

## The Principal's Role in Encouraging the Use of Quizizz as Interactive Media at SD Negeri 1 Wonosari

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### Abstract

The rapid development of digital technology has transformed educational practices worldwide, requiring schools to adapt learning processes that are more interactive, engaging, and responsive to students' diverse needs. This study aims to analyze the causes of reading difficulties among slow learner students, describe the implementation of the Interactive Digital Learning strategy, and examine its effectiveness in improving reading skills at SD Negeri 1 Wonosari. The research employed a qualitative descriptive approach involving observation, interviews, and documentation to collect data regarding the learning experiences of a fourth-grade slow learner student. The findings revealed that reading difficulties were influenced by cognitive limitations, low learning motivation, limited self-confidence, and environmental factors affecting literacy development. To address these challenges, teachers implemented an Interactive Digital Learning strategy utilizing digital media such as PowerPoint, Canva, and educational videos to create engaging and student-centered learning experiences. The implementation process included planning, classroom application, observation, and evaluation to ensure that learning activities met students' needs. The results demonstrated that Interactive Digital Learning significantly enhanced students' motivation, participation, confidence, reading fluency, and reading comprehension. The effectiveness of the strategy can be explained through Constructivist Theory, Sociocultural Theory, Multimedia Learning Theory, Self-Determination Theory, and Social Cognitive Theory, which emphasize the importance of active engagement, technological support, and meaningful learning experiences.

### Keywords

Digital Learning Media, Interactive Digital Learning, Reading Comprehension, Reading Difficulties, Slow Learner.



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## INTRODUCTION

The rapid development of digital technology has transformed educational practices worldwide, requiring schools to adapt learning processes that are more

interactive, engaging, and responsive to students' diverse needs. In the twenty-first century, educational institutions are expected not only to provide knowledge but also to develop students' critical thinking, creativity, communication, and collaboration skills through the integration of digital learning technologies. Consequently, school leaders are challenged to create an educational environment that encourages teachers to adopt innovative teaching methods and utilize digital media effectively. In this context, the principal plays a strategic role as an instructional leader who influences educational quality through policy-making, supervision, motivation, and support for teachers in implementing technology-based learning (Saryanto et al., 2020).

The success of technology integration in schools is closely related to leadership effectiveness. Principals are responsible for creating a vision of digital learning, facilitating professional development, providing technological resources, and fostering a culture of innovation among teachers. Educational leadership theories emphasize that principals serve as change agents who guide teachers toward instructional improvement and encourage the adoption of contemporary learning strategies. Without strong leadership support, teachers may encounter challenges in implementing digital learning tools due to limited technological skills, inadequate facilities, or resistance to pedagogical change. Therefore, the principal's involvement is essential in ensuring that digital learning innovations become sustainable practices within the school environment (Tawil et al., 2024).

One of the increasingly popular digital learning platforms is Quizizz, an interactive educational application that enables teachers to create engaging quizzes, assessments, and learning activities. Quizizz incorporates elements of gamification such as points, leaderboards, instant feedback, and interactive challenges, which can enhance students' motivation and participation during lessons. Unlike traditional learning methods that often rely on one-way communication, Quizizz promotes active student engagement and allows learners to receive immediate feedback on their performance. The platform also provides teachers with analytical reports that help monitor student progress and identify learning difficulties. As a result, Quizizz has become an effective interactive learning medium that supports both formative assessment and meaningful learning experiences (Saryanto et al., 2023).

The implementation of Quizizz is particularly relevant in elementary schools, where students require stimulating and enjoyable learning environments. Young learners tend to have shorter attention spans and are more responsive to visual, interactive, and game-based activities. Interactive digital media can help maintain students' interest while facilitating deeper understanding of learning materials.

Research has consistently shown that technology-enhanced learning environments can improve students' motivation, engagement, and academic achievement when appropriately integrated into classroom instruction. However, successful implementation depends not only on the availability of technology but also on institutional support and leadership commitment (Tawil et al., 2024).

