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The Affective and Cognitive Dimension: Evaluating Students' Receptivity to Gamified Online Assessment

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ABSTRACT

This study aims to investigate students' attitudes toward the use of gamified online quizzes as authentic assessment in learning descriptive writing at MTsN 2 Medan. The research focuses on the affective and cognitive dimensions of students' receptivity to digital assessment tools. The data are collected from 10 students selected through purposive sampling, as they have prior experience using online quizzes in English learning. This study employs a qualitative descriptive design. The data are gathered using a structured questionnaire distributed through Google Forms, consisting of Likert-scale and open-ended questions. The data analysis applies qualitative procedures including data reduction, data display, and conclusion drawing to identify patterns in students' responses. The findings reveal that students show a generally positive attitude toward gamified online quizzes. In the affective dimension, most students feel motivated, excited, and more engaged compared to traditional assessments. In the cognitive dimension, students believe that online quizzes help them understand descriptive text structures and language features more effectively, especially through immediate feedback. However, several challenges are identified, including internet instability and time pressure, which may influence students' performance and confidence. The study implies that gamified online quizzes can serve as effective authentic assessment tools when supported by proper technical conditions. Teachers are encouraged to design flexible and meaningful digital assessments that balance engagement and accessibility to enhance students' learning experiences.

Kata Kunci

Online Quizzes, Authentic Assesment, Students' Attitudes, Descriptive Writing, EFL Learning.

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INTRODUCTION

In the current era of educational transformation, the integration of Information and Communication Technology (ICT) has transitioned from a supplementary luxury to a pedagogical necessity. This shift is particularly evident in the realm of English as a Foreign Language (EFL), where digital tools are increasingly utilized to bridge the gap between theoretical knowledge and

practical application. Central to this evolution is the concept of Authentic Assessment, which seeks to evaluate a student's collective abilities through tasks that mirror real-world challenges. Unlike traditional standardized testing, which often focuses on rote memorization, authentic assessment emphasizes the application of skills in meaningful contexts.

Among the four language skills, writing remains the most cognitively demanding for EFL learners, particularly in mastering genres such as Descriptive Text. Writing a descriptive text requires students to not only master vocabulary and syntax but also to organize their thoughts into a coherent structure consisting of identification and description that allows readers to visualize the subject being described. However, at the junior high school level, specifically at MTsN 2 Medan, students frequently encounter obstacles such as low motivation and 'writing anxiety' when faced with conventional evaluation methods. Traditional paper-based assessments often fail to provide the immediate engagement and feedback necessary for students to improve their writing skills in real-time.

To address these challenges, the implementation of gamified online quizzes has emerged as a strategic intervention. Platforms such as Google Forms, Quizizz, or Kahoot! offer a "game-like" environment that can potentially transform the high-stakes atmosphere of testing into a low-stakes, interactive learning experience. This approach is particularly relevant for Gen-Z students who are "digital natives" and naturally more receptive to technology-mediated instruction. By using online quizzes, teachers can provide instant results, which allows students to immediately identify their strengths and weaknesses in descriptive writing, such as adjective usage or the simple present tense. However, the effectiveness of any pedagogical tool is not solely determined by its technical features, but more importantly, by the students' attitudes toward it. According to the Theory of Planned Behavior, an individual's attitude comprising affective (emotional) and cognitive (perceptual) dimensions is a primary predictor of their engagement and success. If students perceive the online quiz as a mere burden or if they feel overwhelmed by technical constraints, the goal of authentic assessment will not be achieved. On the other hand, a positive receptivity can lead to higher autonomy and better learning outcomes.

Despite the growing use of digital tools in Indonesian schools, there is still limited empirical evidence specifically focusing on how students at the Islamic Junior High School level (MTsN) react to gamified assessments in writing tasks. At MTsN 2 Medan, while technology has been introduced, the psychological reception of the students their feelings of excitement, their

struggles with internet connectivity, and their cognitive belief in the tool's utility needs to be formally evaluated. Therefore, this study is conducted to fill this gap. By evaluating the affective and cognitive dimensions of student receptivity, this research aims to provide a clear picture of whether gamified online quizzes truly serve as a supportive authentic assessment tool or if there are systemic barriers that need to be addressed. The insights gained from this study are expected to help EFL teachers at MTsN 2 Medan and similar institutions to refine their assessment strategies, ensuring that technology serves to empower students rather than hinder them.

