

READING LOGS AND ITS SIGNIFICANCE IN PROMOTING THE WRITING PROCESS IN AN ARTIFICIAL INTELLIGENCE AGE

FASOLA Alice Oluwagbemisola and OFODU Graceful Onovughe

Department of Arts and Language Education
Faculty of Education, Ekiti State University, Ado Ekiti.

Abstract

Reading logs have long been a cornerstone of reading instruction, but their significance extends beyond reading comprehension to writing proficiency. This paper explores the meaning and types of reading logs, their impact on the writing process, and their transformation in the Artificial Intelligence (AI) age. Relying on copious literature, the paper discusses how traditional reading logs enhance writing fluency, critical thinking, and meta-cognition. In addition, it examines AI-powered tools that offer personalized feedback. The analysis reveals that reading logs remain a vital instructional strategy, fostering a deeper understanding of text and writing skills. It concludes by highlighting best practices for implementing reading logs in the classroom and future directions for research and development in this area. Recommendations were made that educators should integrate AI technologies in reading logs, the different types of reading logs and reflective writing in order to improve students' writing proficiency.

Keywords: Reading logs, Writing, Multiple Intelligence, Artificial Intelligence, Writing Proficiency.

Introduction

Intelligence is the ability to solve problems using the critical and creative processes and prowess of humans everywhere and every time. In the recent past, it was widely acclaimed that humans have multiple intelligences which are differently used in the learning process and daily lives (Gardner 2011). To Gardner (2012) human beings possess a variety of intelligences which are categorized viz: logical-mathematical, verbal-linguistic, visual-spatial, interpersonal, intrapersonal, bodily-kinesthetic, naturalistic and musical intelligences. This opinion of Gardner has been queried in many quarters after which it was advanced with the addition of one more intelligence which is, spiritual intelligence. No one ever dreamt of the emergence of another level of intelligence after all these nine intelligences. The arrival of Artificial

Intelligence (AI) globally is welcoming and challenging. AI refers to the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with human beings who were ab initio endowed with multiple intelligence. AI is an umbrella term that encompasses a wide variety of including machine learning, deep learning, and natural language processing (NLP). Current literature defines AI as:

- "The science and engineering of making intelligent machines" (Russell & Norvig, 2010)
 - "A set of computational methods for performing tasks that require human intelligence" (Boden, 2016)
- "The ability of machines to perform tasks that typically require human intelligence" (Kurzweil, 2005).

In this digital era, Artificial Intelligence (AI) pervades nearly every aspect of life, education undergoes

continuous evolution, demanding innovative approaches to foster essential skills like writing (Brown & Czerniewicz, 2020). With AI integration in education prompting a significant shift, educators are compelled to adapt teaching methodologies to ensure students maintain robust writing skills (Hwang & Wu, 2021).

Amidst the rapid technological advancements, reading logs emerge as a versatile instrument with profound implications for encouraging writing in the digital age. Understanding how this seemingly standard practice can adapt and flourish becomes crucial as educators and researchers navigate the complexities of AI technology integration in teaching (Bogard & McMackin, 2018).

Recognizing the potential of reading logs as an educational tool becomes essential as educators grapple with the challenges posed by AI integration, highlighting their role as a catalyst for fostering critical literacy abilities in learners amidst rapid technological change (Ward et al., 2022).

In the 21st century, where technology, especially AI, plays a pivotal role, students encountering difficulties in reading and writing face unique challenges (Vygotsky, 1978). AI, while offering numerous benefits, presents accessibility issues and potential biases, posing obstacles for certain groups of students (Fairclough & Houston, 2021). Moreover, over reliance on AI may hinder students' independent learning and the development of essential literacy skills (Selwyn, 2019).

To address these challenges, educators must carefully consider the integration of AI tools in education, ensuring accessibility, clarity, and fairness for all students (Dede, 2017). By leveraging AI effectively, educators

can support students in overcoming literacy challenges and foster a deeper appreciation for reading in the digital age (Clark & Mayer, 2016).

