



ENGLISH TEACHERS' PERCEPTIONS OF KAHOOT AS A DIGITAL FORMATIVE ASSESSMENT IN EFL CLASSROOMS: A QUALITATIVE STUDY

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ABSTRACT

In English as a Foreign Language (EFL) education in Indonesia, teachers still face various challenges, such as differences in student ability, large class sizes, time constraints, and curriculum requirements that place greater emphasis on final outcomes. This situation has prompted teachers to adopt teaching strategies and resources that can support more effective and sustainable assessment. In this context, Kahoot! has emerged as a practical and easy-to-implement digital platform for the learning process. This is qualitative study examines English teachers' perspectives on the use of Kahoot as a formative assessment tool in EFL classrooms. Using a phenomenological-constructivist approach, the study involved five EFL teachers who were purposively selected from secondary school. Data were collected through in-depth semi-structured interviews, classroom observations, and document analysis. Data analysis employed a reflexive thematic approach. The analysis yielded four main themes: (1) Kahoot functions as a real-time diagnostic tool, (2) motivational and affective aspects in game-based assessment, (3) pedagogical tensions between entertainment and academic rigor, and (4) contextual and infrastructure-related opportunities and barriers. The results indicate that teachers view Kahoot as a formative instrument capable of providing rapid instructional feedback and enhancing student engagement; however, they also highlight limitations regarding the depth of assessment and its reliability for evaluation purposes. This study offers practical insights into the intersection of gamification, formative assessment, and EFL pedagogy within the Indonesian context.

Keywords: EFL Classroom, Formative Assessment, Gamification, Kahoot, Qualitative Study, Teachers' Perceptions

A. INTRODUCTION

The rapid integration of digital technology into education has fundamentally transformed classroom assessment practices, particularly in English as a Foreign Language (EFL) education. Rather than functioning solely as a mechanism for measuring students' final achievement, assessment is increasingly expected to support learning by providing continuous evidence of students' progress and informing instructional decisions (Black & Wiliam, 2009, 2018; Wiliam, 2017). This shift has become particularly relevant in Indonesia, where the implementation of technology-enhanced learning and the Merdeka Curriculum encourages

teachers to integrate digital tools into instructional and assessment practices. However, despite these developments, many EFL teachers continue to rely heavily on conventional paper-based and summative assessments that provide limited opportunities for timely feedback and fail to adequately monitor students' ongoing language development (Black & Wiliam, 2009). The challenge is further intensified by contextual realities such as large class sizes, diverse learner proficiency levels, limited instructional time, and curriculum demands that often prioritize learning outcomes over learning processes (Salama, 2025; Defianty & Wilson, 2024). These conditions make it increasingly difficult for teachers to implement effective formative assessment capable of supporting students' continuous language development.

In response to these challenges, digital formative assessment platforms have attracted growing attention as practical solutions for improving assessment quality while enhancing student engagement. Among these platforms, Kahoot has emerged as one of the most widely adopted game-based assessment tools because of its ability to provide immediate feedback, real-time performance data, and interactive classroom experiences (Ertmer & Ottenbreit-Leftwich, 2010; Wang & Tahir, 2020). Its gamified features including leaderboards, timed quizzes, instant scoring, and competitive gameplay are consistent with principles of active learning and formative assessment by enabling teachers to collect learning evidence efficiently while increasing student participation. Within EFL classrooms, such characteristics are particularly valuable because affective factors, including motivation, anxiety, confidence, and classroom participation, substantially influence language learning success (Krashen, 1985; Pekrun, 2006). Consequently, Kahoot has been increasingly viewed not merely as a digital quiz platform but as a technological innovation capable of supporting more responsive and engaging formative assessment practices.

