

**DIGITAL GAMIFICATION IN EFL CLASSROOMS:
VOCATIONAL SCHOOL STUDENTS' VOICES****Isti Ramona Lubis¹, Anna Riana Suryanti Tambunan^{2*}, Immanuel
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ABSTRACT

Integrating digital gamification into English language teaching has become a powerful trend aimed at enhancing student engagement and motivation in the 21st-century education era. Despite their great potential, many vocational high school students still struggle to organize their ideas, maintain interest, and stay confident when writing argumentative texts. This study aims to describe vocational high school students' perceptions of the application of digital gamification in EFL learning, particularly by examining 1) its influence on students' motivation and engagement in argumentative writing, 2) its contribution to their cognitive and writing skill development, and 3) the challenges they experience during its implementation. This study uses a qualitative descriptive method involving 34 eleventh-grade accounting major students. Data were collected through open-ended questionnaires and analyzed using thematic analysis. The research results show that the majority of students perceived digital gamification as an engaging approach that increased their motivation, enjoyment, and confidence in writing. However, students identified several challenges, particularly related to technical limitations such as unstable internet connections and device constrains. This result underscores the importance of flexible gamified learning design that balances learning enjoyment with achieving meaningful learning outcomes in the context of vocational education.

Keywords: Argumentative Writing, Digital Gamification, Students' Voices, EFL Learning, Vocational School

A. INTRODUCTION

Writing is an important part of language acquisition because it demonstrates students' capacity to think critically, arrange ideas, and effectively transmit meaning. It is both a language talent and a cognitive and social process that involves preparation, revision, and reflection (Graham, 2019). In educational contexts, particularly in English as a Foreign Language (EFL) schools, writing is used to demonstrate understanding and critical reasoning. Among the numerous writing genres, argumentative writing is especially significant because it allows students to articulate their viewpoints, develop logical

reasoning, and back up statements with solid evidence. Toulmin (2003) defines argumentative writing as the systematic process of generating assertions, offering supporting evidence, and responding to counterarguments in order to persuade a reasonable audience. Students are required to use this approach to structure their thinking and deliver ideas logically.

However, vocational school students frequently have difficulty how to logically link the facts. They also tend to write articles that lack consistency, depth, and reasoning (Saputra & Febriyanti, 2021). These issues are not simply verbal, but also cognitive and motivational. Many vocational students are disengaged from writing lessons, considering them as boring and unrelated to their professional aspirations. It is due to the use of traditional method. In traditional teaching methods, written exercises are no longer enough to suit the expectations of today's learners, particularly Generation Z students who are accustomed to digital and interactive settings (Zhang & Yu, 2021). These difficulties are worsened by low digital literacy and the prevalence of teacher-centered teaching (Hutasuhut, 2020). Furthermore, the development of EFL students' writing performance often remains limited, especially in contexts where writing tasks are not authentic, reducing opportunities for meaningful engagement and improvement in key aspects such as content development (Quyen & Dan, 2025). Thus, the difficulties in teaching argumentative writing have encouraged educators to investigate novel pedagogical practices that improve student motivation and engagement. Digital gamification is a potential strategy that incorporates game aspects like points, badges, levels, and leaderboards into non-game learning situations to create a more engaging and dynamic learning environment (Dichev et al., 2020; Baptista & Oliveira, 2019). As claimed by Godsk et.al., (2024) that the technology supports structure, active learning, communication, interaction, and activities on the higher levels on the learning taxonomies.

Gamification is generally acknowledged in educational studies as an excellent strategy for enhancing motivation, facilitating cooperation, and improving learning outcomes (Kazu & Kuvvetli, 2023; Zainuddin et al., 2020). Unlike full-scale game-based learning, gamification does not transform the learning process into a game, but rather incorporates game aspects to increase user engagement (Landers, 2014). Furthermore, gamification aligns with the learning tendencies of contemporary students who are deeply engaged with mobile applications, interactive media, and reward-oriented environments, making it both a culturally relevant and pedagogically effective strategy in modern educational contexts (Paudel & Shrestha, 2025; Hong et al., 2025). Moreover, gamified writing challenges teach students not just how to create and defend their arguments, but also how logic, evidence, and counterarguments interact to generate coherent speech (Su & Cheng, 2015).