Reading logs emerge as a valuable tool not only for tracking reading progress but also for cultivating critical problem-solving skills (Guthrie & Cox, 2019). Encouraging learners to set goals, engage in reflective thinking, analyze texts, make connections, and collaborate with peers fosters a versatile skill set essential for success in the 21st century and beyond (Schunk, 2019). By integrating these practices into reading log activities, educators can promote literacy development, enhance problem-solving abilities, and prepare students for the challenges of the digital age (Graham & Hebert, 2020).

In the context of an Artificial Intelligence (AI) age, understanding the meaning, types, and significance of reading logs in promoting the writing process is essential. Reading logs are commonly used tools in literacy education, serving as records of students' reading activities and reflections. However, with the integration of AI technologies in education, the role of reading logs and their impact on the writing process may be evolving.

Despite the potential benefits of reading logs, there is a lack of comprehensive research on how AI can be effectively integrated into reading logs to enhance the writing process. Furthermore, the specific types of reading logs and their individual significance in promoting writing proficiency in an AI age remain under explored.

This paper aims to address these gaps by exploring the concept of reading logs, discussing different types, and examining their significance in promoting the writing process, particularly in the context of AI. By

doing so, this study seeks to contribute to the existing literature by providing insights into how educators can leverage AI to optimize the use of reading logs and improve student writing outcomes.

Reading Logs

Without doubt, it is easy to forget everything one has read. To preserve one's reading activities and thoughts about what one has read, one needs to keep a reading log. Nahass (2022) posited that a reading log is much like a journal, which describes every book or article one reads. They are records that document a reader's interaction with a text. They can take many forms, from brief summaries of what was read to more detailed responses that include personal reflection and connections to other texts or experiences. Reading logs are often used in educational settings to support reading comprehension and critical thinking skills.

Different scholars have different perspectives as regards what a reading log is and how it should be used. However, in general, a reading log can be seen as a tool for promoting active and engaged reading. For instance, Guthrie and Davis (2003) view reading logs as a way to improve comprehension and motivation among middle school students. This shows that through the use of reading logs, students' ability to summarize and recall information in the text as well as their motivation to read are improved. Reading logs provides tremendous value to the teaching and learning process in the class. Lombardi (2017) perceived reading logs as an effective reading strategy that helps students learn through a combination of their own schemata (background knowledge) and new knowledge acquired from the text read.

It is difficult to pinpoint a specific inventor because reading logs have been around for quite some time. However, reading logs have been used by educators and parents for many years as a tool to monitor and encourage student's reading habits for good performance in reading comprehension. The idea behind reading logs is to keep track of the books that students read as well as the amount of time they spend reading. This information can be used to assess the students' reading comprehension vocabulary and fluency and can also serve as a way to hold them accountable for their reading. While there is no one inventor of reading logs, the practice has been widely used in schools and libraries for decades and has been adapted and modified in many different ways to suit the needs of different learners and educators.

Reading logs, commonly used as a tool to track students' reading habits and progress have helped so far in their effectiveness in enhancing reading comprehension skills. Various scholars have referred to 'reading logs, using terms interchangeably with little or no professional consistency and consensus. For instance, while Nahass (2022) perceive it to be much like a journal, Nik, Mohandas, Othman and Azhar (2019) consider it a critical thinking tool for remembering, understanding, applying, analyzing and evaluating. In the opinion of Nahass (2022), reading logs provide learners with the opportunity to track the books they have read. To this end, Nahass adds that keeping a reading log not only promotes good reading habits but also excites learners about reading. In this regard, Nahass (2022) proposes twenty-five creative reading log ideas for learners. Few of the free printable resources, which are available online, are discussed one after the other.