The pedagogical potential of Kahoot can be understood through several complementary theoretical perspectives. Formative assessment emphasizes the systematic collection, interpretation, and use of evidence to improve teaching and learning rather than merely evaluating final performance (Scriven, 1967; Black & Wiliam, 1998; Wiliam, 2017). Effective formative assessment is iterative, requiring continuous cycles of observation, feedback, and instructional adjustment (Heritage, 2010), while meaningful feedback should help learners understand their current progress, learning goals, and subsequent learning steps (Hattie & Timperley, 2007). Furthermore, feedback is most effective when it is timely, specific, and actionable (Shute, 2008), characteristics that digital platforms such as Kahoot can potentially facilitate through instant performance reports. Nevertheless, the effectiveness of any formative assessment technology ultimately depends on teachers' competencies in interpreting assessment evidence and translating it into pedagogical action (Schildkamp et al., 2020). Within language education, this challenge becomes even more complex because language proficiency develops progressively through interaction, experimentation, and continuous refinement rather than discrete knowledge acquisition (Krashen, 1985; Richards & Rodgers, 2014). Therefore, language assessment should satisfy principles of reliability, validity,



practicality, and authenticity (Brown & Abeywickrama, 2010), raising important questions regarding the extent to which multiple-choice game-based platforms can adequately support the assessment of higher-order communicative competencies.

The use of Kahoot is further supported by gamification theory, which explains how game elements can enhance learners' motivation and engagement when appropriately integrated into educational settings. Gamification refers to the application of game mechanics within non-game contexts to facilitate meaningful learning experiences (Deterding et al., 2011; Kapp, 2012). Kahoot primarily represents structural gamification, where points, rankings, and rewards are incorporated into existing instructional activities without fundamentally redesigning learning tasks (Nacke & Deterding, 2017). According to Self-Determination Theory, such game elements become educationally valuable when they support learners' autonomy, competence, and relatedness (Deci & Ryan, 1985), thereby promoting intrinsic motivation rather than dependence on external rewards. Empirical evidence indicates that gamification contributes more effectively to meaningful learning when these psychological needs are fulfilled (Subhash & Cudney, 2018), whereas poorly designed gamification may shift students toward extrinsic motivation and reduce long-term engagement (Landers, 2019). Similarly, Flow Theory suggests that optimal engagement occurs when learning challenges appropriately match students' abilities (Csikszentmihalyi, 1990), highlighting the importance of teachers' instructional decisions when implementing Kahoot in heterogeneous classrooms. Previous studies also demonstrate that game-based learning contributes positively to vocabulary acquisition, grammatical development, speaking confidence, and reading motivation (Al Dosakee & Ozdamli, 2021; Zarzycka Piskorz, 2016), while digital games create authentic learning environments rich in immediate feedback (Prensky, 2003). At the same time, Kahoot may reduce learners' affective barriers by lowering anxiety and increasing classroom enjoyment (Krashen, 1985; Pekrun, 2006), although this motivational advantage may also conflict with the assessment of complex productive language skills.

Existing empirical research generally reports positive educational outcomes associated with Kahoot. Studies have shown that the platform improves student participation, motivation, classroom atmosphere, and academic achievement while enabling teachers to obtain immediate diagnostic information for instructional improvement (Ismail & Mohammad, 2017; Wang & Tahir, 2020). Nevertheless, emerging evidence also reveals important pedagogical limitations. Teachers often express diverse perceptions regarding the effectiveness and practicality of Kahoot in classroom assessment (Rajabpour, 2021). Concerns have been raised regarding the platform's emphasis on response speed, which may discourage deeper cognitive processing and disadvantage learners experiencing anxiety or requiring additional thinking time (Furió et al., 2015). Furthermore, its dependence on multiple-choice questions restricts its capacity to evaluate productive language skills and higher-order communicative competence (Brown & Abeywickrama, 2010; Moranski & Kim, 2016), while excessive use may lead to declining student motivation, commonly referred to as "Kahoot fatigue" (Wang, 2015). These findings

collectively suggest that the educational value of Kahoot is not determined solely by its technological features but largely by how teachers interpret, adapt, and integrate the platform within their pedagogical practices. This perspective is further reinforced by sociocultural theory, which views digital tools as mediators of teacher–student interaction (Vygotsky, 1978), multimedia learning theory, which emphasizes effective instructional design in technology-enhanced environments (Mayer, 2009), and achievement emotion theory, which explains how competitive classroom environments may generate both positive and negative academic emotions depending on instructional implementation (Pekrun, 2006).