At SD Negeri 1 Wonosari, efforts to improve learning quality through digital innovation have become increasingly important. Previous research conducted at the school revealed that interactive digital learning strategies significantly enhanced student engagement and learning outcomes. The study highlighted the effectiveness of digital media such as PowerPoint, Canva, and educational videos in increasing students' focus, motivation, and comprehension during learning activities. Furthermore, the research found that interactive digital learning created a more enjoyable learning atmosphere and supported students with diverse learning needs, including those experiencing learning difficulties. The findings demonstrated that technology-based instructional approaches could contribute positively to literacy development and classroom participation (Moreira & Freire, 2024).

The previous study also identified that students often face learning challenges related to concentration, motivation, and comprehension when conventional teaching methods are predominantly used. Interactive digital learning was introduced as a strategy to address these issues by utilizing attractive and engaging digital media. The research emphasized that digital learning tools could increase students' attention, improve understanding of instructional materials, and create active learning experiences. Moreover, the study suggested that the successful implementation of digital learning innovations requires teachers who are capable of operating digital platforms and designing interactive instructional content (Rahmawati et al., 2026).

Building upon these findings, Quizizz represents a practical and accessible digital platform that aligns with the principles of interactive digital learning. Through its game-based features, Quizizz can support active participation, immediate feedback, and student-centered learning. Nevertheless, the effective use of Quizizz in classroom instruction requires encouragement, guidance, and institutional support from school leadership. Principals play a crucial role in facilitating teacher readiness, organizing training opportunities, providing technological infrastructure, and promoting a school culture that embraces educational innovation. Their leadership can influence teachers' willingness to experiment with new technologies and integrate interactive media into daily instructional practices (Susanti et al., 2024).

The role of the principal becomes even more significant in the context of educational transformation, where schools are expected to continuously adapt to technological advancements and evolving student needs. Effective principals not only manage administrative responsibilities but also inspire teachers to improve instructional quality through innovation. By encouraging the use of Quizizz as an interactive learning medium, principals can contribute to creating engaging learning environments that support student achievement and digital literacy development. Such leadership practices are essential for ensuring that technology integration leads to meaningful educational outcomes rather than merely serving as a supplementary classroom tool (Firdaus et al., 2022).

Therefore, this study entitled *“The Principal’s Role in Encouraging the Use of Quizizz as Interactive Media at SD Negeri 1 Wonosari”* seeks to examine how school leadership contributes to the implementation of Quizizz in teaching and learning activities. The study focuses on understanding the strategies employed by the principal to motivate teachers, facilitate technological adoption, and foster a culture of innovation within the school. By exploring the relationship between principal leadership and the utilization of Quizizz, this research is expected to provide valuable insights into effective educational leadership practices that support digital transformation in elementary education while enhancing the quality of learning experiences for students.

## **METHODS**

This study employed a qualitative descriptive approach to explore the principal’s role in encouraging the use of Quizizz as an interactive learning medium at SD Negeri 1 Wonosari. The research focused on understanding leadership practices, policies, and strategies implemented by the principal to promote technology integration in classroom learning. Data were collected through interviews with the principal and teachers, classroom observations, and documentation analysis related to digital learning activities and school programs. The study was conducted at SD Negeri 1 Wonosari, a school that has previously implemented interactive digital learning approaches to enhance student engagement and learning outcomes. The collected data were analyzed using the interactive model of data reduction, data display, and conclusion drawing, allowing researchers to identify patterns regarding leadership support, teacher readiness, and the utilization of Quizizz in the teaching and learning process. The validity of the findings was ensured through source triangulation and method triangulation to obtain comprehensive and credible information concerning the implementation of Quizizz-based interactive learning (Aprita et al., 2025).

## FINDINGS AND DISCUSSION

### Causes of Reading Difficulties Among Fourth-Grade Slow Learner Students

Reading is one of the most fundamental literacy skills that supports students' academic success and lifelong learning. Through reading, learners acquire information, develop language proficiency, and enhance cognitive abilities that are essential for understanding various subjects. However, not all students develop reading skills at the same pace. The findings from SD Negeri 1 Wonosari revealed that a fourth-grade student categorized as a slow learner experienced considerable difficulties in reading, particularly in distinguishing letters, spelling words, understanding vocabulary, and comprehending the meaning of texts. These challenges were accompanied by difficulties in writing and oral communication, indicating broader learning barriers that affected overall academic performance. The study identified that the student demonstrated slower information processing and limited ability to understand learning materials compared to peers, characteristics commonly associated with slow learners.