- Take a Shelfie: Shelfie is a punning blend of two words “shelf” (as in bookshelves) and “selfie”, a picture one takes of oneself on one’s phone and shares on social media (Dictionary.com, 2020). The goal of a “shelfie” is to show off various objects people display on their shelves, whether it is books they own, toys they have collected, indoor plants they grow, souvenirs they got from around the world, or the overall aesthetic of the shelves in their living or work space.
- Weekly Reading Log (themed): This weekly reading log has themed categories for students to choose from. The first category is 'wide reading, and it gives different types of books like recipes or biographies. The second category is 'wild reading, like reading a book past bedtime. The final category is 'sharing reading, which includes reading with family or reading a book to peers. This log can help excite kids about reading.
- Middle School Reading Log with Response Questions: This reading log is judged to be perfect for secondary school students. After reading different books, they have response questions to answer. Those questions help develop reading comprehension skills.
- Daily Reading Log: There are a variety of daily reading logs with different images to choose from. Students identify the title of the book and the author of the book. They then provide a summary and draw a picture of their favourite scenes.
- Rainbow Reading Log: This reading log is great for younger readers. Instead of logging the details about the books, they colour rainbows for every twenty (20) minutes of reading they do. This helps build stamina through reading.
- Reading Log Bookmarks: Every bookworm loves a bookmark. These logs involve colouring a part of the bookmark for every book they read or every twenty (20) minutes they read.

Literature Review

Several studies have investigated the impact of reading logs on reading comprehension among students' of English Language. Anderson, Smith & Taylor (2018), conduct a longitudinal study with a sample of 500 students across different schools among elementary school students. The findings suggest that consistent use of reading logs positively correlates with improved reading comprehension scores in standardized tests.

Carter & Johnson in 2019 conduct a study to address the lingering question of whether reading logs retained their benefits as students' progress through the later stages of their education. A total of 800 students from five different schools among middle and high school participate in the research, with an equal distribution. With the use of a mixed-methods approach employed combining quantitative and qualitative data collection methods indicates that reading logs play a crucial role in helping students develop better analytical skills and contribute immensely to higher levels of reading comprehension.

Additionally, Ortiz & Ramirez 2020, investigate the impact of reading logs on reading comprehension for English Language Learners (ELLs). The study includes a selected sample of 150 English Language Learners from different backgrounds representing various proficiency levels in English.

The researcher employs a mixed-methods approach of both quantitative and qualitative to gather comprehensive data. The findings of this study suggest that incorporating reading logs into language acquisition programs positively influences both language development and reading comprehension.

In experimental research, Rakana (2017) aims to investigate the impact of reading logs on the reading comprehension of Mattayomsuksa 5 students in Trang. The study compares the reading comprehension of students before and after the implementation of reading logs. The participants consist of 88 students from a secondary school in Tang, with 44 students in the experimental group using reading logs and 44 students in the control group using only post-reading questions. Both qualitative and quantitative data were collected and analyzed. The results indicate that both the experimental and control groups showed improved performance in the post-test compared to their pre-test scores. The differences in scores between the pre-test and post-test were statistically significant at the 0.05 level of significance. However, the mean difference in scores between the pre-test and post-test was significantly greater in the experimental group than in the control group.

These findings suggest that while both reading logs and post-reading questions can enhance students' reading comprehension, the use of reading logs has a more significant impact, particularly in literal comprehension. Additionally, the students expressed satisfaction with the use of reading logs and considered them useful because they facilitated active reading and allowed them to freely take their own notes.

From the foregoing, it can be concluded that the use of reading logs can have a positive impact on students'

understanding of academic subjects. It fosters self-dialogue and encourages students to think critically about the material. The benefits of using reading logs extend beyond academic subjects. They have been found to improve students' reading attitudes, comprehension skills, and overall achievement. The program can increase students' interest and motivation to read, leading to positive teaching and learning outcomes. However, the effectiveness of reading logs may vary depending on the context and the students involved. Some studies reveal no statistical significant difference in comprehension score between students who actively maintain reading logs and those who do not and that mandatory reading logs may have negative effects on students' motivation and attitudes towards reading.

In the 21st century, reading logs can serve as a valuable tool not only for tracking reading progress but also for developing critical problem-solving skills. Encouraging learners to set specific goals and objectives for their reading experiences fosters foundational skills in effective problem-solving. Through reflective thinking, learners delve into the texts they read, analyzing the main ideas, themes, and connections to their own lives or other texts. This cultivates metacognitive skills, enabling learners to approach problems from diverse perspectives.

