

Adapting English Language Teaching to 21st Century Learners Through Kahoot Application

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Abstract

This study explores the use of the Kahoot! application as a digital learning tool to enhance motivation, cooperation, and comprehension among vocational high school students in English language teaching. As 21st-century learners, students today are digital natives who require interactive and technology-based learning environments. The research was conducted at SMK Swasta HKBP Pematang Siantar using a qualitative descriptive approach. Data were collected through classroom observation, documentation, and field notes. The results showed that Kahoot! significantly increased students' enthusiasm, participation, and teamwork during English lessons. Students were more focused, cooperative, and motivated when learning through game-based quizzes. Moreover, repeated quiz activities improved their understanding of lesson materials through active recall and feedback. Despite some technical challenges such as limited internet access and shared devices, the overall learning atmosphere became more dynamic, joyful, and engaging. The study concludes that integrating Kahoot! into English teaching effectively supports interactive, fun, and student-centered learning for digital-age learners.

Keyword : Kahoot! Application, English language teaching, Digital natives, Motivation, Game-based learning

INTRODUCTION

The rapid growth of technology in education encourages teachers to innovate in how they deliver lessons. Teaching English today cannot rely only on lectures or written exercises; instead, it needs to be more interactive and enjoyable. According to Ashfiah, Nur, and Ammade (2024), learning activities that involve competition and fun can increase students' intrinsic motivation and help them maintain focus. From a psychological perspective, educational games enable students to learn in an enjoyable way, build self-confidence, and reduce anxiety when facing tasks.

Kahoot! is one of the most widely used game-based learning platforms in education. It was developed in 2012 by a team from the Norwegian University of Science and Technology (NTNU) in collaboration with Mobitroll AS and was officially launched in 2013 (Wang & Tahir, 2020). Kahoot! was designed to create an active learning environment through interactive quizzes that can be accessed via mobile phones or computers. Students answer within a limited time and receive instant points, while class leaderboards display the scores. Its combination of points, time limits, and competition motivates students to participate actively in learning.

However, Kahoot! is not the only digital platform that supports game-based learning. Similar tools such as Quizizz, Quizlet Live, and Blooket are also used to promote collaboration and engagement in English classes. Rahmadani, Saman, and Bahing (2024) note that all these tools can enhance motivation, but Kahoot! is considered easier to use in large classrooms because of its simple interface and real-time response system. This makes it flexible for various educational levels, including vocational schools.

In the context of English language teaching, optimization should not focus only on linguistic skills but also on increasing learning motivation, teamwork, and comprehension of

lesson materials. The specific goal of this study is to strengthen students' engagement in English classes through repeated quiz activities using Kahoot!. Repetition of questions helps students become familiar with the content and the correct answers, which in turn improves their understanding of the lessons. Interactive quizzes also create a joyful learning atmosphere where students feel relaxed, confident, and willing to collaborate with their peers.

Based on my classroom observation at SMK Swasta HKBP Pematang Siantar, students in grades 10 and 11 were more enthusiastic when learning through interactive quizzes compared to conventional methods. They appeared more motivated, worked better in groups, and paid greater attention during lessons. This shows that Kahoot! has strong potential to promote joyful learning. Therefore, I adopted Kahoot! as a learning medium to improve students' motivation, cooperation, and comprehension of English lesson materials at the vocational high-school level.

Literature Review

English Language Teaching (ELT) in the twenty-first century requires teachers to adjust their methods to the needs of digital learners. Godwin-Jones (2018) states that teachers should integrate technology to foster critical thinking, communication, collaboration, and creativity. Similarly, Licorish et al. (2018) emphasize that digital platforms such as Kahoot! encourage active participation and collaboration among students in both online and classroom settings.

Game-based learning, or gamification, has become one of the most effective strategies to increase engagement in English classes. Deterding et al. (2011) define gamification as the use of game-design elements in non-game contexts to motivate participation. In education, this approach transforms traditional lessons into interactive experiences. Ashfiah et al. (2024) found that gamification significantly

enhances students' focus and enthusiasm, especially when it involves time challenges and reward systems. These features help learners maintain interest and improve their comprehension.