Despite the growing body of literature on Kahoot, important research gaps remain. Most previous studies have primarily examined the platform’s effects on students’ motivation, vocabulary acquisition, participation, and learning achievement using predominantly quantitative approaches. Consequently, considerably less attention has been devoted to understanding teachers’ professional perspectives, pedagogical reasoning, and classroom experiences regarding Kahoot as a formative assessment tool, particularly within Indonesian secondary EFL contexts. Since teachers are the primary agents responsible for interpreting assessment evidence, designing meaningful learning experiences, and determining whether digital technologies function as genuine formative assessment or merely as engaging classroom activities, understanding their perceptions becomes essential for successful technology integration. Addressing this gap is therefore both theoretically and practically significant because it contributes to the broader literature on formative assessment, gamification, and technology-enhanced language learning while providing empirical evidence to support more effective implementation of digital formative assessment in EFL classrooms.

Accordingly, this study aims to explore Indonesian EFL teachers’ perceptions of Kahoot as a digital formative assessment tool in English language classrooms. Specifically, the study investigates how teachers evaluate Kahoot’s contribution to formative assessment practices, the pedagogical opportunities and challenges they encounter during its implementation, and the ways in which their professional beliefs and contextual teaching conditions shape their evaluation of the platform. By focusing on teachers’ lived experiences rather than solely on student outcomes, this study seeks to provide a more comprehensive understanding of the pedagogical role of Kahoot in supporting meaningful formative assessment within contemporary EFL education.

B. METHOD

This study uses a qualitative approach with the subjective experiences of the participants. (Creswell & Poth, 2016; Denzin & Lincoln, 2018). A total of five participants participated in the study. The selection of respondents using purposive sampling with a criterion-based sampling approach was deemed appropriate for the study's purpose, which was to gain in-depth and meaningful insights into teachers' professional practices and considerations in utilizing Kahoot as a formative assessment instrument (Patton, 2015). This study employed three

complementary data collection methods to achieve triangulation. The interview framework was designed around three themes: participants' professional backgrounds, their views on Kahoot as a formative assessment tool, and reflections on ease of access and challenges in its use. In addition to the interviews, the researcher also conducted non-participant classroom observations of three participants, each covering a full 40–45-minute lesson period. During these observations, the researcher acted solely as an observer without intervention, allowing for natural documentation of how Kahoot was implemented in real-world learning situations. Additionally, document analysis served as a secondary data source, including lesson plans incorporating Kahoot activities, examples of Kahoot quizzes created by participants, and institutional assessment policy documents. The data collected in this study were analyzed using Reflective Thematic Analysis, following the qualitative coding guidelines outlined by Saldaña (2016). These codes were then grouped and organized to form initial themes representing consistent patterns of meaning within the data.

C. FINDINGS AND DISCUSSION

Findings

Theme 1: Kahoot as a Real-Time Diagnostic Instrument

Generating Immediate Evidence of Learning

The most consistent view expressed by all five participants highlighted that the primary value of Kahoot's formative assessment lies in its ability to generate immediate, visible, and actionable evidence of learning across the entire class. They explained that the bar charts on the platform which display the distribution of student responses for each option after every question serve as real-time diagnostic indicators, allowing teachers to immediately identify misunderstandings and adjust their teaching focus on the spot. This stands in stark contrast to traditional paper-based assessments, where feedback typically takes several days and learning opportunities are often lost before the data can be utilized.

Rina, a high school teacher with seven years of experience, clearly describes this dynamic:

A1: *"When I look at the bar graph and realize that 60% of students chose the wrong answer often the same one I immediately realize there's a misunderstanding I haven't addressed yet. Before, without Kahoot, I might have kept teaching without even knowing it. Now I can pause the lesson, revisit that topic, and correct it immediately."*

A2: a high school teacher with ten years of experience, explicitly compared it to written quizzes:

A2: *"With paper quizzes, by the time I finish grading and returning them, we've already moved on to three new topics. That opportunity has passed. With Kahoot, the data appears right then and there, when it's most needed for teaching."*

Theme 2: Motivational and Affective Dimensions

Engagement, Energy, and Classroom Climate

All five participants stated that Kahoot serves as a platform that has a transformational impact on classroom dynamics and student engagement, particularly when compared to conventional assessment methods. The quiz-like design of the platform with a competitive leaderboard, time limits for answering, engaging visuals, and real-time results seems to create a qualitatively different classroom atmosphere, which teachers consistently associate with increased participation and enthusiasm. A5, a teacher with three years of experience, described the change clearly:

A5: "When I announced we'd be using Kahoot, the atmosphere changed instantly. Students who were usually quiet in the back of the classroom suddenly became more alert and active. There was a kind of collective excitement spreading throughout the room it was truly contagious."