RESEARCH METHOD

This study employed a qualitative descriptive approach to investigate students' receptivity toward gamified online quizzes as an authentic assessment tool in learning descriptive writing. The use of this approach is intended to provide a comprehensive and in-depth description of students' affective and cognitive responses in a natural educational setting, without manipulating variables. This design allows the researcher to explore not only what students feel and think, but also how and why those responses occur in relation to digital assessment practices.

The research was conducted at MTsN 2 Medan, North Sumatra, Indonesia. The population of this study consisted of eighth-grade students who had learned descriptive text as part of their English curriculum. A purposive sampling technique was applied to select participants who met specific criteria relevant to the research objectives. The sample consisted of 10 students who fulfilled the following requirements: (1) they had completed the descriptive text unit, ensuring that they possessed basic knowledge of the generic structure and language features; (2) they had prior experience using gamified online quizzes such as Google Forms or Quizizz, so that their responses were based on actual experience rather than first impressions; and (3) they were willing and able to provide reflective and descriptive responses to the questionnaire. The use of purposive sampling was considered appropriate to obtain rich and relevant data aligned with the focus of the study.

The primary instrument used for data collection was a structured questionnaire administered through Google Forms. The instrument was designed to reflect the multidimensional nature of students' attitudes, particularly focusing on affective and cognitive components. The questionnaire consisted of two main types of items. First, Likert-scale items were used to measure students' level of agreement regarding their emotional responses (such as motivation, excitement, and anxiety) and their cognitive perceptions (such as

perceived usefulness and understanding). Second, open-ended questions were included to allow students to elaborate on their experiences, provide explanations, and express any challenges they encountered during the use of gamified online quizzes. This combination of quantitative-like scaling and qualitative narrative responses was intended to strengthen the depth and credibility of the data.

The data collection procedure was carried out in a systematic sequence. Initially, students participated in a gamified online quiz session that focused on descriptive writing. The quiz included questions related to the generic structure of descriptive text, such as identification and description, as well as language features including the use of adjectives and the simple present tense. The quiz was designed with a time limit to simulate a real assessment environment and to incorporate gamification elements such as instant feedback and interactive interface. Following the completion of the quiz, the questionnaire link was distributed immediately to the participants. This step was crucial to capture students' affective responses while their emotional experiences were still fresh. Students were given sufficient time to complete the questionnaire and to provide detailed answers, especially for the open-ended section.

The data obtained from the questionnaire were analyzed using the interactive model of qualitative analysis proposed by Miles, Huberman, and Saldaña. This model involves three main processes: data reduction, data display, and conclusion drawing. In the data reduction stage, the researcher selected and simplified the data by coding responses into relevant categories, particularly affective themes (such as excitement, motivation, and anxiety) and cognitive themes (such as perceived usefulness and clarity of understanding). In the data display stage, the data were organized into descriptive narratives and simple percentage distributions to facilitate interpretation. Finally, in the conclusion drawing stage, patterns and relationships between affective and cognitive responses were identified to generate meaningful interpretations of students' receptivity toward gamified online quizzes.

To ensure the validity of the research, several strategies were applied. The questionnaire items were developed based on established theoretical frameworks, particularly the affective and cognitive dimensions of attitude, to ensure content validity. In addition, the use of both Likert-scale and open-ended questions allowed for data triangulation, where students' numerical responses could be supported and explained by their qualitative statements. Reliability was addressed by maintaining consistency in the questionnaire structure and ensuring that similar constructs were measured through multiple items. Furthermore, the immediate administration of the questionnaire after the

quiz helped minimize recall bias and increased the accuracy of students' responses.

In terms of data analysis techniques, descriptive analysis was used to present the distribution of responses in percentages, while qualitative interpretation was used to explain the meaning behind those responses. The combination of these approaches enabled the researcher to provide both measurable trends and in-depth explanations of students' attitudes.

However, this study also has certain limitations. The small sample size of 10 participants limits the generalizability of the findings to a wider population. Additionally, the reliance on self-reported data may introduce subjectivity, as responses are influenced by students' perceptions and personal experiences. Technical factors, such as internet connectivity during the quiz, may also have affected students' responses and performance. Despite these limitations, the detailed description of the research procedures and context allows other researchers to replicate the study in similar educational settings.

RESULT AND DISCUSSION

The findings of this study are derived from a systematic analysis of data collected through a structured questionnaire distributed via Google Forms to 10 students at MTsN 2 Medan. The results are organized into four main aspects: students' digital familiarity, affective responses, cognitive perceptions, and structural barriers encountered during the implementation of gamified online quizzes.

