet, 1995; Willingham, 2007).

The correlation between literacy and critical thinking lies in the cognitive processes inherently involved in reading and writing activities. Reading is not a

passive endeavor; rather, it entails complex cognitive efforts. When a reader engages in comprehending a text, their mind undergoes analysis, organization, and control of thoughts (Thorndike, 1917), making connections and selecting new ideas in conjunction with existing background knowledge. Similarly, writing is a mental undertaking that involves thinking and evaluating ideas and each component of the content (Gage, 1986), assessing and discerning between facts and assumptions, appropriateness and inappropriateness, usefulness and uselessness, and so forth.

In further exploring the relationship between literacy and critical thinking, Paul and Elder (2006) propose a framework that delineates five levels of critical thinking proficiency in reading and writing activities. The initial stage involves paraphrasing, wherein the ability to read and write is demonstrated through the rephrasing and re-explanation of the content using different words. The second stage, explication, encompasses identifying the main points in a paragraph, elaborating on these points, providing examples, and incorporating additional information such as data, metaphors, or explanations. In the third level, analysis, students are encouraged to comprehend the author's purpose for the text, the issues addressed, questions posed, specific data and information, concepts and theories presented, as well as the author's assumptions, implications, and various perspectives within the text. The subsequent stage is evaluation, wherein the quality of the text is assessed based on criteria such as clarity, accuracy, correctness, applicability, significance, depth, breadth, rationality, and fairness. The final level, role-play, delves deeper into the text to understand the author's perspective, enabling the reader to speak and act as the author of the text.

Bloom's Taxonomy

Reading activity in School Literacy Movement is inadequate; specifically, 15-minute reading for students is less fruitful. Literacy is not just reading the text. Literacy must grow students' critical thinking. The literacy activity is more than just reading the text; students must comprehend and evaluate it. Every writer always has an intention in a piece of writing he produces because every text has a meaning (both visible and hidden meaning). Therefore, questioning skill is indispensable to improve students' critical thinking and prevent them, students, from becoming credulous. The teacher's role is essential in helping learners assess the readings critically by teaching them how to build their questions on the text, or the teachers provide the questions to help the students engage with the text.

Bloom's Taxonomy and its level of comprehension can be basic guidelines to question the text. There are two versions of the Bloom Taxonomy level. The first version has six levels: knowledge, comprehension, application, analysis, synthesis, and evaluation (Bloom, 1965). Another version of Bloom's Taxonomy is the updated version by Anderson and Krathwohl (2001), in which the cognitive levels consist of remembering, understanding, applying, analyzing, evaluating, and creating. Producing questions based on the levels can help educate the students to develop their critical thinking.

Questions in Bloom's Taxonomy

The initial version of Bloom's Taxonomy comprises six stages, namely knowledge, comprehension, application, analysis, synthesis, and evaluation (Bloom et al., 1965). At the knowledge level, students exhibit cognitive abilities focused on remembering and recalling previous ideas or knowledge (Utica University,

2022). Sample questions at this level include "*How many...?*", "*Who was...?*", and "*What happened...?*" (Utica University, 2022). Moving to comprehension, the second level, learners demonstrate their understanding of the material and can effectively communicate it (Bloom et al., 1965). Sample questions in this category involve inquiries such as "*What do you think could have happened next...?*" and "*What differences between...?*" (Utica University, 2022). The third level is application, wherein students must apply what they have comprehended (Bloom et al., 1965). Sample questions include "*Do you know another instance where...?*" and "*Can you apply the method used to some experience of your own...?*" (Utica University, 2022). The fourth level, analysis, involves a more complex process than comprehension and application. Learners are required to understand every small part of the subject matter and discern the connections among these components (Bloom et al., 1965). Sample questions for analysis include "*Which events could have happened...?*" and "*What do you see as other possible outcomes?*" (Utica University, 2022). In the synthesis stage, learners combine all the thoroughly analyzed parts (Bloom et al., 1965). Sample questions in this category are "*Can you design a ... to ...?*" and "*How many ways can you...?*" (Utica University, 2022). The final stage of this taxonomy is evaluation, where students critically assess their learning (Bloom et al., 1965). Sample questions at this level are "*Do you think ... is a good or a bad thing?*" and "*What changes to ... would you recommend?*" (Utica University, 2022).

A revised version of Bloom's Taxonomy was presented by Anderson and Krathwohl (2001), which consists of six levels: remembering, understanding, applying, analyzing, evaluating, and creating. The first level, remembering, involves the process of recollecting

information and retaining it in memory (Anderson and Krathwohl, 2001). Sample questions for this stage include "*What is ...?*" and "*Where is ...?*" The second level is understanding, where learners build meaningful connections to integrate new knowledge with their prior understanding (Anderson and Krathwohl, 2001). Sample questions at this level are "*What does... mean?*" and "*Can you explain...? Why does it....?*" The third level, applying, entails students' execution of familiar tasks or implementation of new and challenging exercises based on their acquired knowledge (Anderson and Krathwohl, 2001). Sample questions for this stage include "*How do you solve...?*" and "*What is the result of...?*" In the analyzing stage, the fourth level, learners identify the intricate components of knowledge or information and discern their interconnections and relevance (Anderson and Krathwohl, 2001). Sample questions at this level are "*How do... are developed?*" and "*How can you identify the different parts ... and their connection?*" The fifth level is evaluating, where learners render judgments based on specific criteria (Anderson and Krathwohl, 2001). Sample questions at this level include "*How does the procedure of... qualify or not qualify?*" and "*How would you prove...?*" The sixth and highest level in this taxonomy is creating, wherein students synthesize their previous learning into a cohesive structure, pattern, or product (Anderson and Krathwohl, 2001). Sample questions in this stage involve queries such as "*What are the better alternatives?*" and "*How would you improve?*"