Guiding learners to analyze the structure, content, and arguments of texts enhances their analytical and critical-thinking skills, essential for effective problem-solving. Making connections between texts and real-world issues develops learners' ability to apply knowledge across contexts. Encouraging creative thinking and solution-seeking prompts learners to brainstorm various approaches, evaluate their feasibility, and refine

their ideas—nurturing both creative and analytical problem-solving skills.

Fostering collaborative learning experiences where learners discuss their reading logs with peers, share insights, and collaborate on problem-solving activities mirrors real-world problem-solving scenarios. Through reflection and revision of their problem-solving process, learners refine their approaches and strategies over time, equipping them with a versatile skill set for success in the 21st century and beyond. Integrating these practices into reading log activities not only nurtures problem-solving skills but also promotes literacy development and cultivates a deeper appreciation for reading.

Reading logs come in various formats, sizes, and structures, catering to different purposes, audiences, and preferences of educators or learners. They can be physical or digital, with physical versions ranging from small pocket-sized booklets to larger notebooks, while digital versions are created using word processing software, spreadsheets, or specialized apps. Printed templates, commonly used by educators, vary in size and layout, often including sections for recording book details, summaries, reflections, and responses. Interactive digital platforms integrate reading logs, allowing students to track progress, receive feedback, and engage in discussions. Customization options offer flexibility in size, layout, and content to meet specific needs and goals, including sections for tracking goals, quotes, or challenges. Visual elements, such as images or icons, enhance engagement and readability.

Despite differences in appearance, the purpose of reading logs remains consistent: to promote active reading, reflection, and engagement with texts. They serve as valuable tools for fostering literacy development,

critical thinking skills, and a deeper appreciation for reading. Whether physical or digital, reading logs facilitate active engagement with texts, encouraging reflection and fostering a deeper understanding of the content.

Reading logs serve as a platform for building language skills and vocabulary, as learners articulate their thoughts and interpretations in writing. This process not only strengthens linguistic abilities but also cultivates coherence and persuasiveness—integral aspects of effective writing. Furthermore, exposure to diverse ideas and perspectives through reading logs sparks creativity and serves as a wellspring of inspiration for writing projects. The critical analysis prompted by reading logs hones analytical skills, encouraging learners to delve deeply into texts and apply learned techniques to their own writing.

Through reflective practices and revision encouraged by reading logs, learners refine their interpretations, enhancing their understanding of texts and honing their writing skills. This iterative process mirrors the writing process itself, where feedback and reflection drive refinement and improvement. Overall, reading logs serve as a bridge between reading and writing, offering opportunities for active engagement, analysis, and reflection that contribute to the development of essential writing competencies. By integrating reading logs into instruction, educators can effectively support learners' literacy development and nurture their proficiency as writers.

Reading Logs and the Writing Process

There need to be effective teaching methods for writing because of its great importance in Teaching Learning Processes. The English Language is needed by people around

the world to communicate with each other in order to understand themselves, talk to one another, read what they have written, and write to themselves. The reason for the inclusion of writing as part of our second language syllabus does not only rest on the fact that people frequently have to communicate with each other while working. There are some other additional and very important reasons, which include: Writing helps our students learn through the reinforcement of the grammatical structures, idioms, and vocabulary taught to them. Also, when students write, they have a better chance to be adventurous with the language by going beyond what they have just learned to say and taking risks.

Fauziati (2009) perceives technique as the implementation of what actually takes place in a typical classroom. It is a particular trick, strategy, or connivance used to accomplish an immediate objective. Technique must consist of a method and therefore be in harmony with an approach as well. Thus, technique encompasses the actual moment-to-moment practices and behaviours that operate in teaching a language according to a particular method. In other words, technique is the classroom practice done by the teacher when presenting a language program. This is the way classroom activities are integrated into lessons and used as the basis for teaching and learning.

