ENHANCING READING PROFICIENCY THROUGH DIGITAL TOOLS: THE IMPACT OF KAHOOT! AMONG ESL LEARNERS IN VISION SCHOOLS

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ABSTRACT

As Malaysia continues to navigate digital integration in education, the role of interactive tools in language acquisition has become increasingly significant. This mixed-method research investigates the impact of Kahoot! on improving reading proficiency among Year 5 students in a vision school complex comprising SJK(T) Tun Sambanthan (SJKTS), SJK(C) Tun Tan Cheng Lock (SJKCTTCL) and SK Dato' Onn Jaafar (SKDOJ). Quantitative data were collected from 21 Year 5 students from SKDOJ using a Google Forms-based questionnaire designed with Likert-scale items to assess students' learning experiences in developing reading skills. The data revealed that over 75% of students acknowledge that Kahoot! made reading lessons more enjoyable, increased their focus, improved their selfconfidence and helped them better understand texts. Qualitative insights gathered through interviews with the English Panel Heads supported these findings, highlighting increased engagement and motivation among learners. However, the interviews also revealed challenges, including limited access to quiz materials aligned with the MOE English textbook and time constraints in creating quality content. Despite these barriers, all panel heads agreed that Kahoot! is an effective supplementary tool when integrated with traditional approaches like group reading and comprehension worksheets. These findings suggest that while Kahoot! enhances reading instruction, its success depends on adequate planning, teacher training and digital infrastructure, particularly within multilingual vision school contexts.

Keywords: ESL learners, Kahoot!, reading proficiency, vision schools

1.0 INTRODUCTION

In recent years, the Malaysian education system has undergone a significant transformation in response to the global shift towards digital learning. As part of this transition, the integration of interactive technologies has become a key strategy to enhance student engagement and improve learning outcomes, particularly in the teaching of English as a second language. Among the various digital tools available, game-based learning platforms like *Kahoot!* have gained popularity for their ability to create dynamic and learner-centred environments that motivate students and support language acquisition (Wang & Tahir, 2020). Reading proficiency remains a fundamental skill in the development of English language competence, especially among primary school learners. However, traditional methods of teaching reading often struggle to maintain students' interest and engagement, particularly in diverse classroom settings. The need for innovative and inclusive pedagogical approaches is especially critical in vision schools in Malaysia, where students from different ethnic and linguistic backgrounds learn together in a shared educational space. These schools, including national (SK), Chinese (SJKC) and Tamil (SJKT) streams, offer a unique context for exploring the impact of digital tools on language learning (Kehing & Yunus, 2021).

This study investigates the use of *Kahoot!* as an interactive platform to enhance reading skills among Year 5 students in a vision school complex comprising SJK(T) Tun Sambanthan (SJKTS), SJK(C) Tun Tan Cheng Lock (SJKCTTCL)and SK Dato' Onn Jaafar (SKDOJ). By employing a mixed-method research design, the study seeks to understand not only students' perceptions and experiences with *Kahoot!* in the primary ESL classroom but also the perspectives of the heads of English language panel regarding its effectiveness and implementation challenges in respective schools. The findings aim to contribute to ongoing discussions about best practices in digital integration and the potential of gamified learning tools to foster literacy development in multilingual, multicultural primary education settings in Malaysia.

Statement of the Problem

Despite ongoing efforts to enhance English language proficiency among Malaysian primary school students, reading remains one of the most challenging skills to develop effectively, particularly in linguistically and culturally diverse classrooms. Traditional reading instruction often relies heavily on textbook-based approaches, which may lack engagement and fail to address the varied learning needs of students from different ethnic backgrounds (Ismail et al., 2020). As a result, students may exhibit low motivation, limited comprehension and a lack of confidence when approaching English texts. With the increasing push for digital integration in Malaysian classrooms, interactive tools such as *Kahoot!* offer promising alternatives that can transform passive learning into active participation. However, while studies have highlighted the positive impact of gamified platforms on learner motivation and engagement, their specific influence on reading proficiency, particularly in multilingual, vision school contexts remain underexplored (Navinkumar & Sivakami, 2024). Therefore, there is a need to investigate whether *Kahoot!* can be an effective tool not only to capture students' interest but also to improve their reading skills and comprehension in English, especially in schools with diverse student populations.