Observations of three of the five participants A3, A2, and A4 reinforced the interview findings. During the observed Kahoot sessions, students' body language appeared more animated compared to the preceding direct instruction phase: they leaned forward toward their devices, frequently discussed with their neighbors despite the individual nature of the competition, and voiced their answers with genuine enthusiasm. Interaction between teachers and students also increased in both frequency and warmth during the post-Kahoot discussion phase, as teachers used incorrect responses as a starting point for collaborative inquiry in the classroom.

Managing Competition and Affective Risks

Although most participants viewed Kahoot's motivational impact positively, some offered a more nuanced perspective by acknowledging the potential emotional risks arising from the platform's competitive nature for certain groups of students. A4 emphasized the importance of paying attention to students for whom, in their view, the public display of rankings on the leaderboard could cause anxiety or embarrassment rather than foster engagement:

A4: "I've seen students become very uncomfortable when their rankings are displayed on a leaderboard visible to the entire class. For some of them, especially those who are already anxious about English, the competition isn't motivating it actually makes them feel small. That's not what I expect from formative assessment."

In response, the participants mentioned several adaptive pedagogical strategies: using a team-based Kahoot format instead of individual to spread performance pressure; completely turning off the leaderboard display; explicitly positioning Kahoot as a low-risk learning activity, not as an evaluative task; and reserving the platform for the beginning of the unit as a diagnostic warm-up, not as an assessment.

Theme 3: Pedagogical Tensions and Epistemic Concerns ***The Speed-Accuracy Tension in Language Assessment***

One of the issues that often arises in participant interviews is the tension between the time pressure imposed by Kahoot and the deliberate metacognitive processes an essential element in second language learning. This platform awards points based on the accuracy and speed of answers, creating a design pattern that, for some participants, does not align with the cognitive needs in language learning. R1 voiced this concern in the context of teaching grammar:

A1 "Language learning is not focused on speed." When I ask students to choose between 'has gone' and 'went,' I expect them to think deeply feeling the structure of the language, processing it carefully. Kahoot does not provide space for that type of thinking. In the end, this platform values the fastest guesser more than the most meticulous language learner.

Participants' responses to this tension varied:: BS1 routinely extended the duration of each question to reduce unnecessary time pressure; Laila used Kahoot only for practicing basic vocabulary recall, where speed was not a pedagogical issue, while higher-level language assessment was conducted with other tools; and W1 began to doubt whether Kahoot was suitable for assessing language forms at all, so she used it solely for material review.

Depth versus Coverage in Formative Feedback

The participants also expressed genuine concerns regarding the extent of formative feedback that Kahoot can provide. Although this platform presents aggregate data in real-time about answer patterns, it cannot independently explain the causes of student errors or identify the appropriate instructional responses. W1 carefully examined those limitations:

A1: "Kahoot told me that forty percent of my students chose the wrong answer." However, this platform does not reveal the reason behind it. Is it due to a limited vocabulary? Misinterpretation of grammar? Or did they misread the question due to time pressure? That data is just a surface diagnosis. The real formative work meaningful happens in the discussions that take place after Kahoot, when I sit down with the students and discuss their thoughts.

Institutional Culture and Assessment Pol

Participants also conveyed how the institutional culture and the existing assessment policy framework shape and in some cases limit their ability to use Kahoot in a truly formative manner. In schools and universities where summative exam results are still the primary benchmark for institutional accountability, several participants reported facing skepticism or rejection from administrators and colleagues who doubted whether game-based activities could be considered legitimate assessment practices. L1 explained how to cope with such institutional pressure:

A3: "Some of my senior colleagues and the head of the department think that Kahoot is just entertainment." They do not consider it an assessment. Therefore, I pay close attention to how I introduce it I use Kahoot in the classroom, but I also meticulously record the data generated to adjust my teaching methods. I have to



prove that Kahoot truly functions as a formative tool, not just a way to pass the time with games.

