Overcoming the Challenge: Assessing Reading and Writing Literacy in Fourth-Grade Students

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**Purpose of the study:** The research aims to assess fourth-grade students' reading and writing literacy. Understanding the literacy level in this age group is crucial for identifying areas requiring improvement and enhancing their skills. This study provides insights for educational enhancements.

**Methodology:** The research utilized a quantitative descriptive research design involving 85 fourth-grade students as participants. Data collection methods included interviews, observations, and tests. The interactive data analysis model was applied, consisting of three essential stages: data reduction, data presentation, and concluding (verification).

**Main Findings:** The findings from this study highlight a prevailing issue concerning the reading and writing literacy skills of students, indicating that the majority of students, over 55%, are categorized as having "Low" literacy skills, while 22.35% fall into the "Moderate" category. This concerning situation can impede the holistic development of students' abilities, necessitating prompt and effective intervention.

**Novelty/Originality of this study:** This study is unique for its focus on evaluating the reading and writing literacy skills of fourth-grade students at Elementary School 2 Merauke. It provides valuable insights into literacy education challenges and opportunities within this context. Using an interactive data analysis model, the research comprehensively assesses the factors affecting students' literacy skills. The findings highlight the importance of addressing print awareness and vocabulary, fundamental aspects of early literacy development, and the need to enhance teaching methods, including practical media usage and using the immediate environment for improved learning.

**Keywords:** Fourth-Grade Students, Merauke, Reading, Writing Literacy

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**1. INTRODUCTION**

The development of the 21st century demands that individuals are capable of competing in various fields; therefore, today's learners are required to master literacy. Literacy serves as an initial foundation for addressing the demands of the 21st century. Literacy is the basis for the formation of a multi-educated personality [1]. Literacy means the ability to read and write [2], [3]. However, the concept of literacy has broadened over time. Nowadays, literacy is not only defined as the ability to read and write but also encompasses the meaning and implications of basic reading and writing skills, from metalinguistic analysis of grammatical units to the structures of oral and written texts, and from the historical impact on humans beings to the philosophical and social consequences of Western education [4]. An individual's literacy skills can be used as...
a weapon to face the challenges of life in the present century, as through literacy, an individual will develop cognitive aspects within themselves [5]. Literacy includes various types of skills such as reading, writing, information processing, generating and expressing ideas and opinions, decision-making, and problem-solving [6]. There are six basic types of literacy, including reading and writing literacy, numeracy literacy, scientific literacy, digital literacy, financial literacy, and cultural and citizenship literacy[7], [8].

Reading and writing literacy is defined as the ability to read and write to develop one's knowledge for personal use and the advancement of society [9], [10]. Literacy, or the ability to read and write, is related to everything we do in future social situations and practices, making it crucial for developing literacy skills in children [11]. Reading literacy is the knowledge and skills needed to read, search, navigate, process, and understand information in order to analyze, respond to, and use written texts to achieve goals, develop understanding and potential, and participate in social environments [12]. Reading literacy is considered vital because it serves as the foundational skill for progressing to other abilities. On the other hand, writing involves a child's cognitive ability to transform ideas into a sequence of words organized in symbols and written form [13]. Writing skills are closely connected to students' literacy abilities [14]. Furthermore, students' writing abilities will impact their success in the learning process [15], [16]. Therefore, writing is not a simple activity that requires no learning but rather something that should be mastered and practiced. Writing skills have a significant impact on an individual's thinking abilities [17]–[19] and enhance their communication skills [20]. For this reason, writing literacy should be developed effectively because literacy is not something that can be acquired quickly; it takes time [21]. Based on these challenges, it can be said that reading and writing literacy is one of the fundamental skills that individuals must possess to access information and solve everyday life problems. With reading and writing skills, individuals can lead a higher quality life [22].