Purpose of the Study

The purpose of this study is to examine the impact of *Kahoot!*, a game-based learning platform, on improving reading proficiency among Year 5 students in a Malaysian vision school complex. Specifically, the study aims to explore student's perceptions of how *Kahoot!* influences their reading engagement, comprehension and motivation. Additionally, the study seeks to gather insights from English panel head teachers regarding the effectiveness and challenges of implementing *Kahoot!* in the primary ESL classroom. By adopting a mixed-method approach, this study intends to provide a more comprehensive understanding of the potential of interactive digital tools in enhancing literacy development within a multilingual and multicultural educational context.

Research Questions

- 1. How does the use of *Kahoot!* influence reading engagement, comprehension and motivation among Year 5 students in a vision school complex in Malaysia?
- 2. What are the perceptions of English language panel head teachers regarding the effectiveness and challenges of using *Kahoot!* in teaching reading?

2.0 LITERATURE REVIEW

This review outlines key areas relevant to the study. It begins with the theories underpinning the study. Reading proficiency in the Malaysian ESL context is then explored. The review also highlights the practice of game-based learning and Kahoot! in language classrooms and digital tools in enhancing ESL learning. Lastly, it investigates students' motivation and engagement in reading.

Constructivist Learning Theory

Constructivist theory, championed by educational theorists such as Piaget and Vygotsky, posits that a learner actively construct knowledge through experience and interaction with their environment. In the context of language learning, this theory emphasises the importance of meaningful engagement, collaboration and learner-centred activities. *Kahoot!*, as an interactive game-based platform, aligns with this perspective by encouraging students to

participate actively in the reading process rather than passively absorbing information. It supports scaffolded learning, where students build upon prior knowledge through dynamic feedback and repeated exposure to language input in an engaging format (Vygotsky, 1978; Paul, 2023). Moreover, the collaborative and competitive features of *Kahoot!* foster social interaction, which is essential for cognitive and linguistic development in constructivist classrooms.

Self-Determination Theory (SDT)

Self-Determination Theory (Deci & Ryan, 1985; Luo et al., 2021) emphasises the role of intrinsic motivation in driving learning behaviour. According to SDT, students are more likely to engage and perform well when three basic psychological needs are met which are autonomy, competence and relatedness. *Kahoot!* addresses these needs by allowing students to take charge of their learning (autonomy), experience success through correct answers and immediate feedback (competence) as well as connect with peers through group-based or competitive gameplay (relatedness). These motivational elements are particularly beneficial in primary ESL classrooms where anxiety and lack of confidence often hinder reading development. By satisfying these psychological needs, *Kahoot!* can help foster a more positive attitude towards reading and improve students' self-efficacy. Together, Constructivist Learning Theory and Self-Determination Theory provide a comprehensive framework for analysing how *Kahoot!* can influence both the cognitive and affective dimensions of reading proficiency in young ESL learners. These theories support the idea that learning is most effective when it is active, student-centred and intrinsically motivating- conditions that game-based tools like *Kahoot!* are well-positioned to create.

Reading Proficiency in the Malaysian ESL Context

Reading is a core skill in English language acquisition, yet it remains one of the most difficult to master for many Malaysian ESL learners. Primary school students, especially those from non-English-speaking homes, often struggle with vocabulary, comprehension and engagement when reading English texts. According to Ismail et al. (2020), many Malaysian primary school students exhibit low reading motivation and face comprehension difficulties due to limited exposure to English outside the classroom. In vision schools where students of diverse linguistic backgrounds learn together these challenges can be further compounded by differences in language proficiency and cultural context. Therefore, innovative strategies are needed to support reading development in inclusive and multilingual environments.

Game-Based Learning and Kahoot! in Language Classrooms

Game-Based Learning (GBL) has emerged as a powerful pedagogical tool for improving student engagement, especially in language learning. GBL integrates elements of play, competition and rewards into the learning process, making it more interactive and enjoyable. *Kahoot!*, a widely-used GBL platform, allows teachers to design quiz-style games that encourage participation and immediate feedback. *Kahoot!* has a positive effect on students' learning outcomes by increasing their motivation, attention span and enjoyment in class (Kee & Razali, 2021; Wang & Tahir, 2020). In the ESL classroom, such tools can help shift

traditional teacher-centred instruction to more student-centred, interactive learning experiences.

Digital Tools in Enhancing ESL Learning

Digital tools have become increasingly important in addressing the limitations of traditional ESL instruction. These tools support multimodal learning and can be tailored to suit different learning styles, making them especially beneficial in diverse classrooms. According to research on the use of technology in English language teaching it was found that the integration of ICT in ESL classrooms promotes autonomy, enhances collaboration and improves overall language proficiency (Altun & Hassan, 2021). For reading instruction specifically, digital platforms can offer multimedia texts, vocabulary support and immediate assessment, features that help improve comprehension and learner confidence.