Discussions

Theme 1: Kahoot as a Real-Time Diagnostic Instrument

This perspective aligns with William's (2011) concept that formative assessment is a process of gathering evidence that is then used to make more precise instructional decisions. Kahoot's speed of feedback shrinking the assessment cycle, which typically takes days, down to a matter of seconds was recognized by all participants as a significant improvement over their previous assessment practices. This finding reinforces the observation by Wang and Tahir (2020) that the real-time feedback provided by Kahoot is one of the most valued features in education, while also adding a new perspective by explaining how teachers actively interpret and act on the data, rather than merely receiving it passively.

Theme 2: Motivational and Affective Dimensions

This shift in classroom dynamics aligns with Pekrun's (2006) theory of achievement emotions, which states that activities perceived as controllable and personally meaningful evoke positive emotions such as joy and pleasure, which in turn drive cognitive engagement and behavior. Kahoot's quiz-like competitive format appears to trigger similar affective responses in many students, thereby creating an atmosphere that participants perceive as highly supportive of language participation and the courage to take risks. These concerns align with the tension described in the gamification literature, namely between competition that drives engagement and competition that becomes a source of shame, anxiety, and withdrawal for low-achieving or less competitive students (Landers, 2019; Pekrun, 2006).

Theme 3: Pedagogical Tensions and Epistemic Concerns

These concerns align with established critiques in the language assessment literature regarding the validity of using timed multiple-choice formats to measure complex language competencies (Brown & Abeywickrama, 2019; Widiastuti et al., 2017; Li, 2025). This tension is most palpable in the context of EFL (English as a Foreign Language), where the speed of cognitive processing in the second language is usually slower than in the first language—an established neurological fact that is not accommodated by the standard Kahoot design. Participants' responses to this tension varied. These findings have important theoretical implications: they show that experienced EFL teachers do not view Kahoot as a formative assessment tool in itself, but rather as a source of data that can facilitate and enrich subsequent formative dialog. This view is consistent with the argument by Wiliam and Thompson (2008) that formative assessment is essentially a social and dialogic process, and the value of a tool lies in the quality of the instructional conversations it generates, not merely the data produced. The five participants, at various levels of experience, positioned themselves as the main actors in

formative assessment practitioners who utilized evidence from Kahoot as a starting point for professional inquiry, rather than as an end goal.

Institutional Culture and Assessment Policy

These findings align with Black and Wiliam's (1998) identification of cultural and institutional resistance as the main barriers to the adoption of formative assessment practices. The results of this study indicate that these barriers have a strong impact, especially in educational environments that still emphasize summative accountability—teachers who wish to utilize Kahoot as a true formative tool must address not only the technical and pedagogical aspects of the platform but also the professional political dynamics related to the assessment culture in their institutions

D. CONCLUSION

Four key themes emerged from the data: Kahoot as a real-time diagnostic tool; motivational and affective dimensions of game-based assessment; pedagogical tensions and epistemic concerns; and contextual and infrastructural opportunities and barriers. Findings indicate that the five teachers had diverse but professionally grounded perceptions, reflecting a genuine appreciation of Kahoot's formative potential while also critically recognizing its limitations and risks. Participants positively assessed the platform's ability to generate real-time evidence of learning across the classroom, enabling more responsive instructional adjustments—an advancement described by participants as a significant improvement over traditional paper-based assessment methods. They also acknowledged Kahoot's powerful motivational impact on classroom climate, with observations indicating increased engagement and interaction between teachers and students. On the other hand, teachers expressed legitimate concerns that balanced their positive views. The emphasis on response speed was perceived as potentially disruptive to the deliberative and reflective cognitive processes required in second language learning. The depth of formative feedback that Kahoot can provide independently was perceived as limited; teachers identified post-Kahoot pedagogical discussions as the primary arena for formative work. Its competitive structure can be motivating for some students, but at the same time, it can cause anxiety for others, requiring careful management. Infrastructure inequities such as internet connectivity, device quality, and institutional culture were also identified as key determinants of the platform's formative effectiveness in practice. Ultimately, these findings confirm that experienced EFL teachers are not simply passive users of Kahoot's embedded design logic. All five respondents demonstrated active and reflective professional reasoning, making adjustments to the settings, modifying the format, and designing pedagogical sequences after using Kahoot to expand and deepen the formative functions of a tool not primarily designed for formative assessment.



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