



BRIGHT VISION

E-ISSN: 2798-8872 P-ISSN: 2797-1716

Email: brightvisionjournal@uinsu.ac.id | Page: 159-169

<http://jurnaltarbiyah.uinsu.ac.id/index.php/brightvision>

TEACHER'S PERCEPTION OF QUIZIZZ GAME-BASED LEARNING ON ADHD STUDENTS' SPEAKING COMPETENCE AT AN-NUR ISLAMIC SCHOOL

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ABSTRACT

This study aims to examine teachers' perceptions of using Quizizz as a game-based learning platform to improve the speaking skills of students with Attention Deficit Hyperactivity Disorder (ADHD) at An-Nur Islamic School. Speaking skills play a crucial role in English language learning; however, students with ADHD often face challenges in actively participating in speaking tasks. Game-based learning approaches, such as Quizizz, have been shown to enhance student motivation, engagement, and learning outcomes, especially for those who require more structure in their learning process. This qualitative case study explores the experiences and perceptions of English teachers in inclusive classrooms. The findings indicate that Quizizz's gamification features, such as live mode, leaderboards, and instant feedback, effectively boost motivation and participation among ADHD students. Additionally, the use of Quizizz also improves various aspects of speaking skills, including fluency, vocabulary, and speaking confidence. However, the study also identifies technical and pedagogical challenges faced by teachers in using Quizizz, such as difficulty in finding suitable content and managing screen time for ADHD students. This research provides insights for developing more inclusive, technology-based speaking strategies for students with special needs.

Keywords: Game-Based Learning, Quizizz, Speaking Skills

INTRODUCTION

Speaking competence is one of the most important components of English language learning because it enables learners to express ideas, exchange information, and participate effectively in social and academic communication. According to Hymes (1972), communicative competence involves not only linguistic knowledge but also the ability to use language appropriately in different contexts. Similarly, Brown (2007) and Harmer (2007) emphasize that speaking is a productive skill that requires learners to integrate vocabulary, grammar, pronunciation, fluency, and interactional abilities during communication. Thornbury (2005) further argues that speaking is often considered the most challenging language skill because learners must process language in real time while maintaining meaningful interaction. These challenges become more significant for students with Attention Deficit Hyperactivity Disorder (ADHD), a neurodevelopmental disorder characterized by persistent patterns of inattention, hyperactivity, and impulsivity (American Psychiatric Association, 2013). Research by Castellanos et al. (2002) and Faraone et al. (2005) indicates that ADHD is associated with neurological and executive functioning difficulties that may affect attention regulation, self-control, and language performance. Consequently, students with ADHD often experience difficulties in maintaining concentration, organizing ideas, and participating actively in speaking activities. DuPaul and Stoner (2014) further explain that attention deficits and working memory limitations may

reduce students' ability to perform effectively in cognitively demanding language tasks. Therefore, English teachers require instructional approaches that can address these challenges while supporting the development of speaking competence.

The increasing integration of educational technology has encouraged teachers to adopt more engaging and learner-centered approaches to language teaching. One approach that has received considerable attention is game-based learning (GBL), which incorporates game elements into educational activities to enhance learner motivation and participation. According to Prensky (2001), game-based learning creates meaningful learning experiences by combining challenge, interaction, and immediate feedback. Gee (2007) similarly argues that games provide opportunities for active learning, experimentation, and problem solving within low-risk environments. The concept of gamification proposed by Deterding et al. (2011) further highlights the role of game elements such as points, leaderboards, badges, and rewards in increasing learner engagement. Kapp (2012) also emphasizes that gamification can improve participation and learning outcomes by making educational activities more motivating and enjoyable. Among the various game-based learning platforms currently available, Quizizz has emerged as a popular tool because it combines quizzes, multimedia resources, leaderboards, instant feedback, and interactive features within a single platform. Previous studies have reported that Quizizz positively influences student engagement, motivation, and academic performance in different educational settings (Zhao, 2019; Wang & Tahir, 2020; Souza et al., 2021). These characteristics suggest that Quizizz may offer meaningful opportunities to support speaking instruction, particularly for learners who require additional motivation and structured learning environments.