Motivation and Engagement in Reading

Motivation plays a crucial role in developing reading habits and proficiency. This is evident from a study which found that motivated learners are more likely to invest time and effort in reading, leading to deeper comprehension and better retention (Dörnyei, 2011; Muñoz-Restrepo et al., 2020). Tools like *Kahoot!* can serve as motivational catalysts by turning reading activities into engaging, low-pressure experiences. The competitive yet supportive nature of *Kahoot!* helps reduce language anxiety and creates a classroom culture that encourages participation and persistence, particularly among students who may struggle with traditional reading tasks.

While previous studies have demonstrated the benefits of *Kahoot!* and other digital tools in enhancing student engagement and language learning, there is limited research on their direct impact on reading proficiency, especially within vision schools in Malaysia. These schools present a unique context where linguistic diversity and inclusivity are central, yet underexplored in the literature. This study aims to fill that gap by focusing on the effects of *Kahoot!* on reading development and by including both student feedback and teacher insights to provide a holistic understanding.

3.0 METHODOLOGY

This study employed a mixed-methods research design to investigate the impact of *Kahoot!* on reading proficiency among Year 5 students in a vision school complex. The combination of quantitative and qualitative approaches allowed for a comprehensive understanding of both student experiences and teacher perspectives.

Participants

The participants of this study were Year 5 students and English language panel head teachers from a vision school complex comprising three schools which are SJK(T) Tun Sambanthan (SJKTS), SJK(C) Tun Tan Cheng Lock (SJKCTTCL) and SK Dato' Onn Jaafar (SKDOJ). A total of 21 students were selected from SK Dato' Onn Jaafar (SKDOJ) through purposive sampling based on their involvement in English reading activities and access to digital tools. The student participants represented a diverse mix of ethnic and linguistic backgrounds consistent with the vision school model. In the qualitative phase, three English Panel Heads, with one from each school were selected for semi-structured interviews. These individuals

were chosen due to their leadership roles in English instruction and their direct involvement in the implementation of *Kahoot!* within their respective classrooms.

Research Instruments

To gather comprehensive data, two main research instruments were employed which was a questionnaire for the quantitative phase and a semi-structured interview protocol for the qualitative phase. For the quantitative component, a Google Forms-based questionnaire was used to collect data from the student participants. The questionnaire consisted of Likert-scale items ranging from 1 (Strongly Disagree) to 4 (Strongly Agree) and was specifically administered at SK Dato' Onn Jaafar (SKDOJ), one of the three vision schools selected for this study, due to its central multicultural composition. The aim was to assess students' perceptions of *Kahoot!* in relation to various aspects of reading development. These included enjoyment and engagement in reading lessons, motivation and focus during activities, self-confidence in reading tasks and the understanding and retention of texts. To ensure the validity and clarity of the questionnaire items, the instrument was reviewed and validated by three ESL experts.

For the qualitative phase, a semi-structured interview protocol was developed and administered to English Panel Heads of the 3 vision schools. The interviews aimed to explore the perceived effectiveness of *Kahoot!* in enhancing reading instruction, observe changes in student engagement and reading progress as well as identify any challenges or limitations experienced in implementing the tool in classroom settings. Each interview was conducted in English and lasted approximately 30 to 40 minutes via *Google Meet* and in person, as it took into consideration the availability and preference of the participants.

Research Procedures

The study was conducted over four weeks, beginning with obtaining consent from school administrators, teachers and parents. Students were informed about the purpose of the study, and their anonymity and voluntary participation were assured. During the implementation phase, SK Dato' Onn Jaafar (SKDOJ) teachers integrated *Kahoot!* into weekly reading lessons, using quiz-based activities aligned with the Year 5 English curriculum.

After the four-week period, SK Dato' Onn Jaafar (SKDOJ) students completed a Google Forms questionnaire to provide feedback on their experiences. Responses were collected and stored automatically. Following this, semi-structured interviews were conducted with the English panel head teachers from each school to gather qualitative insights. Interviews were recorded with permission and transcribed for analysis. Quantitative data were analysed using descriptive statistics to identify trends in student responses, while qualitative data were thematically coded. This mixed-methods approach ensured a comprehensive understanding of both student and teacher perspectives on the use of *Kahoot!* in reading instruction.