The combination of Toulmin's approach with digital gamification provides a viable framework for bridging these gaps. Toulmin's (2003) model, which consists of six core elements: claim, data, warrant, backing, qualifier, and rebuttal which provides a logical structure that assists students in building arguments systematically. When paired with gamification, each stage of argument development may become an interactive challenge that rewards students' progress and encourages deeper participation. For example, digital platforms like Quizizz or Kahoot! enable teachers to create gamified writing activities in which students identify assertions, analyze evidence, or construct rebuttals using point-based challenges (Roshdan et al., 2021).

However, integrating gamification into writing teaching is not without obstacles. Some studies have shown uneven involvement, an overreliance on external benefits, and technological hurdles such as internet access and device limits (Toda et al., 2018; Oliveira & Bittencourt, 2019). Furthermore, the efficacy of gamified learning is contingent on proper design and alignment with pedagogical objectives. When game features are utilized superficially, they can enhance excitement but not foster meaningful learning (Van Roy & Zaman, 2018). As a result, teachers must guarantee that gamification is used as a scaffold for building actual arguing ability, rather than just for pleasure. To strike this balance, gamification must be strategically integrated into the learning process, tying incentives to learning outcomes and encouraging reflective participation rather than rivalry (Koivisto & Hamari, 2019).

Despite its rising popularity, gamification's application in teaching argumentative writing, particularly in vocational education, has received little attention. Most prior research has concentrated on general or higher education contexts (Guo, 2025). Thus, this study investigates how digital gamification might improve the argumentative writing abilities of vocational students. It focuses on students in the 11th grade at a vocational high school in Medan, Indonesia, who completed gamified writing projects created using digital platforms such as *Quizizz*. It specifically investigates (1) how gamification affects students' motivation and engagement in argumentative writing, (2) how it contributes to their cognitive and writing skill development, and (3) the challenges students encountered during the implementation of gamified learning.

B. METHOD

This qualitative study was employed to investigate the gamification influence students' engagement and motivation in argumentative writing task. A qualitative study attempts to comprehend the events seen by the study subjects (Sidiq et.al, 2019). It was sufficient to present a conceptual definition in which the data acquired were articulated qualitatively - reports and descriptions. This design was created to identify the students' perception and experience of using gamification in writing. Overall, this methodological approach enables a comprehensive analysis of the influence of digital gamification on argumentative writing, providing valuable insights for educators, students, and language practitioners who wish to improve their understanding of argumentative writing and strategies for enhancing students' writing skills.

The primary data for this study were obtained through questionnaires administered to vocational school students. Data collection took place on 15 May 2025 at Sultan Iskandar Muda Vocational School, Medan. The participants were 34 eleventh-grade students majoring in Accounting, consisting 7 males and 27 females. Their ages ranged from 17 to 18 years old, and they generally demonstrated an upper intermediate level of English proficiency. The questionnaire was completed during 60 minutes session conducted in the classroom.

The questionnaire consisted of three parts. The first and second sections, which contained close-ended items, were analyzed using descriptive statistics to capture overall patterns in students' responses. Meanwhile, the third section included two open-ended questions, the responses which were examined using thematic analysis to identify recurring themes and deeper insights into students' perceptions. The thematic analysis was conducted to identify recurrent themes in students' positive and negative perceptions of using digital gamification.

Based on these emergent themes, the researchers organized and described the findings accordance with the categories of digital gamification, highlighting their respective functions and influences on the learning experience.

C. FINDINGS AND DISCUSSION

This section presents the result of the questionnaire, which explored students' perceptions of digital gamification in argumentative writing. A number of students in the grade XI participated in the survey, and the responses were analyzed qualitatively to identify patterns of agreement and disagreement. This section is divided into three thematic areas emerging from students' responses: (1) motivation and engagement, (2) cognitive and writing skill development, and (3) implementation challenges.

1. Motivation and Engagement

Before examining the detailed results, it is essential to highlight how students evaluated the motivational aspects of using gamification in writing activities. Table 1 summarizes their perceptions regarding enjoyment, task completion motivation, reward-based incentives, and the extent to which interactive features supported their focus during learning.