The initial findings reveal the level of students' familiarity with online quizzes as part of their learning process. The data indicate that 60% of the participants (6 out of 10 students) reported using online quizzes occasionally, approximately one to two times per month. Meanwhile, 30% of the students categorized themselves as rare users, and 10% experienced online quizzes for the first time during this study. This distribution suggests that online quizzes are not yet a dominant assessment method but are sufficiently familiar to create meaningful responses. The moderate exposure also indicates that students' attitudes are not purely influenced by novelty, but rather by actual learning experiences.

From the affective perspective, the findings demonstrate a predominantly positive emotional response toward the use of gamified online quizzes. A total of 70% of students expressed feelings of excitement, enjoyment, and increased motivation when participating in the activity. They perceived the quizzes as engaging and less stressful compared to traditional paper-based assessments. Furthermore, 60% of the participants strongly agreed that the gamified format

is more interesting and interactive. Qualitative responses support this finding, as students described the activity using expressions such as “fun,” “exciting,” and “like playing a game,” indicating a shift in perception from formal testing to interactive learning.

However, not all emotional responses were entirely positive. Around 20% of the students reported experiencing nervousness during the quiz. This anxiety was primarily associated with the time limit feature rather than the content difficulty. The presence of a countdown timer created pressure that affected their comfort level, suggesting that while gamification increases engagement, it may also introduce elements of stress for certain learners.

In terms of cognitive perception, the findings indicate that students generally believe that gamified online quizzes support their understanding of descriptive writing. Approximately 80% of the participants agreed that the quizzes helped them comprehend the generic structure of descriptive texts, particularly in distinguishing between identification and description components. This suggests that the quizzes effectively function as tools for reinforcing structural knowledge.

Additionally, 60% of the students reported improvement in their understanding of language features, such as the use of adjectives and the simple present tense. The immediate feedback provided by the online platform emerged as a significant factor contributing to this improvement. Students were able to identify and correct their mistakes instantly, which enhanced their awareness of linguistic accuracy. This feature was repeatedly highlighted in the qualitative responses as beneficial for learning.

Further findings relate to students’ self-assessment of their performance after completing the quiz. The data show that 40% of students rated their confidence at a high level (scores 4-5), indicating strong self-belief in their performance. Meanwhile, 30% reported moderate confidence, and another 30% expressed low confidence (scores 1-2). This variation suggests that students’ confidence is not solely determined by their understanding of the material, but is also influenced by external factors such as familiarity with digital tools and technical conditions during the quiz.

The study also identifies several structural barriers that affect the effectiveness of gamified online quizzes. The most prominent issue is internet connectivity, reported by 90% of the participants as a major obstacle. Students experienced problems such as slow loading times and unstable connections, which disrupted their ability to complete the quiz smoothly. In a timed assessment, these technical issues can lead to missed questions and reduced performance, thereby affecting the validity of the assessment.

Another challenge is related to time constraints. About 40% of students indicated that the time allocation was insufficient, especially when dealing with longer descriptive texts. This limitation forced some students to respond quickly without fully processing the questions, potentially reducing the accuracy of their answers. Additionally, 30% of students reported difficulties with unfamiliar vocabulary, which became more challenging to manage within the limited time frame of the quiz.

The discussion of the research findings at MTsN 2 Medan reveals a multifaceted relationship between digital pedagogy, student psychology, and the practicalities of EFL instruction. When analyzing the 70% enthusiasm rate observed in the results, it becomes evident that gamification acts as a powerful motivational catalyst that transcends the boundaries of traditional rote learning. This high level of emotional receptivity aligns closely with Ajzen's (1991) Theory of Planned Behavior, which suggests that a positive attitude toward a pedagogical tool is a primary predictor of a student's intention to engage deeply with the subject matter. The "game-like" interface of the online quizzes characterized by vibrant visuals and interactive elements effectively lowered the students' "Affective Filter," a concept famously proposed by Stephen Krashen. By transforming a high-stakes writing evaluation into an engaging digital challenge, the students at MTsN 2 Medan were able to interact with the English language in a state of "flow," where the fear of failure was replaced by the drive for achievement. This suggests that for junior high school learners, the shift from static paper to dynamic screens reduces the psychological burden of formal testing, thereby fostering a more receptive learning environment. Furthermore, the significant 80% consensus regarding the utility of these quizzes in mastering the Generic Structure of descriptive text (specifically Identification and Description) confirms that students are not merely "playing," but are actively engaging in complex cognitive processing. This data strongly supports Brown's (2004) principle of "washback," where a well-designed assessment serves as a bridge to future learning rather than just a final judgment. The immediate feedback provided by the digital platform functions as a "Cognitive Scaffold," allowing students to undergo a rapid cycle of trial, error, and correction. Unlike traditional methods where feedback is often delayed by days, the instant validation of their choices regarding adjectives and the simple present tense reinforces their mastery of linguistic "building blocks" in real-time. Consequently, the cognitive dimension of their attitude is built upon a foundation of perceived competence; students believe in the tool because they can see, in seconds, how it clarifies their understanding of descriptive writing. This immediate gratification is a key driver of modern