4.0 FINDINGS AND DISCUSSION

This study used a mixed-method design to explore the impact of *Kahoot!* on reading proficiency, motivation and engagement. Quantitative data were gathered from **21 Year 5**

students at SK Dato' Onn Jaafar (SKDOJ) through Likert-scale responses, while qualitative insights were collected via interviews with the English Language Panel Heads of SK Dato' Onn Jaafar (SKDOJ), SJK(T) Tun Sambanthan (SJKTS) and SJK(C) Tun Tan Cheng Lock (SJKCTTCL).

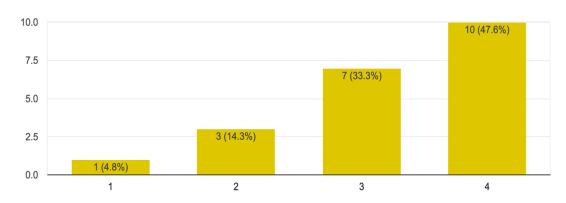
1.1.1

1.1.2 Section A: Reading Enjoyment

Figure 3
Students' Responses on Enjoyment of Reading Lessons Using Kahoot!

1.) Kahoot! made my reading lessons more enjoyable.

21 responses

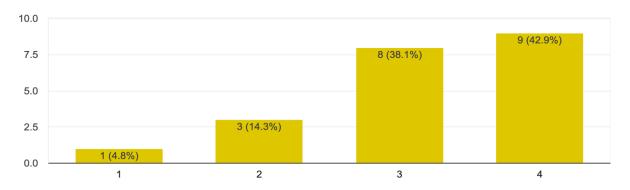


The first item, "Kahoot! made my reading lessons more enjoyable," received positive feedback from the students. A total of 47.6% (n=10) selected Strongly Agree, while 33.3% (n=7) chose Agree. This indicates that over 80% of the students found that Kahoot! enhanced their enjoyment in reading lessons.

Figure 2Students' Responses on Looking Forward to Kahoot! Based Reading Lessons

2.) I look forward to English reading lessons when Kahoot! is used.

21 responses



The second item, "I look forward to English reading lessons when Kahoot! is used," further reinforced this finding. A total of 42.9% (n=9) of students selected Strongly Agree, while 38.1% (n=8) chose Agree. These results suggest that the gamified approach using Kahoot! generated anticipation and enthusiasm among the students.

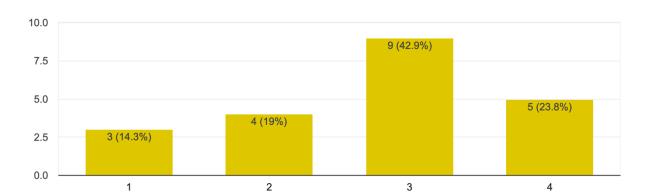
The first item in Section A indicated that over 80% of students agreed or strongly agreed that *Kahoot!* made their reading lessons more enjoyable. The second item showed that more than 75% of students looked forward to reading lessons when *Kahoot!* was used. These results suggest that *Kahoot!* not only increases immediate enjoyment but also sustains students' anticipation and motivation for learning English. This reflects the intrinsic motivation component of Self-Determination Theory, where learners engage more when they find an activity enjoyable (Deci & Ryan, 2020). Supporting this, Zarzycka-Piskorz (2020) found that gamified grammar activities significantly raised student motivation. Interviews with English Panel Heads from SJK(T) Tun Sambanthan (SJKTS) and SJK(C) Tun Tan Cheng Lock (SJKCTTCL) also confirmed these findings, with both noting increased enthusiasm and class participation, particularly among passive learners.

Section B: Focus and Attention

Figure 3Students' Responses on Improved Focus During Kahoot! Reading Activities

21 responses

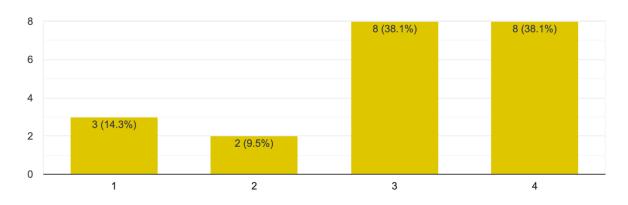
1.) Using Kahoot! helped me focus better during English reading activities.



In the item "Using Kahoot! helped me focus better during English reading activities," 42.9% (n=9) of students agreed and 23.8% (n=5) strongly agreed. Although a smaller percentage (14.3%) disagreed, the majority of responses indicated that *Kahoot!* contributed to improved focus during reading lessons.