The causes of reading difficulties can be understood from both internal and external perspectives. Internally, slow learner students often experience cognitive limitations that influence their ability to process linguistic information efficiently. The study explains that slow learners generally possess lower-than-average intellectual functioning, requiring more time to understand concepts and absorb new information. They frequently encounter difficulties in comprehension, have limited short-term memory capacity, and process information more slowly than their classmates. These characteristics directly affect reading performance because successful reading requires students to recognize letters, decode words, retain information in memory, and construct meaning from text simultaneously. When cognitive processing is delayed, students struggle to integrate these reading components effectively, leading to poor comprehension and slower reading development (Damayanti & Rahmadonna, 2025).

This finding can be analyzed through Piaget's Cognitive Development Theory, which emphasizes that learning depends on an individual's cognitive readiness and ability to process information. According to Piaget, children construct knowledge through interaction with their environment, but cognitive development progresses at different rates among individuals. Slow learner students may require more concrete learning experiences, repeated practice, and visual support to accommodate their developmental needs. Because abstract thinking and complex language processing develop more slowly in these learners, traditional reading instruction often fails to provide sufficient support. Consequently, reading difficulties emerge when

instructional approaches do not align with the learner's cognitive stage and processing capacity.

Psychological factors also contribute significantly to reading difficulties. The research indicates that many slow learner students experience low self-confidence, limited motivation, and emotional instability due to repeated experiences of academic failure. When students repeatedly struggle to read fluently or understand texts, they often develop negative attitudes toward learning. Such experiences may lead to anxiety, avoidance behaviors, and decreased participation in classroom activities. As motivation declines, students invest less effort in reading tasks, creating a cycle in which poor performance further reduces confidence and engagement (Julaeha, 2025).

These findings align with Bandura's Social Cognitive Theory, particularly the concept of self-efficacy. Bandura argues that individuals' beliefs about their abilities influence their motivation and performance. Students who repeatedly experience failure often develop low self-efficacy, causing them to doubt their capability to succeed in academic tasks. In reading instruction, low self-efficacy may discourage students from attempting challenging texts or participating actively in literacy activities. Therefore, psychological support and positive reinforcement are essential to improving reading achievement among slow learners.

External factors are equally important in explaining reading difficulties. The study identifies environmental influences such as family background, educational support, school facilities, and instructional approaches. Children who receive limited literacy stimulation at home or insufficient guidance from parents may have fewer opportunities to develop early reading skills. Similarly, school environments that rely heavily on conventional teaching methods may fail to address the unique needs of slow learner students. The research notes that motivation problems and lack of attention from the surrounding environment can worsen learning difficulties. Furthermore, inadequate educational facilities and insufficient teacher support may limit opportunities for individualized instruction and intervention (Matra & Dewi, 2024).

From the perspective of Vygotsky's Sociocultural Theory, learning is strongly influenced by social interaction and environmental support. Vygotsky introduced the concept of the Zone of Proximal Development (ZPD), which suggests that learners can achieve higher levels of understanding when guided by more knowledgeable individuals. In the case of slow learner students, effective teacher assistance, parental involvement, and supportive learning environments are crucial for facilitating reading

development. Without adequate scaffolding, students may struggle to progress beyond their current abilities(Wahyuni et al., 2024).