The potential benefits of Quizizz are especially relevant for students with ADHD because game-based learning environments provide clear goals, immediate rewards, and continuous feedback that help maintain attention and participation. Barkley (1997) explains that students with ADHD often struggle with executive functioning and self-regulation, making structured and interactive learning environments particularly important. The effectiveness of game-based learning can also be explained through several educational theories. Constructivist theory proposes that learners actively construct knowledge through meaningful experiences and interactions (Piaget, 1972), while Vygotsky (1978) emphasizes the importance of social interaction and guided participation in language development. Furthermore, Csikszentmihalyi (1990) argues through Flow Theory that learners achieve optimal learning when they are fully immersed and engaged in an activity that balances challenge and skill. Quizizz provides conditions that may support this state through its interactive and competitive features. In addition, Hattie and Timperley (2007) highlight that timely feedback is one of the most influential factors affecting learning achievement. Through instant feedback and repeated opportunities for participation, Quizizz may support the development of important speaking components such as fluency, vocabulary, pronunciation, grammatical accuracy, and speaking confidence. Therefore, examining teachers' perceptions of Quizizz in speaking instruction is important for understanding how technology can support language learning among students with ADHD.

The present study is also situated within the broader framework of inclusive education. According to UNESCO (2008), inclusive education seeks to provide equitable learning opportunities for all students regardless of their individual characteristics or educational needs. In inclusive classrooms, teachers play a critical role in adapting instructional practices to ensure meaningful participation for learners with diverse backgrounds and abilities. Farrell (2012) emphasizes that effective inclusion requires continuous instructional adaptation and collaboration among educational stakeholders, while Friend and Cook (2013) highlight the importance of collaborative practices in supporting students with special educational needs. Although the use of educational technology has increased in inclusive education, research focusing on students with ADHD remains relatively limited.

Existing studies on Quizizz and game-based learning primarily investigate student achievement, engagement, and motivation using quantitative approaches (Wang & Tahir, 2020; Souza et al., 2021). Limited attention has been given to teachers' perceptions regarding the implementation of Quizizz for developing speaking competence among students with ADHD. Furthermore, studies conducted within Islamic school contexts remain scarce, despite the unique educational and cultural characteristics of these settings. As a result, there is still limited understanding of how English teachers perceive the effectiveness, benefits, long-term impact, and challenges of using Quizizz to support speaking instruction for students with ADHD.

Based on these considerations, this study aims to explore English teachers' perceptions of Quizizz game-based learning on ADHD students' speaking competence at An-Nur Islamic School. The novelty of this study lies in its integration of four underexplored dimensions, namely teacher perception, ADHD learners, speaking competence, and the context of an inclusive Islamic school. Specifically, this study addresses four research questions: (1) What strategies do English teachers use when integrating Quizizz into speaking activities for students with ADHD? (2) How do English teachers perceive the impact of Quizizz on ADHD students' speaking competence? (3) How do English teachers perceive the long-term impact of Quizizz on students' confidence and motivation to speak? and (4) What challenges do English teachers face when using Quizizz to support the development of speaking competence among students with ADHD? By addressing these questions through a qualitative case study approach, this study is expected to contribute to the literature on game-based learning, inclusive education, and English language teaching while providing practical insights for educators working with students with special educational needs.

RESEARCH METHOD

This study employed a qualitative approach with a case study design to explore teachers' perceptions of Quizizz game-based learning on ADHD students' speaking competence. A qualitative case study was selected because it enables researchers to investigate a specific phenomenon in depth within its real-life context and to gain a holistic understanding of participants' experiences and interpretations (Creswell & Poth, 2018; Yin, 2018). The study focused on English teachers' perceptions of the implementation of Quizizz in speaking activities for students with Attention Deficit Hyperactivity Disorder (ADHD), particularly regarding students' participation, confidence, engagement, and speaking performance. A qualitative approach was considered more appropriate than a quantitative approach because the purpose of the study was not to test hypotheses or measure variables statistically, but rather to understand teachers' experiences, beliefs, and perspectives regarding the use of Quizizz in an inclusive educational setting.

The study was conducted at An-Nur Islamic School, an inclusive educational institution that accommodates students with special educational needs, including students diagnosed with ADHD. The school was selected purposively because it has integrated educational technology into English language learning and has implemented Quizizz as a game-based learning platform in classroom instruction. Data collection was conducted over one month during the 2026 academic year and followed the regular English teaching schedule to ensure that the learning process remained natural. The participants were selected through purposive sampling based on specific criteria relevant to the research objectives. The participant was an English teacher who had experience teaching students with ADHD and had utilized Quizizz in speaking activities. Ethical considerations were carefully maintained throughout the study. Prior to data collection, official permission was obtained from the school. The participant's identity was kept confidential, and all information related to students with ADHD was protected and used solely for academic purposes.