The importance of reading and writing literacy skills demands that teachers are able to effectively teach these skills, ultimately resulting in strong literacy abilities that impact the quality of human resources who can compete in the global world (123). Several methods have been employed to develop reading and writing literacy skills. Research indicates that applications like Wattpad can assist students in honing their reading and writing literacy skills [5]. Studies also emphasize the necessity of literacy-based MID (Model-Imitation-Development) learning models to enhance writing skills in various text genres [24]. Furthermore, research has demonstrated that using contextual or real-life learning methods along with reading materials, letter cards, and number cards can reduce difficulties in early literacy learning [25]. It has been found that early literacy learning can be improved through picture-based games [26]. In addition, research suggests that the use of QR Code dice as an alternative for early literacy introduction for 5-6-year-old children is suitable [27], [28]. Moreover, research indicates that the use of audio-visual media in specific learning materials can successfully enhance reading, writing, and numeracy skills [29]. In summary, based on the information provided, it can be concluded that to improve reading and writing literacy skills, various methods are employed, including the use of effective teaching models, engaging learning media, and educational games. These approaches contribute to enhancing the overall literacy skills of individuals, which is crucial for personal development and competitiveness in the global context.

However, some studies have found a gap between literacy and learning, meaning that literacy and learning are separated in their implementation [30]. Another issue in the field is that while there are various methods and strategies to promote literacy skills among students, a culture of literacy is still not evident in early childhood, whether at school or at home [31]. This lack of a literacy culture can lead to lower reading and writing literacy skills among students. This is supported by research showing that the public's interest in reading is still relatively low due to the lack of reading resources and the average educational level of the population, which is often at the primary school level or includes dropouts and illiterate individuals [32]. Some students still face challenges in reading individual words and forming them into sentences. They may leave words out when writing sentences and experience difficulties in basic arithmetic operations, resulting in errors when attempting practice questions provided by the teacher [33]. Research results also indicate that reading and writing literacy in higher grades is still far from the expected levels [34]. In other words, while literacy programs have been implemented, there are still areas where reading and writing literacy skills remain relatively low. If this condition is not addressed successfully, the consequences will significantly harm the development of the learning process. We must recognize that low levels of literacy in reading and writing can have a ripple effect on various other literacy aspects, such as digital literacy, cultural literacy, and financial literacy. This condition has the potential to impede the younger generation in creating a high-quality human resource, which, in turn, can have a serious impact on the future progress. This is one of the reasons for conducting research aimed at improving the reading and writing literacy of fourth-grade elementary school students. This research provides an overview of the students' reading and writing literacy skills. With this overview, it becomes possible to determine how to address the challenges to achieve optimal reading and writing literacy. This research differs from previous studies in that it assesses nine components: print awareness, phonological awareness, alphabet knowledge, phonics, vocabulary, comprehension, speaking, grammar, and writing.
2. RESEARCH METHOD

The research conducted employs a descriptive quantitative research method. Descriptive research aims to systematically explain phenomena, events, or occurrences in line with their actual state or the phenomenon that is taking place [35]. In descriptive research, researchers do not manipulate or apply specific treatments to the research sample, allowing all activities/events to occur as they naturally would within a relatively broad population [36]. Descriptive research focuses on obtaining data without manipulation or additional treatments [37]. This research was carried out to acquire information about the phenomenon of reading and writing literacy. It consists of three stages: the research preparation stage, the research implementation stage, and the final stage [38]. In the research preparation stage, the following steps are undertaken: Identifying the issues to be investigated and identifying related assumptions, and developing research instruments in the form of tests. The research implementation stage involves: Administering the tests to assess the reading and writing literacy skills of fourth-grade students at SD N 2 Merauke. The final stage of the research includes: 1) Data analysis and processing by the researcher. 2) Drawing conclusions based on the research results. And 3) Presenting the research findings in the form of a report. The research sample consists of fourth-grade students at SD N 2 Merauke, totaling 85 individuals. Fourth-grade students are selected because they are expected to have developed reading and writing literacy skills. One of the reasons for choosing SD N 2 Merauke is the diverse background of its students, which includes indigenous and migrant groups.