In conclusion, the reading difficulties experienced by the fourth-grade slow learner student at SD Negeri 1 Wonosari result from a complex interaction of cognitive, psychological, and environmental factors. Cognitive limitations affect information processing and comprehension, psychological barriers reduce motivation and confidence, while environmental conditions influence opportunities for literacy development. Theoretical perspectives from Piaget, Bandura, and Vygotsky collectively explain why slow learner students require differentiated instructional strategies, continuous support, and adaptive learning environments to overcome reading challenges and achieve meaningful literacy growth

### **Implementation of the Interactive Digital Learning Strategy at SD Negeri 1 Wonosari: Theoretical Analysis**

The implementation of the Interactive Digital Learning strategy at SD Negeri 1 Wonosari emerged as an innovative response to the reading difficulties experienced by slow learner students. The study found that conventional teaching methods often failed to maintain students' attention and motivation, resulting in low comprehension and limited participation during learning activities. To address these challenges, teachers adopted an Interactive Digital Learning approach that integrated various forms of digital media, including PowerPoint presentations, Canva-based instructional materials, and educational videos. These digital resources were designed to be visually attractive, interactive, and easily understood by students, particularly those who required additional support in processing information. The strategy aimed to improve students' concentration, increase learning motivation, and facilitate reading comprehension through meaningful and engaging learning experiences.

The implementation process began with careful instructional planning. Teachers prepared learning materials tailored to the characteristics and abilities of slow learner students. This stage involved designing interactive digital content, selecting appropriate learning resources, and preparing observation and assessment instruments. The planning process was essential because slow learner students require instructional materials that are concrete, structured, and adapted to their learning pace. By developing learning resources specifically designed for the students' needs, teachers ensured that the digital learning environment would be supportive and accessible. In addition, the preparation of assessment tools enabled teachers to evaluate the effectiveness of the intervention systematically and identify areas requiring improvement(Dewi & Marlana, 2026).

During the implementation stage, students were introduced to the digital learning tools and guided in their use. Teachers provided clear instructions and demonstrations to ensure that students could interact effectively with the technology. Various activities were incorporated into the learning process, including interactive exercises, word games, comprehension tasks, multimedia presentations, and digital storytelling. Students were encouraged to engage actively with the content rather than passively receiving information from the teacher. Immediate feedback was also provided throughout the activities, allowing students to recognize mistakes and improve their understanding in real time. Such interactions created a dynamic learning environment where students became participants in the construction of knowledge rather than mere recipients of information (Nurfadila et al., 2024).

The implementation of Interactive Digital Learning can be analyzed through the lens of Constructivist Learning Theory proposed by Jean Piaget and further developed by educational theorists. Constructivism suggests that learners actively construct knowledge through experiences and interactions with their environment. Rather than viewing learning as a passive process of information transmission, constructivist theory emphasizes active engagement and personal meaning-making. In the context of SD Negeri 1 Wonosari, digital learning tools provided opportunities for students to explore concepts independently, manipulate learning materials, and receive immediate responses to their actions. The interactive nature of digital media enabled students to build understanding through direct experience, which is particularly beneficial for slow learner students who often require concrete and visual learning experiences to comprehend abstract concepts (Batubara & Lubis, 2025).

Another important theoretical perspective that supports the implementation of Interactive Digital Learning is Vygotsky's Sociocultural Theory. Vygotsky argued that learning occurs most effectively when students receive guidance and support within their Zone of Proximal Development (ZPD). The role of the teacher is therefore crucial in providing scaffolding that helps students perform tasks beyond their current level of competence. In this study, teachers functioned as facilitators who guided students in using digital tools, provided explanations when difficulties arose, and offered continuous feedback during learning activities. The digital resources themselves also served as scaffolding tools by simplifying complex information through visualizations, animations, and interactive exercises. Consequently, students were able to achieve higher levels of comprehension than they might have attained through traditional instruction alone (Supriyanto & Syamsuri, 2025).

The strategy also reflects the principles of Mayer's Cognitive Theory of Multimedia Learning. Mayer argues that students learn more effectively when information is presented through multiple channels, such as text, images, audio, and animation. According to this theory, meaningful learning occurs when learners actively select relevant information, organize it into coherent mental structures, and integrate it with prior knowledge. The Interactive Digital Learning strategy incorporated various multimedia elements that reduced cognitive overload and enhanced students' understanding of reading materials. Visual representations, educational videos, and interactive tasks helped students connect words with meanings more effectively than text-only instruction. These multimedia features were particularly advantageous for slow learner students, who often struggle with abstract verbal information and benefit from visual and contextual support.