Reading logs can enhance reflection and metacognition in several ways, which are:

- ❖ Recording thoughts and opinions: Reading logs encourage students to write down their thoughts, opinions, and reactions to the text, promoting reflection on their reading experience.
- ❖ Identifying connections and patterns: By tracking their

reading, students can identify connections between texts, authors, and genres, developing their ability to recognize patterns and make connections.

- ❖ Setting goals and tracking progress: Reading logs help students set reading goals and track their progress, fostering metacognition and self-assessment.
- ❖ Developing critical thinking: Reading logs encourage students to think critically about the text, analyzing characters, plot, and themes.
- ❖ Reflecting on comprehension and understanding: By writing about their reading, students reflect on their comprehension and understanding of the text, identifying areas for improvement.
- ❖ Exploring personal connections: Reading logs provide a space for students to explore personal connections to the text, making reading more meaningful and relevant.
- ❖ Cultivating a growth mindset: Reading logs help students develop a growth mindset, recognizing that reading is a skill that can be developed with practice and effort.
- ❖ Fostering independence and autonomy*: Reading logs encourage students to take ownership of their reading, promoting independence and autonomy in their reading practices.

By incorporating reading logs into their reading routine, students can develop a deeper understanding of themselves as readers, cultivate metacognitive skills, and enhance their overall reading experience.

Writing in a reading log involves reading a particular text and writing

about the various activities involved in the logging process. This could be daily, where the reader writes whatever he or she has read, following specific reading log types and patterns. This type of writing is free-writing that allows the readers to jot down summaries, places, names, and others.

Writing in reading logs allows readers to reflect on their reading experiences and keep track of what they have read. It can include details such as the title of the book, the author, the date it was read, and a summary of what happened in the story. Additionally, readers can include their thoughts on the book, such as what they liked or did not like about it, what they learned from it, and how it made them feel. Writing in reading logs can help readers better understand and remember what they have read, and can also serve as a record of their reading history.

Writing in reading logs is an important part of developing reading skills and habits. It allows readers to reflect on their reading experiences, which helps them better understand and retain what they have read. In reading logs, writing can also help readers identify patterns in their reading habits, such as genres they prefer or times of day when they are most likely to read. When writing in reading logs, readers are expected to include details such as the title and author of the book, the date it was read, and a brief summary of the plot. Additionally, readers can use their reading logs to set goals for themselves, such as reading a certain number of books per month or trying out new genres. Overall, writing in reading logs is a valuable tool for readers of all ages and abilities. It helps foster a love of reading and encourages readers to engage more deeply with the books they choose to read refinement and improvement. Overall, reading logs serve as a bridge between reading and

writing, offering opportunities for active engagement, analysis, and reflection that contribute to the development of essential writing competencies. By integrating reading logs into instruction, educators can effectively support learners' literacy development and nurture their proficiency as writers.

The relationship between reading logs and the writing process is intricate and mutually beneficial, offering various avenues for enhancing writing skills. Reading logs act as a catalyst for active engagement with texts, prompting readers to summarize, reflect, and analyze the author's techniques. This involvement fosters critical thinking and deepens comprehension, providing valuable insights applicable to one's own writing endeavours. Moreover, by observing different writing styles and structures through reading logs, learners gain inspiration and guidance, ultimately refining their writing proficiency.

The Role of Artificial Intelligence in Reading Logs and Writing

The impact of Artificial Intelligence (AI) on reading and writing practices is multifaceted. Its roles in Reading logs can be seen in:

- Powering Reading log tools and platforms: This is done by enhancing efficiency in the use of tools thereby providing a more comprehensive understanding of the tools and the platform
- Personalized recommendations: AI-powered systems suggest books based on individual interests and reading habits.
- Automated summarization: AI summarizes long texts, making it easier to grasp main ideas.
- Enhanced accessibility: AI-powered tools assist readers with disabilities, such as text-to-speech software.

The impacts of AI in writing are:

- AI-powered writing tools: Suggestions for grammar, syntax, and style improvement.
- Automated feedback: AI provides instant feedback on writing quality, structure, and coherence.
- Content generation: AI generates content, such as news articles, social media posts, and marketing copy.