Table 1 Students' Perceptions of Motivation and Engagement in Gamified Learning

Indicator	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Gamification made writing enjoyable	23.53	26.47	47.06	2.94	-
Game elements motivated completion of writing tasks	44.12	41.18	8.82	2.94	2.94
Points and rewards improved motivation	23.53	47.06	26.47	2.94	-
Interactive features (levels, badges) enhanced focus	29.41	32.35	32.35	2.94	2.94

The findings showed that students generally responded positively to the use of gamification in argumentative writing activities. More than half of students (25.53% strongly agree, 26.47% agree) perceived that gamification made writing more enjoyable. This corresponds with educational studies that highlight gamification as an effective approach for enhancing motivation, facilitating cooperation, and improving learning outcomes (Kazu & Kuvvetli, 2023; Zainuddin et al., 2020). This is further supported by prior studies showing that gamified learning environments can enhance attention and engagement by promoting immersive learning experiences (Koivisto & Hamari, 2019; Su & Cheng, 2015). Thus, it can be concluded that digital gamification is a potential strategy that incorporates game aspects like points, badges, levels, and leaderboards into non-game learning situations to create a more engaging and dynamic learning environment (Dichev et al., 2020; Baptista & Oliveira, 2019).

Furthermore, the data also revealed a significant majority (44.12% strongly agree; 41.18% agree) acknowledged that game elements encouraged them to complete their writing assignments. This highlights the role of gamified components, such as challenges, checkpoints, or task progression, in promoting persistence toward writing tasks. This is consistent with the findings of Koivisto and Hamari, (2019) who discovered that gamified settings improve student engagement and attention in digital learning situations. It is supported also by Su and Cheng (2015) who argue that gamified writing challenges teach students not just how to create and defend their arguments, but also how logic, evidence, and counterarguments interact to generate coherent speech.

Moreover, points and rewards were also perceived as effective motivators, with 70.59% of students (23.53% strongly agree; 47.06% agree) reporting enhanced motivation due to these features. The open-ended responses further reinforce these findings. Many students associated gamification with increased enthusiasm and participation. As stated by Student 2 and Student 3:

I felt more motivated to finish the tasks because it felt like completing missions, not just doing the assignments. (Student 2)

“The badges made me want to improve my writing every time because I wanted to get the higher levels” (Student 3)

These responses indicate that students did not perceive gamification merely as an entertaining addition, but as a mechanism that positively influenced their effort and emotional engagement. The findings therefore support the research goal of determining how digital gamification might change writing from a passive chore to an active, engaging learning experience. These findings support Zainuddin et al.'s (2020) claim that gamified learning platforms such as *Quizizz* create meaningful experiences by mixing incentive systems with cognitive difficulties.

Finally, interactive elements such as levels and badges received similarly positive responses. A total of 61.76% (29.41% strongly agree; 32.35% agree) indicated that these features helped them maintain focus during writing activities. Thus, it can be concluded that digital gamification had a positive impact on students' motivation and engagement. It can be an excellent strategy for enhancing motivation, facilitating cooperation, and improving learning outcomes (Kazu & Kuvvetli, 2023). Most students expressed favorable perceptions across all indicators, with only small percentages showing negative responses. These findings support the potential of gamified instructional strategies to increase enjoyment, task completion effort, and sustained focus in argumentative writing contexts.

2. Cognitive and Writing Skill Development

This section focuses on students' self-reported improvements in understanding argument structure and their confidence in expressing ideas. The distribution of responses reflects how gamified elements supported not only motivation but also key aspects of analytical thinking and written expression. Table 2 presents the detailed breakdown of students' perceptions.

Table 2. Students' Perceptions of Cognitive and Writing Skill Development

Indicator		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
		%	%	%	%	%
Gamification helped understand argument structure		26.47	29.41	41.18	2.94	-
Increased confidence in expressing opinions		23.53	41.18	35.29	-	-

The data in table 2 show that students generally perceived gamification as beneficial for developing cognitive skills related to argumentative writing. More than half of students (26.47% strongly agree; 29.41% agree) believed that gamification helped them understand the structure of an argument. This finding is consistent with Noroozi et al. (2024) and Su et al. (2021), who noted that explicit training based on Toulmin's model improves students' capacity to build well-structured arguments. The use of gamified technologies, such as Quizizz, gave additional quick feedback, reinforcing students' cognitive comprehension of argumentation concepts.

Similarly, students reported positive perceptions regarding the role of gamification in increasing their confidence when expressing opinions. Most of students (64.71%) agree that gamified tasks made them feel more assured in articulating ideas. This perception was also reflected in the open-ended responses. It can be seen in the following excerpt:

"The system helped me understand how to organize claims, reasons, and evidence more clearly"
(Student 1)

"Writing felt easier because the game showed instantly which part of my argument was missing."
(Student 3)

Overall, the findings highlight how gamification motivates learners while also boosting deeper cognitive engagement by leading them through challenging reasoning processes in a controlled and fun manner. To maximize its pedagogical impact, gamification must be strategically integrated into the learning process, with incentives clearly tied to learning outcomes and designed to promote reflective participation rather than competition (Koivisto & Hamari, 2019).