Furthermore, the implementation of Interactive Digital Learning aligns with contemporary educational demands emphasizing twenty-first-century skills. The study notes that the strategy supports Higher Order Thinking Skills (HOTS), communication, collaboration, creativity, and critical thinking while simultaneously promoting character development. By engaging students in interactive activities and encouraging active participation, the strategy helps prepare learners for the increasingly digital and interconnected world. The integration of technology into literacy instruction demonstrates how digital innovation can be used not merely as a teaching aid but as a transformative tool that enhances learning quality and student engagement (Novitasari et al., 2023).

In conclusion, the implementation of the Interactive Digital Learning strategy at SD Negeri 1 Wonosari was carried out through systematic planning, active classroom application, continuous observation, and reflective evaluation. The strategy successfully created a student-centered learning environment that addressed the specific needs of slow learner students. Theoretical perspectives from Constructivism, Sociocultural Theory, and Multimedia Learning Theory explain why the approach was effective in enhancing engagement, comprehension, and participation. By integrating technology with sound pedagogical principles, Interactive Digital Learning provided meaningful learning experiences that supported literacy development and promoted more inclusive educational practices for students experiencing reading difficulties.

### **The Effectiveness of Interactive Digital Learning in Assisting Slow Learner Students with Reading Difficulties: Theoretical Analysis**

The findings of the study conducted at SD Negeri 1 Wonosari indicate that the Interactive Digital Learning strategy effectively assisted slow learner students in

overcoming reading difficulties. Prior to the implementation of the strategy, the identified student experienced significant challenges in recognizing letters, reading words fluently, understanding vocabulary, and comprehending written texts. These difficulties affected not only academic performance but also the student's motivation, confidence, and participation during classroom learning. The implementation of Interactive Digital Learning was designed to address these problems by providing engaging, technology-based learning experiences that utilized digital media such as PowerPoint, Canva, educational videos, and other interactive learning resources. The results demonstrated notable improvements in students' learning motivation, classroom engagement, reading fluency, and comprehension abilities, suggesting that digital learning interventions can be highly beneficial for students with learning difficulties.

One of the most important outcomes observed in the study was the increase in student motivation. Before the intervention, the slow learner student frequently showed limited interest in reading activities and often struggled to maintain concentration during lessons. Traditional instructional methods tended to make learning appear monotonous and demanding, causing students to become disengaged. After the implementation of Interactive Digital Learning, however, the student demonstrated greater enthusiasm and willingness to participate in classroom activities. The visual and interactive features of digital media attracted the student's attention and transformed reading activities into more enjoyable experiences. As a result, the student became more actively involved in learning tasks and showed greater persistence when encountering challenging materials (Zahara et al., 2025).

This improvement can be explained through Self-Determination Theory developed by Deci and Ryan, which emphasizes the importance of intrinsic motivation in the learning process. According to this theory, students are more motivated when learning activities satisfy their needs for competence, autonomy, and relatedness. Interactive Digital Learning provides immediate feedback, engaging challenges, and opportunities for active participation, enabling students to experience success and feel competent in their learning. For slow learner students who often encounter repeated failures, experiencing achievement through interactive activities can significantly enhance motivation and encourage continued engagement with reading tasks (Saodi et al., 2024).

The study also found that Interactive Digital Learning improved students' reading comprehension. The digital media used during instruction incorporated images, animations, videos, and visual representations that helped students understand the

meaning of words and texts more effectively. Instead of relying solely on written information, students were exposed to multiple forms of representation that facilitated deeper understanding. Visual support enabled students to connect textual information with real-world contexts, making abstract concepts more concrete and easier to comprehend. Consequently, the student demonstrated greater ability to interpret reading materials and answer comprehension questions accurately after participating in the intervention(Wardhani et al., 2024).

The effectiveness of this approach can be analyzed using Mayer's Cognitive Theory of Multimedia Learning. Mayer argues that learners process information through separate visual and verbal channels, and meaningful learning occurs when both channels are engaged simultaneously. Interactive Digital Learning utilized text, images, audio, and animations, allowing students to process information through multiple sensory pathways. This approach reduced cognitive overload and facilitated the integration of new knowledge with existing understanding. For slow learner students, who often struggle with processing verbal information alone, multimedia presentations provide additional support that enhances comprehension and retention of learning materials(Novitasari et al., 2023).