Higher-Order Thinking

Qasrawi & Beni Abdelrahman (2020) discussed the classification of higher-order thinking and lower-order thinking based on Bloom's Taxonomy by Benjamin Bloom (1965). According to this taxonomy, the first three levels, namely

knowledge, comprehension, and application, fall under lower-order thinking, while analysis, synthesis, and evaluation are categorized as higher-order thinking. Similarly, the revised Bloom's Taxonomy by Anderson and Krathwohl (2001) groups the first three levels as remembering, understanding, and applying, representing lower-order thinking, while the other three levels correspond to higher-order thinking. The distinction between higher-order and lower-order thinking lies in the cognitive activity engaged by learners during the learning process. Lower-order thinking primarily involves activities like reading, listening, watching, and practicing, where new knowledge is integrated with existing knowledge, while higher-order thinking entails cognitive processes that stimulate analysis, problem-solving, and creative solutions (Ivie, 1998; Underbakke, Borg & Peterson, 1993). Higher-order thinking is considered more advantageous in education, as it equips learners with critical and analytical skills, fostering their ability to solve problems and approach real-world challenges innovatively.

Numerous scholars have investigated the implementation and impact of higher-order thinking in educational practices. Despite facing challenges in classroom teaching (Yen and Halili, 2015), higher-order thinking has shown promise in effectively assisting students in developing critical thinking and analytical skills as well as problem-solving competence. For instance, Nourdad, Masoudi, & Rahimali (2018) conducted a study on the impact of higher-order thinking instruction on learners' reading competence. The research involved two hundred thirty-six foreign language students from the University of Tabriz in Iran, randomly divided into control and treatment groups. The study revealed that the experiment

group, which received higher-order thinking treatment, demonstrated higher reading comprehension scores compared to the control group. After nine cycles of HOT instruction, the mean score of the experiment group is 13.90 (SD = 4.18), while the non-treatment group is 1.29 (SD = 5.49).

Similarly, research conducted by Munawati & Nursamsu (2019) in Indonesia aimed to explore the impact of higher-order thinking skills on improving junior high school students' reading comprehension. The experiment and control groups underwent pretests and post-tests, with the treatment group showing a significant improvement in their post-test scores with 83.44 point compared to the non-experiment group with 72.32 point.

Higher-order thinking research has not only impacted language subjects but also science subjects. For example, Heong et al. (2019) conducted an experiment on university students of civil and environmental engineering to investigate the effects of combining learning strategies with higher-order thinking on students' ideation. The control group had a slight increase in post-test scores. In contrast, the experiment group had a significant escalation, particularly on all criteria, from a minor improvement of 0.51 on the dimension criterion to a significant improvement on the idea criterion with 1.56.

In the context of science learning, higher-order thinking has also demonstrated a profound impact on students' innovative thinking. Sapriadil et al. (2019) conducted a study involving a Higher Order Thinking Virtual Laboratory (HOTVL) intervention in a laboratory computer simulation on the topic of electric circuits. The mean score of both groups is increasing, but the experiment group's score is higher, with 67.54 for the post-test. Like the mean score, the

creative thinking score of the experiment group is higher than the control group, which gets 0.61 points. This creative thinking in this investigation is classified into four features: fluency, flexibility, originality, and elaboration (Sapriadil et al., 2019). This study shows that the experiment group still leads with the higher score.

Overall, these studies collectively demonstrate the importance and potential of higher-order thinking in enhancing students' critical thinking, problem-solving, and creative abilities across various academic subjects.

CONCLUSION

The Gerakan Literasi Sekolah program in Indonesia represents a laudable initiative aimed at promoting literacy across the nation. However, it is imperative to recognize that cultivating reading habits alone may not suffice in preparing students to thrive in the dynamic and intricate landscape of the twenty-first century. As the world undergoes rapid transformations, individuals must possess not only the ability to read but also the capacity to think critically and creatively, enabling them to tackle complex challenges and engage in innovative problem-solving. Educators assume a crucial role in this endeavor, actively fostering students' cognitive development and equipping them with the skills necessary to confront the demands of the future with confidence and efficacy.

To foster critical and creative thinking skills, educators can adopt a comprehensive approach by integrating Bloom's taxonomy and higher-order thinking questions into literacy activities. This approach extends beyond mere surface-level comprehension of the text. Instead, it empowers students to engage in deeper cognitive processes, such as analyzing, evaluating, and synthesizing

information, thereby fostering the development of critical analysis, creative problem-solving, and independent thinking abilities. By incorporating such advanced literacy activities into the classroom environment, educators can create a stimulating atmosphere that nurtures creativity, promotes innovation, and cultivates intellectual growth among students. In doing so, students are better equipped to face the challenges of the modern world and become proactive and confident problem solvers.

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