Several studies have reported the benefits of using Kahoot! in English teaching. Harahap, Dewi, and Daulay (2022) found that students felt happy and motivated when learning through Kahoot! because it created a competitive yet enjoyable atmosphere. Rajaban, Hermansyah, and Nguyen (2023) observed that integrating Kahoot! into classroom activities improved group participation and collaboration. Tampubolon, Siahaan, and Bouk (2023) also found that teachers viewed Kahoot! as an effective medium for improving classroom engagement and learning outcomes. These findings confirm that Kahoot! supports student engagement and active learning in language education.

In vocational education, English lessons must connect classroom content with real-world applications. Izzah et al. (2022) demonstrated that Kahoot!-based learning using a genre-based approach improved students' motivation

and comprehension of texts. Permata Suci (2023) also reported that vocational students became more confident and enthusiastic when English quizzes were conducted through Kahoot!.

Although many studies have examined Kahoot! in English learning, most have focused on general schools or universities, particularly on vocabulary and motivation. Research exploring how Kahoot! enhances comprehension of lesson materials, motivation, and teamwork in vocational schools remains limited. Therefore, this study aims to fill that gap by investigating how Kahoot! can be used as an interactive quiz medium to improve enthusiasm, collaboration, and understanding among tenth- and eleventh-grade students at SMK Swasta HKBP Pematang Siantar.

Several previous studies have examined the implementation of the Kahoot! Application in English language learning contexts. To provide a structured overview of relevant earlier research, Table 1 summarizes selected previous studies focusing on motivation, collaboration, and comprehension.

Author(s) & Year	Research Context	Research Focus	Key Findings
Licorish et al. (2018)	University EFL learners	Student engagement using Kahoot!	The use of Kahoot! Increased students' participation, enjoyment, and collaborative learning through interactive quizzes.
Harahap et al. (2022)	Senior high school students	Motivation in English learning	Students demonstrated higher motivation and enthusiasm when Kahoot! Was implemented as a game based learning tool.
Rajaban et al. (2023)	EFL classroom	Group participation and collaboration	Kahoot! effectively promoted teamwork, peer interaction, and

			cooperative learning among students.
Putri & Ardi (2020)	Secondary school students	Grammar comprehension	Students' grammar comprehension improved through repeated Kahoot! based quizzes that encouraged active recall.
Munday (2016)	EFL learners	Learning atmosphere	Kahoot! created a relaxed, enjoyable, and low anxiety classroom environment that supported students engagement.

Table 1. Summary of Previous Studies on the Use of Kahoot! in English Learning

As presented in Table 1, previous studies consistently report positive effects of the Kahoot! application on learners' motivation, collaboration, and comprehension in English language learning. However, most of these studies were conducted in general secondary schools or higher education contexts and tended to focus on a single learning aspect, such as motivation or grammar mastery. Limited research has explored the integrated use of Kahoot! to enhance motivation, teamwork, and comprehension simultaneously in vocational high school English classrooms. Therefore, the present study seeks to address this gap by investigating the implementation of Kahoot! in a vocational education context.

RESEARCH METHOD

This section explains the method used in conducting the study, including the research design, participants, instruments, and the process of data analysis. The purpose of this research was to describe how Kahoot!, a game-based learning application, could enhance students' motivation, cooperation, and comprehension of English lesson materials in a

vocational high school context. A qualitative descriptive approach was employed to observe and describe students' behaviors and attitudes during classroom activities where Kahoot! was implemented as an interactive quiz tool.

The study was conducted at SMK Swasta HKBP Pematang Siantar, North Sumatra, Indonesia, involving tenth- and eleventh-grade students during the 2024/2025 academic year. The data were collected through observation, field notes, documentation, and reflective journals. The collected data were then analyzed thematically to identify emerging patterns related to student motivation, teamwork, and understanding of lesson content.

Research Design

This study employed a qualitative descriptive design. The purpose of this design was to describe how the use of the Kahoot! application could enhance students' motivation, teamwork, and understanding of English lesson materials in a vocational high school context. The qualitative approach was selected

because it allows the researcher to explore and understand participants' behaviors and experiences in their natural classroom environment without manipulating any variables.

According to Creswell (2014), qualitative research focuses on understanding a phenomenon from the participants' perspectives by observing them in their real-life setting. The descriptive design, as one of the qualitative methods, aims to provide an accurate and systematic description of what actually occurs during a learning process. In this study, it was applied to present a factual portrayal of students' engagement and reactions during Kahoot!-based English learning sessions.