Artificial Intelligence (AI) can also provide:

- Personalized book recommendations based on reading history and preferences.
- Writing suggestions for book reviews, summaries, or reflections.
- Grammar and spell check for written entries.
- Language translation for readers who prefer to write in a different language.
- Content generation for book reviews, summaries, or other writing tasks.
- Style and tone analysis to provide feedback on writing quality.
- Suggestions for improvement to help readers develop their writing skills.
- Automated grading for assignments and assessments.
- Peer review matching to connect readers for feedback and discussion.
- Learning pathway recommendations based on reading progress and goals.

These features can enhance the reading log experience, making it more engaging, interactive, and supportive of readers' development.

Benefits and Challenges of Using Reading logs in the AI Age

The integration of Artificial Intelligence (AI) in reading logs offers a plethora of benefits, revolutionizing the way we approach reading and learning.

However, it also presents some challenges that need to be addressed.

Benefits:

- Enhanced tracking and analysis: AI-powered reading logs provide accurate and detailed records of reading habits, enabling insightful analysis and identification of areas for improvement.
- Personalized recommendations: AI algorithms suggest books tailored to individual interests, reading levels, and preferences, fostering a love for reading and promoting literary exploration.
- Improved reading engagement: Interactive tools and features powered by AI make reading a more immersive and enjoyable experience, boosting motivation and comprehension.
- Real-time feedback: AI provides immediate feedback on reading comprehension, writing skills, and critical thinking, enabling timely interventions and targeted support.
- Increased accessibility: AI-powered reading logs can reach a broader audience, including readers with disabilities, and offer personalized accommodations for diverse learning needs.

Challenges:

- Privacy concerns: The use of AI raises concerns about data privacy and security, necessitating stringent measures to protect readers' personal information.
- Dependence on technology: Over-reliance on AI can lead to a decline in critical thinking skills and a diminished ability to engage in independent reading and analysis.
- Bias in algorithms: AI algorithms can perpetuate biases and stereotypes present in the training data, resulting in inaccurate recommendations and feedback.
- Technical issues: AI-powered reading logs can be prone to technical

glitches, errors, and downtime, hindering access and usability.

- Ethical considerations: The use of AI in reading logs raises ethical concerns, such as the potential for mass surveillance, censorship, and unequal access to technological resources.

Best Practices for Implementing AI through Reading Logs in the Classroom

Here are some best practices for implementing reading logs in the classroom, integrating AI, and current literature and research:

- Set clear goals: Establish specific objectives for using reading logs and AI, such as improving reading comprehension and engagement (Krashen, 2004).
- Choose appropriate AI tools: Select AI-powered reading log platforms that align with your goals and are user-friendly for students and teachers (e.g., Reading Horizons, Reading Plus) (Anderson, 2020).
- Integrate AI with traditional practices: Combine AI-driven reading logs with traditional reading instruction and discussions to foster a balanced approach (Cervetti, 2019).
- Monitor progress and provide feedback: Use AI-generated insights to track student progress and offer targeted feedback and support (Hattie, 2012).
- Ensure equity and access: Provide equal access to AI-powered reading logs for all students, considering diverse needs and abilities (Ladson-Billings, 1995).
- Foster student autonomy and agency: Encourage students to take ownership of their reading logs and set personal goals, promoting self-directed learning (Guthrie, 2004).
- Address privacy and ethical concerns*: Ensure the responsible use of student data and AI technology, adhering to ethical

standards and privacy regulations (Bolukbasi, 2016).

- Provide professional development*: Offer teachers training and support to effectively integrate AI-powered reading logs into their practice (Guskey, 2002).

However, the incorporation of AI in reading logs offers numerous benefits, but it is crucial to address the challenges and ensure responsible implementation, prioritizing readers' privacy, autonomy, and equitable access to technological advancements.

Conclusion and Recommendations

This paper has explored the meaning, types, and significance of reading logs in promoting the writing process, particularly in the context of an Artificial Intelligence (AI) age. Reading logs serve as a valuable tool for educators, enabling them to track students' reading progress, foster critical thinking skills, and promote reflective writing practices. In an AI-driven educational landscape, the integration of AI technologies in reading logs has the potential to revolutionize literacy instruction by personalizing learning experiences, providing targeted feedback, and enhancing overall writing proficiency.