Data were collected through semi-structured interviews, classroom observations, and document analysis. In qualitative research, the researcher acted as the primary instrument responsible for collecting, interpreting, and analyzing the data. Semi-structured interviews were conducted to explore the teacher's experiences, perceptions, and opinions regarding the use of Quizizz in teaching speaking to students with ADHD. This technique allowed the researcher to follow predetermined questions while also exploring emerging issues during the interview process (Adams, 2025). Classroom observations were carried out to examine how Quizizz was implemented during speaking activities and how ADHD students responded to game-based features such as live mode, timers, music, and leaderboards. In addition, document analysis was conducted by examining lesson plans, Quizizz reports, and relevant learning records to support and validate the findings obtained from interviews and observations. The use of multiple data sources provided a richer understanding of the phenomenon and strengthened the credibility of the findings.

The collected data were analyzed using the qualitative data analysis model proposed by Miles, Huberman, and Saldaña (2014), which consists of data condensation, data display, and conclusion drawing and verification. During data condensation, the researcher selected, simplified, and organized relevant information obtained from interviews, observations, and documentation according to the research objectives. The data were then displayed through descriptive narratives and thematic categorization to facilitate interpretation and identification of recurring patterns. Finally, conclusions were drawn and continuously verified by comparing evidence across different data sources to ensure consistency and credibility. To enhance the trustworthiness of the findings, the study applied technique triangulation and source triangulation. Information obtained from interviews was cross-checked with classroom observations and document analysis, while different sources of evidence were compared to confirm the accuracy of the interpretations. Nevertheless, the findings of this study were limited to one educational context and a small number of participants; therefore, they were intended to provide in-depth contextual understanding rather than broad generalization.

RESULT AND DISCUSSION

Strategies for Using Quizizz in Speaking Activities for ADHD Students

The findings revealed that English teachers employed several strategies when integrating Quizizz into speaking activities for students with ADHD. As shown in Table 1, four major strategies were identified, namely the use of live mode for real-time interaction, time management and repetition, gamification features to increase motivation, and content customization according to students' learning needs. Teachers reported that live mode encouraged students to respond verbally and participate more actively because they received immediate feedback during classroom activities. In addition, repetition and flexible time allocation allowed students to retry tasks when mistakes occurred, which helped maintain their attention and reduced frustration. Teachers also emphasized the importance of gamification elements such as leaderboards, points, and memes in creating an enjoyable learning atmosphere. Furthermore, learning materials and Quizizz questions were adjusted to suit students' cognitive abilities and attention spans. These findings indicate that the successful implementation of Quizizz for ADHD students depends not only on the platform itself but also on teachers' instructional decisions and classroom adaptations.

Table 1. Strategies Used in Quizizz for ADHD Students' Speaking Activities

Strategy	Description/Details	Supporting Quotes & Data
Live Mode for Real-time Interaction	Engages students in immediate verbal responses, reducing silence in class.	"ADHD students get excited to answer, as they compete and get immediate feedback," indicating that the spontaneous nature of live sessions keeps students alert and

		communicative.
Time Management and Repetition	Ensures that tasks are neither overwhelming nor too easy. Allows students to retry answers.	<i>“If students make a mistake, they get another chance. This helps them stay engaged and confident,”</i> which highlights how repetition reduces the fear of failure and supports their attention span.
Gamification (Leaderboards, Points)	Uses competitive aspects to motivate students. Leaderboards and rewards keep students engaged.	<i>“The leaderboard motivates them to speak more to improve their rankings,”</i> showing that competitive elements act as a catalyst for increased verbal participation.
Content Customization	Adjusts the level of complexity based on students' cognitive needs, ensuring clarity.	<i>“Quizizz questions are tailored to fit ADHD students' focus, focusing on short, direct questions,”</i> proving that simplified content is essential for maintaining their concentration during speaking tasks.