The focus of observation included students' motivation, teamwork, and comprehension as they engaged in game-based learning using Kahoot!. Motivation was reflected through their enthusiasm and willingness to participate, teamwork was observed through their cooperation and communication in group sessions, and comprehension was identified through their ability to recall and apply English lesson materials after the activities. This qualitative descriptive design was chosen because it provided flexibility for the researcher to observe natural classroom dynamics as they occurred. It allowed for a detailed and contextual understanding of how the Kahoot! application contributed to creating an interactive, joyful, and collaborative English learning atmosphere at the vocational level.

Research Participants or Population and Sample

The subjects of this study were students from SMK Swasta HKBP Pematang Siantar, a private vocational high school located in Pematang Siantar, North Sumatra, Indonesia. The participants consisted of tenth- and eleventh-grade students who were enrolled in English classes during the 2024/2025 academic year. In total, there were 106 students involved in the research. The tenth

grade consisted of one class with 31 students, while the eleventh grade consisted of three classes, two with 26 students each and one with 23 students.

The researcher employed a purposive sampling technique to select the participants. This technique was chosen because it allowed the researcher to identify students who met specific criteria related to the objectives of the study. The criteria included regular attendance in English lessons, willingness to participate in Kahoot!-based learning, and the ability to collaborate effectively with peers during classroom activities.

The learning sessions were carried out in two phases. In the first phase, students participated individually using their own mobile phones to answer the Kahoot! quizzes independently. This stage aimed to observe students' personal motivation, focus, and comprehension during game-based learning. In the second phase, students were divided into small groups consisting of four to five members. Although each student still used their own mobile phone, they discussed and coordinated their answers within their groups before submitting responses. This collaborative phase provided the opportunity to observe students' teamwork, communication, and engagement in a cooperative learning environment.

The participants were between 15 and 17 years old, representing the typical age range of vocational high school students in Indonesia. During the learning implementation, some students faced technical constraints such as the lack of personal mobile phones or internet data. To overcome this issue, the teacher provided a hotspot connection and allowed students to share devices so that everyone could participate in the activities. These conditions reflected the authentic classroom environment in which the study was conducted and provided valuable insight into the real challenges and dynamics of integrating digital tools into English teaching.

Instruments

The instruments used in this study consisted of classroom observation, documentation, and the Kahoot! application as the main digital tool. Observation was carried out to examine students' motivation, participation, and behavioral responses during the teaching and learning process. The researcher observed how students reacted to the use of Kahoot! in both individual and group sessions, paying attention to their enthusiasm, attention, and cooperation while participating in the quizzes. Students who achieved the highest scores in each session were given additional points as a form of positive reinforcement to maintain their motivation and engagement.

Photo documentation was also used to record the atmosphere of the classroom and students' reactions during the activities. These photos served as supporting evidence to strengthen the observation results. The Kahoot! platform itself functioned as both a learning medium and an observation tool. The researcher used a free version of Kahoot! that was downloaded and operated through a laptop, alternating between the classic and trial modes depending on the type of activity conducted. The quizzes were projected on the classroom screen, while students accessed the questions individually through their own mobile phones.

Before the main study was implemented, a pilot study was conducted to test the practicality and effectiveness of Kahoot! in the classroom. The pilot phase helped the researcher refine the quiz duration, question level, and technical setup to ensure all students could participate effectively. During the main study, the researcher acted as both the English teacher and the observer, facilitating the activity, managing the Kahoot! sessions, and monitoring the students' overall engagement throughout the learning process.

Data Analysis

In this qualitative descriptive study, the data were analyzed through a series of stages involving data organization, interpretation, and description. Since the data were collected primarily through classroom observation and

documentation, the researcher focused on identifying patterns of student behavior, motivation, and interaction during the implementation of the Kahoot! activities. The analysis began by reviewing the field notes and photo documentation taken during the lessons to capture students' participation and engagement in both individual and group sessions.

The researcher categorized the observed behaviors into several aspects, including students' enthusiasm, level of participation, teamwork, and comprehension of lesson materials. Each observation was then described and interpreted qualitatively to understand how the integration of Kahoot! influenced students' learning attitudes. Data reduction was carried out by selecting the most relevant observations that represented students' responses during the game-based learning sessions.