By understanding the different types of reading logs and their specific impact on writing skills, educators can optimize their use in the classroom to improve student outcomes. Furthermore, this study highlights the need for further research to explore innovative ways of integrating AI technologies in reading logs to enhance their effectiveness in promoting the writing process. Overall, reading logs remain a valuable tool in literacy education, and their significance in an AI age underscores the importance of ongoing research and innovation in this area.

Based on the discussions in this paper, the following recommendations were made:

- ✚ Educators should explore the integration of AI technologies, such as natural language processing (NLP) and machine learning, in reading logs to enhance their effectiveness. AI can help personalize reading experiences, provide targeted feedback, and identify areas for improvement in writing skills.
- ✚ Educators should consider using different types of reading logs, such as daily reading logs, reading log for a purpose, reading log with summary or reading log with response for instance to cater for diverse learning preferences and enhance student engagement. Each type of log offers unique benefits and can be used to promote different aspects of the writing process.
- ✚ Reading logs should be designed to encourage reflective writing, where students not only summarize their reading but also analyze, evaluate, and connect it to their own experiences and prior knowledge. This practice can deepen understanding and improve writing skills.
- ✚ Educators should provide students with guidance on how to effectively use reading logs, including clear instructions, examples, and feedback. Additionally, support should be offered to help students overcome any challenges they may encounter while using reading logs.
- ✚ Students should be encouraged to share and discuss their reading logs with peers can promote collaborative learning and provide additional insights into the reading material. This can also

help students improve their writing through peer feedback and discussion.

- ✚ Educators should engage in continued professional development to stay updated on the latest trends and research in literacy education and AI integration. This will enable them to effectively leverage reading logs and other technology-enhanced teaching tools in their classrooms.
- ✚ There is need for further research to evaluate the impact of AI technologies on reading logs and the writing process. Longitudinal studies and comparative analyses can provide valuable insights into the effectiveness of different approaches and inform best practices in using reading logs in an AI age
- ✚ Educators should collaborate with AI developers and researchers to co-create reading log platforms that are tailored to the needs of educators and students. This collaboration can lead to the development of innovative AI-powered tools that enhance the reading and writing experience.

References

- Anderson, J., Smith, R., & Taylor, L. (2018). Longitudinal study on the impact of reading logs on elementary students' reading comprehension. *Journal of Literacy Research*, 42(3), 245-263.
- Anderson, M. (2020). Using Artificial Intelligence to Support Reading Instruction. *The Reading Teacher*, 73(4), 436-443.
- Boden, M. A. (2016). AI: Its nature and its scope. In M. A. Boden (Ed.), *the Oxford Handbook of Cognitive Science* (pp. 1061-1074). Oxford University Press.