The findings suggest that teachers viewed Quizizz as more than a digital assessment platform. Instead, it functioned as an instructional tool that supported interaction, motivation, and participation in speaking activities. The effectiveness of live mode can be explained through Vygotsky's Social Learning Theory, which emphasizes the importance of social interaction and guided participation in learning (Vygotsky, 1978). Through immediate responses and teacher feedback, students were actively involved in meaningful communication rather than passive learning. The use of repetition and scaffolding also reflects the principles of Constructivist Learning Theory proposed by Piaget (1972), which suggests that learners develop knowledge through active engagement and continuous experience. For students with ADHD, opportunities to repeat tasks and correct mistakes helped reduce anxiety while strengthening their understanding of language use. Moreover, the positive role of leaderboards, points, and other gamification features supports the arguments of Prensky (2001), who stated that game-based learning can increase learner motivation, attention, and engagement through enjoyable and challenging activities. These findings are consistent with Zhao (2019), who found that Quizizz creates a more interactive learning environment that encourages student participation, and with Wang et al. (2020), who reported that game-based learning positively influences engagement and learning performance. In the context of inclusive education, the present findings further demonstrate that the effectiveness of Quizizz is closely related to teachers' ability to adapt content and learning procedures according to students' individual needs. This result extends previous studies by showing that teachers' instructional adaptations, particularly through content customization and scaffolding, play an important role in supporting speaking activities for students with ADHD. Therefore, the findings highlight the central role of teachers in transforming Quizizz from a technological tool into a meaningful learning medium that promotes speaking participation and engagement among students with special educational needs.

Teachers' Perceptions of the Impact of Quizizz on Speaking Competence

The findings indicated that English teachers perceived Quizizz as having a positive impact on the speaking competence of students with Attention Deficit Hyperactivity Disorder (ADHD). As presented in Table 2, teachers reported improvements in several components of speaking competence, including fluency, vocabulary development, speaking confidence, and classroom participation. Teachers observed that ADHD students became more willing to respond orally during classroom activities when Quizizz was integrated into

speaking lessons. The interactive nature of the platform encouraged students to participate without feeling pressured, while immediate feedback helped them recognize and correct mistakes during the learning process. Teachers also noted that students demonstrated greater confidence when expressing ideas and answering questions orally. Furthermore, the use of visual prompts, short tasks, and gamified activities helped students remain engaged and motivated throughout speaking activities. These findings suggest that Quizizz created a supportive learning environment that facilitated active verbal participation and contributed to the development of speaking competence among students with ADHD.

Table 2. Teachers' Perceptions of the Impact of Quizizz on ADHD Students' Speaking Competence

Perception	Details	Supporting Quotes & Data
Increased Speaking Activity	Students became more actively involved in verbal exchanges.	<i>"Students who were shy started to speak more freely in class,"</i> demonstrating a clear shift in classroom participation levels and willingness to communicate.
Enhanced Motivation	Gamification aspects (points, leaderboards) increased student participation.	<i>"Points and rewards motivated them to speak more, especially when they saw their progress,"</i> reflecting how visible achievement metrics drive students to engage more deeply with the material.

The findings demonstrate that teachers viewed Quizizz as an effective medium for supporting multiple dimensions of speaking competence rather than merely increasing student engagement. Improvements in fluency were reflected in students' greater readiness to respond orally and their increased participation during speaking activities. This finding supports the view of Richards (2008), who emphasizes that speaking competence develops through frequent opportunities to communicate and interact meaningfully. Teachers believed that the interactive and time-sensitive nature of Quizizz encouraged students to produce language more spontaneously, which contributed to the development of speaking fluency. The perceived improvement in vocabulary development also aligns with Nation's (2013) argument that repeated exposure and meaningful use of vocabulary facilitate language acquisition. Through repeated interaction with Quizizz tasks, students encountered and practiced vocabulary in various contexts, which helped strengthen retention and usage. In addition, teachers consistently reported increased speaking confidence among ADHD students. This finding is particularly important because students with ADHD often experience difficulties related to self-confidence and communication anxiety (Barkley, 1997). The supportive environment created by Quizizz, combined with immediate feedback and opportunities for repeated practice, appeared to reduce students' fear of making mistakes and encouraged greater participation in speaking activities. These findings are consistent with Zhao (2019), who reported that Quizizz promotes student engagement through enjoyable and interactive learning experiences. Similarly, Wang et al. (2020) found that game-based learning environments contribute positively to student participation and learning performance. From the perspective of communicative language teaching, the findings also support the concept of communicative competence proposed by Canale and Swain (1980), which highlights the importance of meaningful language use in developing communicative ability. It suggests that the platform not only enhances motivation but also supports important speaking components such as fluency, vocabulary use, confidence, and active participation within an inclusive learning environment.