After data reduction, the information was organized and displayed in narrative form. The researcher compared the observations from the individual and group sessions to identify consistent patterns and differences in student behavior. This process helped to highlight how the use of Kahoot! contributed to creating a more interactive, joyful, and collaborative classroom environment. Finally, the findings were concluded and described in detail to answer the research focus on improving students' motivation, cooperation, and comprehension through digital-based learning media.

RESEARCH FINDINGS AND DISCUSSION

Research Findings

The implementation of the Kahoot! application in English lessons at SMK Swasta HKBP Pematang Siantar produced several significant findings related to students' motivation, teamwork, and comprehension of the lesson materials. The research revealed that integrating Kahoot! as a digital quiz-based learning medium successfully increased students' engagement during classroom activities. Students showed higher levels of

enthusiasm and participation compared to conventional question-and-answer sessions.

In the individual session, students participated in the Kahoot! quizzes using their own mobile phones. The competitive nature of the game encouraged them to focus more and respond quickly to each question. The use of colorful visuals, sound effects, and real-time scoring created an exciting classroom atmosphere that motivated even the more passive students to participate actively. Students paid close attention to each question, and many expressed visible excitement when their names appeared on the leaderboard. The reward system, where top scorers received additional points, further stimulated their motivation to perform better.

In the group session, students were divided into small teams consisting of four to five members. Although each student used their own phone to access Kahoot!, they were encouraged to discuss the answers with their teammates before submitting their responses. This collaborative format significantly improved their teamwork and communication. Students were observed sharing ideas, correcting each other's mistakes, and cheering when their group achieved high scores. The classroom atmosphere became more lively and interactive as students learned to value peer contribution and cooperative problem-solving.

Another key finding was related to students' comprehension of lesson materials. Through repeated participation in Kahoot! quizzes, students became more familiar with English vocabulary and grammar structures. Many were able to recall previous answers more easily in subsequent sessions, showing improved retention and understanding. This indicated that Kahoot! not only created a joyful learning experience but also reinforced students' knowledge through repetition and immediate feedback.

However, a few challenges were observed during the process. Some students did not have mobile phones or adequate internet access, which occasionally caused delays in participation. To address this issue, the teacher provided a hotspot connection and allowed

device sharing among students. Despite these limitations, the overall activity ran smoothly, and students remained actively engaged throughout each session.

The findings demonstrated that the integration of Kahoot! as a learning tool was highly effective in promoting a more dynamic, competitive, and cooperative classroom environment. It helped transform English lessons into an enjoyable experience, which motivated students to engage more deeply with the learning content and collaborate meaningfully with their peers.

Discussion

The findings of this study reveal that the integration of the Kahoot! application in English language teaching successfully enhanced students' motivation, teamwork, and comprehension. The use of interactive quizzes created a learning atmosphere that was more dynamic and engaging compared to traditional methods. These results are consistent with previous studies (Licorish et al., 2018; Harahap, Dewi, & Daulay, 2022), which reported that digital-based learning tools such as Kahoot! can foster active participation and positive emotional responses among learners.

During the implementation, students appeared more enthusiastic and actively involved in each learning session. Their motivation increased because Kahoot! provided a sense of competition and immediate feedback through scores and rankings. This aligns with Wang and Tahir (2020), who noted that game-based learning enhances intrinsic motivation by combining playfulness with learning objectives. Students were not only excited to compete but also more focused on understanding the lesson content, as the repeated quizzes helped them recall previous material. This repetition strengthened their comprehension and long-term memory, supporting Zainuddin et al. (2020) who emphasized that gamification reinforces knowledge retention through continuous engagement.

Teamwork also developed significantly during the group sessions. When students worked in

teams, they discussed and negotiated answers before submitting them, which built communication and collaborative problem-solving skills. These interactions reflected the principles of cooperative learning and communicative competence in ELT. The observation results showed that even students who were usually passive became more participative when they worked in groups. This finding supports Rajaban, Hermansyah, and Nguyen (2023), who found that Kahoot! promotes peer cooperation and social learning in classroom environments. The group-based activities not only improved teamwork but also created a supportive atmosphere where students encouraged each other to do their best.