student receptivity, particularly for the "digital native" generation at MTsN 2 Medan. However, the discussion must critically address the "Technological Paradox" created by the 90% prevalence of internet connectivity issues. This finding creates a tension between the pedagogical ideal and the infrastructural reality. When a student's performance is hampered by "lag" or "slow loading" rather than a lack of vocabulary or grammatical knowledge, the assessment shifts from measuring English proficiency to measuring technical luck. The 20% of students who reported feeling "Nervous" are a clear indicator of this systemic anxiety. This suggests that while Affective and Cognitive receptivity is remarkably high, the Behavioral success of online quizzes is currently capped by a "glass ceiling" of infrastructure. For MTsN 2 Medan to fully realize the benefits of digital authentic assessment, the school must bridge this gap by ensuring that the technical environment is as robust as the students' motivation to learn.

Overall, the findings reveal that students at MTsN 2 Medan demonstrate a generally positive receptivity toward gamified online quizzes, particularly in terms of emotional engagement and perceived learning benefits. However, this positive response is accompanied by notable technical and structural challenges that influence students' performance and confidence during the assessment process.

CONCLUSION

The research conducted at MTsN 2 Medan leads to the definitive conclusion that gamified online assessments are a transformative pedagogical tool that significantly enhances student receptivity in the context of descriptive writing. This study has demonstrated that receptivity is a multidimensional construct where the affective dimension plays a primary role; the 70% enthusiasm rate proves that gamification effectively dismantles the "Affective Filter," allowing students to engage with English without the paralyzing fear of traditional evaluation. Cognitively, the 80% agreement on the tool's utility confirms that students recognize the digital interface as a superior method for internalizing the generic structures of descriptive text. By providing a scaffolded environment where linguistic choices are validated instantly, these quizzes facilitate a state of engagement that traditional paper-based methods cannot replicate. However, the study also concludes that this success is currently tethered to the quality of local infrastructure. The 90% prevalence of technical barriers, such as internet latency, creates a "Technological Paradox" where the students' psychological readiness is hindered by physical constraints. Therefore, for online quizzes to serve as a truly authentic assessment, the school

must ensure that the technical environment provides the same level of reliability as the students' motivation to learn. Building upon these conclusions, several pedagogical implications and suggestions arise for the advancement of EFL instruction. For English language educators, it is strongly suggested to adopt a more flexible approach to digital assessment by integrating "un-timed" practice sessions before moving to high-stakes timed quizzes. This strategy would specifically alleviate the 40% time-induced anxiety reported by students, ensuring that the assessment measures linguistic competence rather than technical speed or internet stability. Furthermore, teachers should prioritize the use of multimodal prompts integrating high-quality visual aids with descriptive tasks to better cater to the cognitive needs of junior high school learners. By aligning the digital content with the students' visual-spatial preferences, the transition from identifying descriptive elements to producing full descriptive paragraphs can be made more seamless and intuitive. Furthermore, the findings provide a clear mandate for the school administration to prioritize infrastructural optimization. To resolve the 90% connectivity gap identified in this research, the establishment of a dedicated high-speed network for the Language Laboratory is essential to maintain the validity and fairness of digital assessments. Beyond hardware, providing professional development workshops for teachers on digital troubleshooting and innovative quiz design will ensure that pedagogical goals are not derailed by minor technical glitches. Finally, for future researchers, it is suggested to expand this inquiry by utilizing a larger sample size and a longitudinal design to observe if these high levels of receptivity are sustained over time. Investigating how digital receptivity translates into long-term writing proficiency across different genres, such as narrative or recount texts, would provide a more holistic understanding of the role of technology in the Indonesian educational landscape. Through these synchronized efforts, the potential of gamified assessment can be fully realized, moving beyond a mere novelty to become a cornerstone of authentic learning.

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