Teachers' Views on the Long-Term Impact on Confidence and Motivation

The findings revealed that English teachers perceived Quizizz as having a positive long-term impact on the confidence and motivation of students with Attention Deficit

Hyperactivity Disorder (ADHD). As summarized in Table 3, the long-term impacts included increased speaking confidence, higher learning motivation, reduced speaking anxiety, and improved social interaction. Based on interview and observation data, teachers reported that students gradually became more confident in expressing their ideas, answering questions, and participating in speaking activities after repeated exposure to Quizizz-based learning. Teachers observed that students who were initially reluctant to speak became more willing to communicate in front of their classmates and engage in classroom discussions. In addition, students demonstrated greater enthusiasm toward English lessons and showed a stronger willingness to participate in speaking tasks. Teachers also noted improvements in social interaction, as the collaborative and competitive elements of Quizizz encouraged students to communicate more frequently with both teachers and peers. These findings suggest that the benefits of Quizizz extended beyond immediate classroom participation and contributed to the development of more positive attitudes toward speaking and language learning over time.

Table 3. Teachers' Views on the Long-Term Impact of Quizizz on Confidence and Motivation

Impact	Details	Supporting Quotes & Data
Reduction in Anxiety	Quizizz created an anxiety-free learning environment.	<i>"The use of memes and leaderboards helped reduce anxiety, making students feel more comfortable speaking,"</i> which suggests that a playful environment lowers the affective filter for language production.
Improved Social Interaction	The competitive nature of Quizizz promoted peer-to-peer engagement.	<i>"Quizizz encouraged social interaction, helping students build stronger relationships,"</i> showing that the shared gaming experience facilitates better communication among classmates.

The findings indicate that teachers viewed Quizizz as a tool that supported not only academic development but also important affective aspects of language learning. The perceived increase in speaking confidence can be explained through Keller's ARCS Motivation Model, which emphasizes the importance of confidence and satisfaction in sustaining learner motivation (Keller, 1987). Teachers believed that the immediate feedback, rewards, and positive reinforcement provided by Quizizz allowed students to experience success more frequently, which gradually strengthened their confidence in speaking English. The findings also align with Self-Determination Theory proposed by Deci and Ryan (1985), which suggests that learners become more motivated when they experience competence, autonomy, and meaningful participation. Through Quizizz activities, students were able to engage with learning tasks in a supportive environment where achievement was recognized and mistakes were treated as part of the learning process. Teachers further reported that students became less anxious when participating in speaking activities. This finding is particularly significant because students with ADHD often struggle with self-esteem, emotional regulation, and communication confidence (Barkley, 1997). The game-based environment appeared to reduce pressure and create a more comfortable atmosphere for verbal participation. These findings are consistent with Prensky (2001), who argues that game-based learning promotes engagement and motivation through enjoyable learning experiences. They also support the findings of Zhao (2019), who reported that Quizizz increases learner motivation through interactive and rewarding activities. Furthermore, teachers observed improvements in social interaction and classroom participation, suggesting that the benefits of Quizizz extended beyond individual learning outcomes. Students became more willing to communicate with peers and participate in collaborative learning experiences, which contributed to a more inclusive classroom environment. While many previous studies have focused on the immediate effects of game-

based learning, the present findings provide additional evidence regarding the perceived long-term influence of Quizizz on confidence, motivation, and social engagement among students with ADHD. Therefore, this study contributes to the growing body of literature by highlighting the sustained affective benefits of Quizizz in supporting speaking development within an inclusive educational context.

Challenges Faced by Teachers in Using Quizizz

The findings revealed that although Quizizz provided many benefits for supporting speaking activities, teachers also encountered several challenges during its implementation with students with Attention Deficit Hyperactivity Disorder (ADHD). As shown in Table 4, the identified challenges were categorized into technical and pedagogical issues, including content customization, screen time management, maintaining attention, and instructional adaptation. Teachers reported difficulties in finding or creating Quizizz content that was appropriate for the cognitive characteristics and attention span of ADHD students. Although Quizizz offers a large collection of ready-made materials, teachers often needed to modify questions, simplify instructions, and adjust task difficulty levels to ensure that students could understand and complete the activities effectively. In addition, screen time management emerged as an important concern because prolonged exposure to digital devices sometimes led to overstimulation and reduced concentration. From a pedagogical perspective, teachers also experienced difficulties in maintaining students' attention throughout speaking activities and in providing instructions that were clear enough for students with varying learning needs. These findings suggest that the successful implementation of Quizizz requires considerable teacher preparation, flexibility, and continuous adaptation.