Data collection methods employed in this research consist of interviews, observations, and tests. Interviews were conducted to gain a broad overview related to the teaching practices at SD N 2 Merauke. These interviews were conducted with teachers and the school principal. The questions during the interviews cover various aspects of the teaching process, including instructional media, teaching models, lesson planning, the teaching process, and evaluation methods. It is expected that the interviews provide insight into how the teaching practices of the teachers at the school influence the reading and writing literacy skills of the students. Observations are used to examine the teaching processes at SD N 2 Merauke and to observe how students respond to prepared questions. The data from these observations serve as valuable information for decision-making based on the research outcomes. The primary method of data collection in this research is testing. The questions used in the test are developed based on nine indicators: print awareness, phonological awareness, alphabet knowledge, phonics, vocabulary, comprehension, speaking, grammar, and writing. These nine indicators are translated into 30 literacy questions, with cognitive levels ranging from C2 to C5.

The data analysis in this research is conducted interactively, as described by [39], where the analysis of qualitative data is an ongoing and interactive process that involves the direct participation of the researcher in explaining and drawing conclusions from the data by linking it to the relevant theory. The interactive data analysis model consists of three main stages: data reduction, data presentation, and drawing conclusions (verification), as explained below: Data Reduction: Data reduction involves the process of selection, focusing on simplification, abstraction, and transformation of raw data that emerged from field notes. During the data collection process, further reduction occurs, such as summarization, coding, theme identification, grouping, partitioning, and memo creation. Data Presentation: Data presentation involves organizing information into a structured form that allows for drawing conclusions and taking action. Effective data presentation is a crucial aspect of valid qualitative analysis, including various types of matrices, graphs, networks, and charts. Drawing Conclusions: This final stage includes the decision-making process that leads to answering the research questions and uncovering the "what" and "how" of research findings. The technique of descriptive data analysis is a method of data processing that involves systematic data arrangement in numerical or percentage form, which is related to the object under study [40], [41]. In this research, descriptive analysis was conducted using a Guttman scale and percentage statistics. The percentage statistics are used to calculate the frequency of responses from all respondents for each sub-indicator of the study [42]. The results in terms of percentages are then converted into Table 1, which categorizes the percentages.

<table>
<thead>
<tr>
<th>Interval limit percentage</th>
<th>Assessment category</th>
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<tbody>
<tr>
<td>0-20</td>
<td>Very low</td>
</tr>
<tr>
<td>21-40</td>
<td>Low</td>
</tr>
<tr>
<td>41-60</td>
<td>Moderate</td>
</tr>
<tr>
<td>61-80</td>
<td>High</td>
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<tr>
<td>81-100</td>
<td>Very High</td>
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3. RESULTS AND DISCUSSION

The research results indicate that the reading and writing literacy skills of fourth-grade students are still low. This can be observed from the individual student scores falling within the "Low" category. The analysis reveals that the reading and writing literacy skills are relatively low. For a more detailed breakdown, please refer
to Table 2. The analysis shows that the students’ literacy skills in reading and writing fell into the "Low" category, with 55.29% of the students’ scores falling within this category. This is followed by the "Moderate" category at 22.35%. This suggests that there is a need to improve and enhance the reading and writing literacy skills.

<table>
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<td>2.35</td>
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The low level of reading and writing literacy is evident in how students answer questions and respond to prompts. During classroom observations, it was found that some students struggled with even simple word spelling. For example, when asked to write "Ujan" (rain), they might write "Hujan." While this may seem minor, if not addressed, it can have significant consequences for the child's future development. Considering that fourth-grade students are expected to have mastered reading and writing literacy, this research discovered that nearly 75% of them face difficulties in constructing words, following writing rules, and even transcribing spoken words or sentences from their teachers. One prominent issue among the nine indicators is print awareness. In print awareness, students are taught about writing rules and the different types of books. Apart from print awareness, the component that needs improvement or enhancement is related to vocabulary. Good vocabulary is essential for sentence construction. The research found that students have a limited vocabulary, and sometimes they use words from their native language. Allowing this to persist can have adverse effects, such as students not being able to write a story. This, in turn, affects the teaching and learning process.