3. Implementation Challenges

This section highlights students' experiences with technical limitations as well as their willingness to apply gamified learning to other subjects. The distribution of responses illustrates the extent to which external factors, such as internet stability, device availability, and cross-subject applicability, shaped their overall engagement with the gamified approach. Table 3 presents a detailed breakdown of students' responses.

Table 3. Students' Perceptions of Challenges and Implementation Barriers

Indicator	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Experienced technical problems (internet/device)	23.53	29.41	38.24	5.88	2.94
Would apply gamification to other areas	20.59	26.47	50	2.94	-

The data in table 3 reveal that technical limitations were among the primary challenges experienced by students when using gamification in the writing classroom. Over half of the students (23.53% strongly agree; 29.41% agree) reported experiencing issues related to internet connectivity or device functionality. This finding is in line with several previous studies that have shown technological hurdles such as internet access and device limitation as factors that can reduce the effectiveness of gamified learning (Toda et al., 2018; Oliveira & Bittencourt, 2019).

Furthermore, the open-ended responses reveal the important aspects behind these challenges. Students emphasized that technical barriers often disrupted their immersion and reduces task efficiency, as claimed by student 1 and Student 3:

“Sometimes the game froze when the internet was slow, so it was hard to keep up”
(Student 1)

“My device couldn't load the game smoothly, so I left behind the others”
(Student 3)

These findings suggest that, despite the pedagogical benefits of gamification, the effectiveness of its implementation is closely related to the availability of stable technological infrastructure. Such limits are consistent with the findings of Oliveira & Bittencourt (2019) and Toda et al. (2018), who found that digital disparities can diminish gamification's efficacy. Thus, gamification gives long-term advantages when it is designed to assist both cognitive and motivational goals (Van Roy & Zaman, 2018).

Furthermore, regarding students' willingness to apply gamification to other areas, responses were more evenly distributed. Nearly half of students (20.59% strongly agree; 26.47% agree) indicated a positive attitude toward extending gamified learning beyond writing. This finding is also supported by the data from open-ended questionnaire. The students also expressed optimism about using gamification in other areas. It can be seen in the following excerpts:

“I would like gamification in reading classes too because it makes learning less boring”
(Student 2)

“Gamified tasks could help in subjects like history where we need to remember a lot of details”
(Student 3)

These findings add to the current literature by expanding gamification research into the vocational EFL environment, which has previously received little attention (Guo et al., 2023; Zainuddin et al., 2020). Pedagogically, the research recommends using gamified writing activities to create student-centered and dynamic learning environments that appeal to digital-native learners.

D. CONCLUSION

This study examines students' perspectives of digital gamification when teaching argumentative writing in vocational high schools. The study found that gamification techniques such as points, prizes, badges, and interactive levels boost students' motivation, engagement, and perceived writing development. Furthermore, the findings also revealed that the majority of respondents provided indifferent answers to questions about attention and satisfaction. Technical issues, such as restricted internet connection and collaboration with devices, are also barriers. This study suggests that digital gamification has significant pedagogical potential for improving argumentative writing abilities; However, its effectiveness is dependent on careful implementation, digital readiness, and pedagogical assistance. Future study might look at the long-term effects of gamification on writing skill and student attitudes using longitudinal designs or mixed methods techniques. These findings have significant implications for instructional design in English language education, particularly in circumstances requiring new approaches to writing. Gamification may be an effective adjunct to traditional training, particularly for increasing motivation and participation. However, this strategy involves careful integration of technology preparedness, pedagogical training, and student-centered design.

This research has limitations. First, the sample size is small, confined to one grade level and study program, which may have an impact on the findings' predictability. Second, the dependence on self-reported data implies that replies may represent perceptions rather than actual performance. Third, the short-term nature of post-test assessments precludes long-term monitoring of skill development or retention. Future study should utilize straight or experimental research methodologies that track student performance over time. Furthermore, it would be useful to investigate how different gamification aspects (e.g., competition vs cooperation, badges versus narratives) influence certain learning profiles. Finally, further study is needed to better understand how teacher mindsets and preparation influence the effectiveness of gamified learning settings.

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