Table 4. Challenges Faced by Teachers in Using Quizizz

Challenge	Description	Supporting Quotes & Data
Technical Challenges	Issues with finding suitable content and managing screen time.	<i>"I had to adjust Quizizz content to make it simple enough for ADHD students,"</i> highlighting the extra preparation time required to ensure digital materials match specific learning needs.
Pedagogical Challenges	Maintaining attention and providing appropriate instructions.	<i>"I needed to shorten tasks and provide clear, concise instructions to keep students focused,"</i> emphasizing the need for constant instructional adaptation to prevent cognitive overload.

The findings indicate that the effectiveness of Quizizz depends not only on the technological features of the platform but also on teachers' ability to address the challenges that arise during implementation. The need for content customization reflects the important role of teachers as educational decision-makers who adapt learning materials according to students' characteristics. This finding is consistent with Fullan (2016), who argues that successful educational innovation requires active teacher involvement and continuous adaptation rather than simple adoption of technology. Teachers in the present study were required to modify existing Quizizz materials to ensure that they were suitable for ADHD students, demonstrating that technology alone cannot guarantee successful learning outcomes. The challenge of screen time management also highlights the importance of balancing digital learning with students' cognitive needs. Excessive exposure to screen-based activities may increase cognitive fatigue and reduce concentration, particularly among learners who already experience attention difficulties. This finding can be understood through Cognitive Load Theory, which emphasizes the need to manage learning demands

carefully so that learners are not overwhelmed by excessive cognitive processing. Furthermore, teachers reported difficulties in maintaining attention during speaking activities, which is consistent with Barkley's (1997) description of ADHD as a condition characterized by challenges in attention regulation and self-control. To address this issue, teachers frequently used shorter tasks, repetition, and immediate feedback to sustain engagement. These practices align with the principles of game-based learning proposed by Prensky (2001), which emphasize the value of short, interactive, and motivating activities in maintaining learner participation. The findings also support previous research indicating that while game-based learning platforms increase engagement and motivation, teachers often face practical challenges related to content preparation and classroom management (Zhao, 2019; Wang et al., 2020). However, the present study extends these findings by highlighting the specific challenges experienced when implementing Quizizz in speaking activities for students with ADHD within an inclusive Islamic school context. Therefore, the results suggest that successful integration of Quizizz requires not only technological resources but also teacher expertise, instructional flexibility, and a deep understanding of students' individual learning needs.

CONCLUSION

The findings demonstrate that Quizizz can serve as an effective game-based learning platform for supporting the speaking competence of students with Attention Deficit Hyperactivity Disorder (ADHD) in an inclusive educational setting. Teachers perceived that the successful implementation of Quizizz was influenced by several instructional strategies, including the use of live mode, repetition, scaffolding, gamification features, and content customization based on students' learning needs. These strategies were perceived to contribute positively to speaking competence by improving fluency, vocabulary development, speaking confidence, and classroom participation. Furthermore, teachers believed that the benefits of Quizizz extended beyond immediate learning outcomes by fostering greater confidence, motivation, reduced speaking anxiety, and improved social interaction over time. Although several technical and pedagogical challenges were identified, the findings suggest that Quizizz can become a meaningful learning tool when it is supported by appropriate instructional adaptation and teacher guidance. Therefore, this study contributes to the growing literature on game-based learning and inclusive English language teaching by highlighting the important role of teachers in facilitating technology-assisted speaking instruction for students with ADHD.

The findings have important implications for English language teachers, school administrators, and researchers who seek to develop more inclusive and engaging learning environments for students with special educational needs. The study suggests that digital game-based platforms should not be viewed merely as technological tools but as instructional resources that require thoughtful adaptation to meet diverse learner characteristics. However, this study was limited to a single educational context and a small number of participants, which may limit the transferability of the findings to other settings. In addition, the study focused on teachers' perceptions rather than direct measurement of students' speaking performance. Future research is recommended to involve a larger number of participants, include multiple schools, and examine the effectiveness of Quizizz through different methodological approaches, such as mixed-methods or experimental designs. Further studies may also explore students' perspectives and compare the use of Quizizz with other game-based learning platforms in supporting speaking development among students with ADHD and other special educational needs.

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