Considering that writing is not a simple activity and should be mastered and habitual, it is essential because writing skills significantly impact thinking abilities [17]–[19]. If someone's reading and writing literacy is not good, it will affect other abilities. For example, if a child cannot read, they will not understand events or acquire knowledge. Reading literacy is the knowledge and skill to read, search, trace, process, and understand information to analyze, respond, and use written text to achieve goals, develop understanding and potential, and participate in the social environment [12]. Reading literacy is considered crucial as it is a fundamental skill that leads to other abilities. On the other hand, writing involves a child's cognitive ability to form ideas expressed in a sequence of words in written form [13]. If a student can read, they can write down the information they acquire. When a student can read and write effectively, they can convey that information verbally. Conversely, if someone possesses good reading and writing literacy skills, it also boosts their thinking capabilities. In simple terms, a person who can read and has a strong interest in reading will acquire information that enriches their knowledge. This individual will process the information, leading to clear and thoughtful responses. This situation fosters the development of higher-level thinking abilities in students. Therefore, writing is not a simple activity that requires no learning but rather a skill that should be mastered and cultivated since writing skills influence thinking [17]–[19] and enhance communication abilities [20].

The low level of reading and writing literacy, as revealed in the research results, is closely related to how teaching and learning processes are conducted. The observations and questionnaires distributed regarding the learning process indicate that teachers are not making extensive use of teaching aids. It is widely acknowledged that using teaching aids can make the learning process easier and motivate students. Appropriate teaching aids stimulate learning motivation and consequently improve students' learning outcomes [43], [44]. Conversely, the absence of teaching aids can reduce student engagement, especially in reading activities [45]. Therefore, it can be stated that the presence of effective teaching aids for reading and writing literacy will facilitate the learning process. Students will better grasp abstract materials. It's important to choose, filter, and align teaching aids with the intended learning objectives [46], [47]. Paying attention to these factors can be one solution to improving the quality of students' reading and writing literacy. Additionally, involving the environment in the learning process is another valuable strategy. According to student interviews, they rarely engage in learning activities outside their usual surroundings. It is well-established that the environment is a rich source of learning opportunities. In our surroundings, various objects can serve as teaching aids for both teachers and students. This contextual learning approach simplifies the learning process and makes it more engaging. Furthermore, students are more likely to be interested in exploring what they can observe first hand compared to what they cannot see.

Based on the information provided, it can be concluded that students' literacy skills remain at a low level, as evidenced by their test scores, which show several indicators of reading and writing literacy falling into the low category. This situation can be attributed to the teaching methods employed by educators. Notably, the limited use of teaching aids stands out as a significant factor contributing to the low levels of reading and writing.
literacy. Consequently, it is recommended that teachers integrate teaching aids into their instructional approaches. Furthermore, harnessing the immediate environment offers a promising solution for enhancing the learning experience. This can entail conducting lessons beyond the confines of the classroom, such as in the schoolyard or the local library. Engaging with the natural environment or local surroundings is often more enjoyable for students compared to dealing with abstract concepts. It's important to acknowledge that this research comes with certain limitations, including the absence of confirmation regarding the role of parents in their children's at-home learning processes. Future research endeavors should delve into the impact of parental involvement on the development of reading and writing literacy.

4. CONCLUSION

The research results indicate that the reading and writing literacy skills of students are generally low, with over 55% of students falling into the "Low" category and 22.35% in the "Moderate" category. This condition can have a significant impact on students' overall abilities and must be addressed efficiently. One major issue that emerged from the evaluation of nine literacy indicators was the lack of print awareness. This condition can have a significant impact on students' overall abilities and must be addressed efficiently. One approach that emerged from the evaluation of nine literacy indicators was the lack of print awareness. This condition can have a significant impact on students' overall abilities and must be addressed efficiently. One approach that can be effective is the implementation of a basic understanding of writing rules, different types of books, and recognition of written words in their surroundings. Print awareness is crucial in the early stages of literacy development, as it forms the foundation for more advanced reading and writing skills. The impact of these findings extends beyond literacy itself. Literacy serves as a gateway to acquiring knowledge, critical thinking, and effective communication. As indicated by the research, when students struggle with literacy, it hinders their cognitive development and overall academic progress. It is essential to address these literacy challenges efficiently to enable students to access comprehensive and effective education.

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