In terms of comprehension, students demonstrated better understanding of English materials after the implementation of Kahoot!. The game format required them to recall and apply information quickly, which trained both accuracy and fluency. Similar to the findings of Putri and Ardi (2020), who observed improvement in grammar mastery through Kahoot!-based learning, this study shows that students' comprehension improved because the interactive quiz format encouraged active recall and immediate correction of mistakes. The visual and auditory elements of the platform also helped students stay focused, making the learning experience more memorable.

Moreover, the classroom atmosphere became livelier and more positive. Students expressed enjoyment and confidence during the sessions, creating a joyful learning environment where anxiety was reduced. This supports Munday (2016), who stated that the use of Kahoot! can transform the learning environment into a relaxed but productive space. Laughter, cheering, and friendly competition made the learning process less intimidating and more meaningful for vocational students, who often prefer practical and interactive activities over theoretical lessons.

Despite these positive outcomes, the study also identified several challenges. Some students faced difficulties due to limited internet access,

lack of personal mobile phones, or unstable connections during the quiz sessions. These technical issues occasionally interrupted the flow of activities and caused minor distractions. However, the collaborative atmosphere in the classroom helped to overcome these obstacles, as students willingly shared devices and supported one another. This reflects the adaptability and cooperative spirit of digital learners described by Prensky (2001) as "digital natives," who are generally comfortable using technology and learning through interactive media.

Overall, the findings confirm that integrating Kahoot! into English lessons promotes motivation, cooperation, and comprehension among vocational high school students. The results reinforce the theoretical perspective that technology-based learning tools can effectively enhance engagement and participation when aligned with pedagogical goals. As Godwin-Jones (2018) argues, technology integration in ELT should not merely serve as an accessory but as a medium that supports critical thinking, communication, and collaboration. This study provides practical evidence that the Kahoot! application can bridge that goal by combining fun, challenge, and meaningful learning experiences in the 21st-century classroom.

CONCLUSION

Based on the results of this research, it can be concluded that using the Kahoot! application in English learning gives a positive impact on students' motivation, teamwork, and understanding. The interactive quizzes made the class atmosphere more active, fun, and competitive. Students looked more excited and involved in every activity, and they became more focused when answering the questions.

The group sessions also helped them build better cooperation and communication because they had to discuss answers and make decisions together. This shows that Kahoot! can encourage not only academic improvement but also social interaction among students.

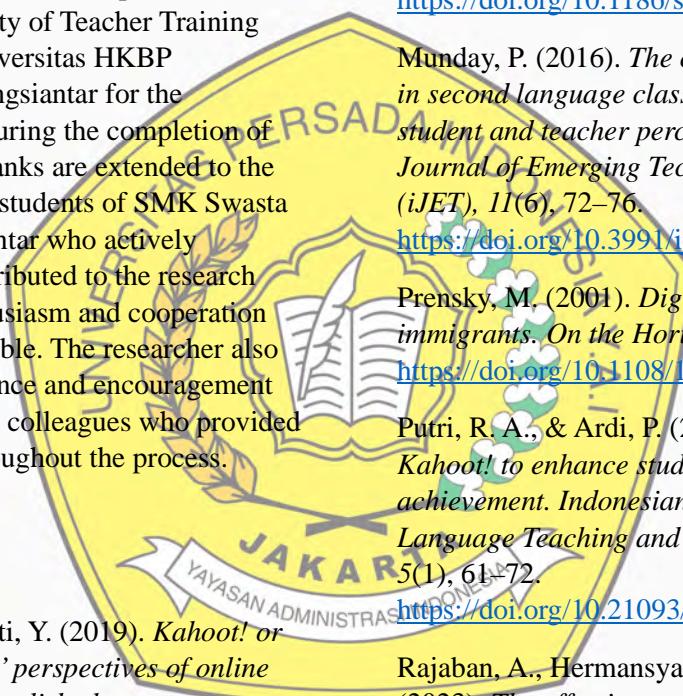
Even though there were some problems like unstable internet or limited access to mobile phones, students still showed enthusiasm and supported one another. These small challenges didn't stop them from learning actively.

Overall, Kahoot! is a helpful and effective tool to make English learning more interesting and meaningful, especially for today's students who are familiar with technology. It can help teachers create a learning atmosphere that is both enjoyable and productive for 21st-century learners.

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