Figure 4
Students' Responses on Attention to Reading Tasks with Kahoot!

2.) I pay more attention to reading tasks when they are presented using Kahoot!. 21 responses



The supporting item, "I pay more attention to reading tasks when they are presented using Kahoot!" showed consistent results with the previous item. An equal percentage of students, 38.1% (n=8), selected both Agree and Strongly Agree, reinforcing the idea that Kahoot! helps sustain student attention during reading activities.

The responses in Section B showed that 66.7% of students agreed or strongly agreed that *Kahoot!* helped them focus during reading activities. Similarly, the second item showed that 76.2% paid more attention to reading tasks when delivered through *Kahoot!*. This consistency

across both items highlights that the platform does not just entertain but also enhances concentration and cognitive engagement.

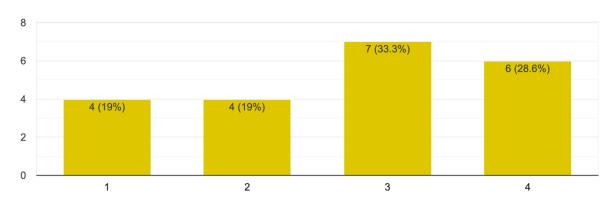
These findings are supported by Wang and Tahir (2020), who noted that *Kahoot!* increases attention through interactivity, immediate feedback and competition. The SK Dato' Onn Jaafar (SKDOJ) English Panel Head remarked that typically distracted students became more attentive during *Kahoot!* sessions, particularly when quizzes were timed- or team-based. These findings also align with Constructivist Learning Theory, which emphasises active involvement as the key to meaningful learning (Jonassen, 2020). Figures 3 and 4 illustrate how both items together reflect improved focus and sustained attention.

1.1.3 Section C: Self-Confidence in Reading

Figure 5
Students' responses on confidence in reading after using Kahoot!

1.) I feel more confident when reading English texts after using Kahoot!.

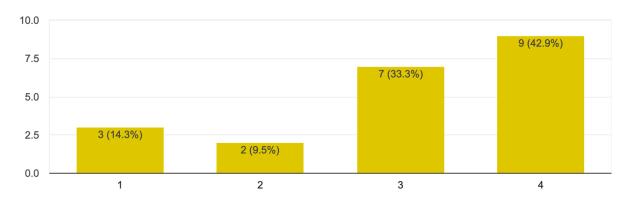
21 responses



For the item "I feel more confident when reading English texts after using Kahoot!," 33.3% (n=7) of students agreed and 28.6% (n=6) strongly agreed with this item. This indicates that over 60% of the respondents perceived a boost in their self-confidence when engaging with reading tasks through Kahoot!.

Figure 6Students' Responses on Belief in Answering Reading Questions Correctly

2.) Kahoot! helps me believe I can answer English reading questions correctly. 21 responses



The item "Kahoot! helps me believe I can answer English reading questions correctly" echoed this sense of confidence among students. A total of 42.9% (n=9) strongly agreed, while 33.3% (n=7) agreed, reinforcing the finding that Kahoot! contributed positively to students' self-belief in handling English reading tasks effectively.

Section C addressed self-confidence. While 61.9% of students felt more confident reading English texts after using *Kahoot!*, an even higher 76.2% believed they could answer English reading questions correctly after playing *Kahoot!*. This suggests that while overall reading confidence grew, the platform had an even stronger impact on students' self-efficacy especially in terms of their belief in their ability to succeed.

According to Licorish et al. (2021), students feel empowered in gamified environments because feedback is immediate and mistakes carry lower social risk. Interviews conducted confirmed this when the English Panel Heads observed that low-proficiency and shy students were more willing to participate during *Kahoot!* quizzes than in traditional question and answer (Q&A) settings.

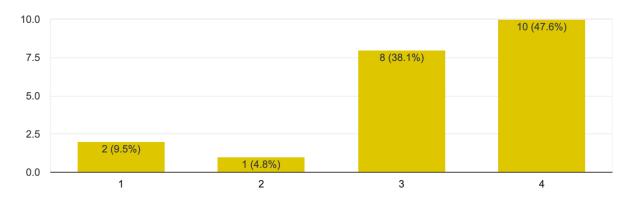
These results tie into the competence component of SDT, where students often feel successful and capable in a game-like context. As shown in Figures 5 and 6, both items work together to reinforce the conclusion that *Kahoot!* helps build confidence not only in reading but also in test-taking and classroom participation.