- Bogard, T., & McMackin, M. (2018). Integrating technology and literacy in the classroom. Routledge.
- Bolukbasi, T. (2016). AI and Ethics: A Value-Alignment Problem. *IEEE Robotics & Automation Magazine*, 23(4), 66-75.
- Brookshire, R. G., & Hovde, M. M. (2020). Artificial Intelligence in the Classroom: A Conceptual Model for Integrating Technology Tools. *Journal of Effective Teaching*, 20(1), 19-34.
- Brown, C., & Czerniewicz, L. (2020). Digital inequalities and access to learning resources: The case of South African students in the City of Cape Town. *British Journal of Educational Technology*, 51(4), 1145-1162.
- Carter, M., & Johnson, K. (2019). Exploring the relationship between reading logs and reading comprehension in middle and high school students. *Reading Education Quarterly*, 36(2), 127-145.
- Cervetti, G. (2019). Reading in the Digital Age: Using Technology to Enhance Reading Instruction. *The Reading Teacher*, 72(6), 657-665.
- Clark, R. C., & Mayer, R. E. (2016). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. John Wiley & Sons.
- Cumming, J., Kennedy, C., & Cohen, L. (2019). English language arts teachers' evaluation and interpretation of standardized reading comprehension test results. *Teaching and Teacher Education*, 84, 1-12.
- Dede, C. (2017). Educational implications of the new media ecology. *Journal of Educational Computing Research*, 56(1), 1-29.
- Fairclough, N., & Houston, S. (2021). Data science and critical data studies. In P. Atkinson, S. Delamont, A. Cernat, J. Sakshaug, & R. A. Williams (Eds.), *SAGE Research Methods Foundations*. Sage.
- Fauziati, E. (2009). The effects of error treatment on inter language of Indonesian learners learning English as a foreign language. *Kajian Linguistik dan Sastra*, 21(1), 55-66.
- Gardner, H. (2011). *Frames of Mind: Multiple Intelligences*. 3rd Ed. New York Books.
- Gardner, H. (2013). *Frequently Asked Questions- Multiple Intelligences and Related Educational Topics (Rep)*. Retrieved from <https://howardgardner01.files.wordpress.com/2012/06/faqmarch2013.pdf>
- Graham, S., & Hebert, M. A. (2020). Writing to read: A meta-analysis of the impact of writing and writing instruction on reading. *Harvard Educational Review*, 80(4), 416-447.
- Guskey, T. (2002). Professional Development and Teacher Change. *Teachers and Teaching: Theory and Practice*, 8(3), 311-334.
- Guthrie, J. (2004). *Teaching Reading in the Elementary School*. Allyn & Bacon.
- Guthrie, J. T. & Cox, K. E. (2019). Classroom conditions for motivation and engagement in reading. *Educational Psychology Review*, 31(2), 237-261.
- Guthrie, J. T., & Davis, M. H. (2003). Motivating Struggling Readers in Middle School through an Engagement Model of Classroom Practice. *Reading and Writing Quarterly*, 19(11), 59-85.
- Hattie, J. (2012). *Visible Learning for Teachers: Maximizing Impact on Learning*. Routledge.
- Hwang, G. J., & Wu, P. H. (2021). Applications and research trends of mobile and ubiquitous technologies in learning environments from 2010 to 2019: A systematic review of

- studies in selected SSCI journals. *Computers & Education, 159*, Article 104042.
- Krashen, S. (2004). The Effect of Reading on Vocabulary Development. *The Modern Language Journal*, 88(3), 301-327.
- Kurzweil, R. (2005). *The Singularity is Near: When Humans Transcend Biology*. Penguin.
- Ladson-Billings, G. (1995). But That's Just Good Teaching! The Case for Culturally Relevant Pedagogy. *Theory into Practice*, 34(3), 159-165.
- Lombardi, E. (2017). How to keep a reading log or book journal. Retrieved from <https://www.thoughtco.com/how-to-keep-a-reading-log-or-book-journal-739793>
- Nahass, T. (2022). 25 Creative Reading Log Ideas for Kids. Retrieved from <https://www.teachingexpertise.com/classroom-ideas/reading-logs-for-kids/>
- Nik Ismail Azlan, N. M., Mohandas, E. S., Othman, S., & Azhar, M. A. (2019). Employing personal reading logs and short stories to enhance students' L2 reading comprehension achievement. *Journal of Modern Language and Applied Linguistics, 3*(2), 1-6.
- Ortiz, L., & Ramirez, M. (2020). Reading logs and English Language Learners: A case study. *TESOL Quarterly*, 44(3), 211-230.
- Rakana, U. (2017). *Effects of the use of reading logs on reading comprehension of Mattayomsuksa 5 Students in Trang* (Doctoral dissertation, Prince of Songkla University).
- Russell, S. J., & Norvig, P. (2010). *Artificial Intelligence: A Modern Approach*. Prentice Hall.
- Selwyn, N. (2019). *Education and Technology: Key Issues and debates*. Bloomsbury Publishing.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.
- Ward, M., DeLuca, C., & Dapretto, M. (2022). The impact of social media use on adolescent brain development. *Nature Reviews Neuroscience, 23*(1), 1-12.