Another significant finding was the improvement in students' confidence and participation. The study reports that the student became more willing to engage in classroom discussions, complete assignments, and respond to teacher questions after participating in Interactive Digital Learning activities. Immediate feedback from digital media enabled the student to recognize mistakes and make corrections without fear of embarrassment. Positive learning experiences contributed to the development of self-confidence, which in turn encouraged greater participation in subsequent learning activities. As confidence increased, the student demonstrated a stronger willingness to read aloud, answer questions, and interact with both teachers and peers(Wardhani et al., 2024).

This outcome aligns with Bandura's Social Cognitive Theory, particularly the concept of self-efficacy. Bandura suggests that individuals who believe in their capabilities are more likely to engage actively in tasks, persist when facing difficulties, and achieve higher levels of performance. Through repeated successful experiences facilitated by interactive digital media, the student developed stronger self-efficacy beliefs regarding reading ability. The increase in self-confidence created a positive cycle in which improved performance reinforced motivation, and increased motivation further supported learning achievement(Zahara et al., 2025).

The success of Interactive Digital Learning can also be understood through Vygotsky's Sociocultural Theory. Vygotsky emphasized that learning occurs most effectively when students receive appropriate support within their Zone of Proximal Development (ZPD). During the intervention, teachers played an active role in guiding students, providing explanations, and offering assistance when challenges emerged. The digital media functioned as additional scaffolding tools by simplifying information and presenting learning materials in accessible formats. Through this combination of teacher support and technological assistance, the student was able to accomplish tasks that would have been difficult to complete independently. The collaborative interaction between teacher, technology, and learner facilitated meaningful learning and accelerated reading development (Saodi et al., 2024).

Furthermore, the implementation of Interactive Digital Learning contributed to creating a more inclusive learning environment. Traditional instruction often fails to accommodate diverse learning needs, particularly for students who require additional support. In contrast, digital learning resources can be adapted to different learning styles and levels of ability. The interactive nature of the strategy allowed the student to learn at an appropriate pace while receiving individualized support through multimedia resources. This flexibility made learning more accessible and reduced barriers that commonly hinder the academic progress of slow learner students.

In conclusion, the findings demonstrate that Interactive Digital Learning effectively helped slow learner students overcome reading difficulties by improving motivation, comprehension, confidence, participation, and overall learning engagement. The success of the strategy is supported by several educational theories, including Self-Determination Theory, Mayer's Cognitive Theory of Multimedia Learning, Bandura's Social Cognitive Theory, and Vygotsky's Sociocultural Theory. These theoretical perspectives collectively explain how interactive digital media creates meaningful learning experiences that support literacy development and foster positive educational outcomes for students with learning difficulties. Therefore, Interactive Digital Learning represents a valuable instructional approach for enhancing reading achievement and promoting inclusive education at the elementary school level.

## CONCLUSION

Based on the findings of the study, it can be concluded that the reading difficulties experienced by the fourth-grade slow learner student at SD Negeri 1 Wonosari were caused by a combination of cognitive, psychological, and environmental factors, including slow information processing, limited comprehension

ability, low learning motivation, and insufficient learning stimulation. To address these challenges, the school implemented an Interactive Digital Learning strategy utilizing digital media such as PowerPoint, Canva, and educational videos to create a more engaging and student-centered learning environment. The implementation was conducted through systematic planning, active classroom application, and continuous evaluation, allowing learning activities to be adapted to the student's needs. The results demonstrated that Interactive Digital Learning effectively improved the student's motivation, participation, self-confidence, reading fluency, and comprehension. These improvements indicate that interactive digital media can provide meaningful learning experiences that support literacy development among slow learner students. Supported by Constructivist Theory, Sociocultural Theory, Multimedia Learning Theory, Self-Determination Theory, and Social Cognitive Theory, the study confirms that technology-integrated instruction can serve as an effective and inclusive approach for helping students with reading difficulties achieve better academic outcomes and more positive learning experiences in elementary education.

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