1.1.4 Section D: Reading Comprehension and Understanding

Figure 7Students' Responses on Understanding Reading Texts with Kahoot!

1.) Kahoot! helped me understand English reading texts better.

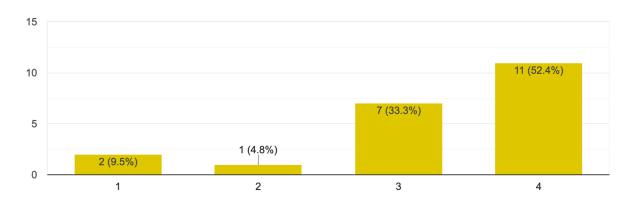
21 responses



The item "Kahoot! helped me understand English reading texts better" received strong agreement from the majority of students. A total of 47.6% (n=10) strongly agreed, while 38.1% (n=8) agreed with this item, indicating that most students felt Kahoot! improved their understanding of English reading texts.

Figure 8
Students' Responses on Recalling Main Ideas After Kahoot! Quizzes

2.) I can remember main ideas and details more easily after playing Kahoot! reading quizzes. 21 responses



For the item, "I can remember main ideas and details more easily after playing Kahoot! reading quizzes," 52.4% (n=11) of respondents strongly agreed, while 33.3% (n=7) agreed with it. This indicates a strong relationship between *Kahoot!* usage and improved reading retention.

In Section D, 85.7% of students agreed or strongly agreed that *Kahoot!* helped them better understand English texts and a slightly higher 85.7% said they could remember main ideas

and details more easily after using it. These paired results reveal that *Kahoot!* supports both comprehension and retention, especially important for second language learners.

This aligns with Al-Azzam et al. (2021), who found that *Kahoot!* improves reading comprehension by encouraging active recall and deeper processing. English Panel Heads from all three schools stated that *Kahoot!* was especially useful for revising content after a reading lesson and helped students retain keywords, plot points and character details.

This outcome supports the Constructivist principle that students retain information better when they are actively engaged in building knowledge themselves (Jonassen, 2020). As illustrated in Figures 7 and 8, both Likert items reinforce each other, confirming *Kahoot!'s* role in improving students' understanding and memory of reading materials.

While the data supports the use of *Kahoot!*, interviews also revealed certain challenges. English Panel Heads from SJK(T) Tun Sambanthan (SJKTS) and SJK(C) Tun Tan Cheng Lock (SJKCTTCL) cited limited access to relevant materials that follows the MOE English textbook topics as key barriers. Both also noted that time constraints made it difficult to prepare high-quality quizzes regularly. Despite this, all English Panel Heads agreed that *Kahoot!* was an effective tool when used alongside traditional methods, such as group reading and comprehension worksheets. These insights highlight that while *Kahoot!* is effective, its success largely depends on adequate planning, training and infrastructure especially in multilingual vision school environments.

5.0 CONCLUSION

This study set out to examine the impact of *Kahoot!*, a game-based learning platform, on reading proficiency among Year 5 ESL learners within a Malaysian vision school complex. The findings from both quantitative student responses and qualitative teacher interviews indicate that *Kahoot!* significantly enhanced students' overall language proficiency. The data reveal that more than 75% of the students responded positively across all categories, with particularly strong agreement on items related to increased motivation, attention, and understanding of texts. The results affirm the relevance of Constructivist Learning Theory and Self-Determination Theory in the digital age. Students were more engaged when learning was interactive and when they felt autonomous, competent and connected. The ability of *Kahoot!* to offer immediate feedback, encourage participation, and reduce language anxiety was central to these improvements. Despite its benefits, the study also identified key implementation challenges. Teachers reported difficulty in sourcing quality content that aligns with national curriculum standards and highlighted the time required to design meaningful quizzes.

To maximise the benefits of *Kahoot!*, teacher training should be strengthened to include effective quiz design aligned with curriculum objectives. Schools should also explore collaborative content development among teachers to reduce workload and maintain quality across all schools. Given that this study focused on Year 5 students in one vision school complex, future studies could explore the long-term impact of *Kahoot!* on reading proficiency across different year levels and regions. Comparative studies between digital and non-digital reading interventions in vision schools may provide further insights. In essence, when

implemented thoughtfully, *Kahoot!* not only fosters a positive learning environment but also supports the broader goals of 21st-century education in Malaysia, a country with increasingly diverse classrooms.

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