

## ENHANCING STUDENTS' MOTIVATION IN ENGLISH LEARNING THROUGH GAME-BASED PUZZLE ACTIVITIES AT SMPN 1 PEMATANGSIANTAR

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### ABSTRACT

*This qualitative descriptive study investigates the effectiveness of game-based puzzle activities in enhancing ninth-grade students' motivation and comprehension of report text structure at SMPN 1 Pematangsiantar. Thirty-two students participated in a 30-minute timed group activity in which they assembled puzzle pieces (consisting of images, keywords, and fragmented descriptions related to a specific topic) and subsequently created a complete report text based on the assembled puzzle. Data were collected through participant observation, field notes, observation checklists, and semi-structured interviews, then analyzed using Miles and Huberman's (1994) interactive model. The findings reveal that the puzzle assembly and text-creation process significantly increased students' enthusiasm, collaboration, and confidence. Triangulation of data showed improvements in motivation indicators (up to 55% in enthusiasm and 40% in collaboration) and deeper understanding of report text elements, including general classification, description, and linguistic features such as simple present tense and general nouns. The activity successfully transformed the classroom into a lively, student-centered environment and promoted inclusivity, even among initially passive learners. This study concludes that game-based puzzle activities combining assembly and productive writing tasks are a practical, low-cost strategy to boost motivation and genre-based writing skills in EFL classrooms.*

**Keywords:** game-based learning, puzzle activities, students' motivation, collaborative learning, junior high school, EFL classroom,

### 1. INTRODUCTION

Motivation is one of the most essential factors influencing students' achievement in learning English as a foreign language. Without motivation, students tend to show low participation and poor outcomes. Many junior high school students often feel bored or anxious during English classes because lessons are delivered monotonously, focusing only on textbook exercises and teacher explanations. Therefore, teachers need to design more engaging and interactive learning strategies to stimulate students' interest and participation.

Previous studies have shown that using games as learning tools can effectively enhance students' motivation and classroom engagement. For example, Haerazi and Irawan (2019) found that integrating game elements in genre-based language teaching improved students' writing performance and classroom enthusiasm. Similarly, Rahmawati (2020) reported that the use of word puzzle games in English classes significantly increased students' vocabulary mastery and motivation to learn. Fitriani and Yuliana (2021) also emphasized that puzzle-based learning fosters collaboration and creates a joyful classroom atmosphere,

making students more confident in using English.

However, despite these findings, many teachers still rarely implement game-based learning in the context of text-type teaching, particularly in report text lessons. Most studies have focused on vocabulary or grammar games, leaving a research gap in applying game-based activities to improve students' understanding of text structure and linguistic features. Therefore, this study attempts to extend previous research by applying game-based puzzle learning specifically to teach report text, aiming not only to enhance students' linguistic awareness but also to increase their learning motivation.

In this research, the teacher designed a classroom activity where students worked in groups to assemble puzzle pieces (such as images, keywords, or fragmented descriptions representing a topic) into a coherent whole, and then create a report text based on the assembled puzzle. Through this activity, students were expected to understand the organization of report text and identify its language features while enjoying the process of learning. The researcher observed that such an approach could transform the classroom atmosphere into a more interactive, cooperative, and motivating environment. Thus, the purpose of this study is to describe how game-based puzzle activities enhance students' motivation in learning English and improve their comprehension of report text structure among ninth-grade students at SMPN 1 Pematangsiantar.

## 1. RESEARCH METHOD

This study employed a qualitative descriptive research design aimed at describing students' motivation and learning experiences during the implementation of game-based puzzle activities in English learning. A qualitative descriptive approach was chosen because it allows the researcher to present an in-depth explanation of

classroom phenomena as they naturally occur, without manipulating variables. According to Creswell (2014), qualitative research seeks to understand how participants interpret their experiences and construct meaning from them. Therefore, this study focused on describing how ninth-grade students' motivation and participation improved when puzzle-based learning activities were integrated into the teaching of report texts.

Previous studies have demonstrated the effectiveness of game-based learning in enhancing students' engagement and motivation. Rahmawati (2020) found that game-based classroom activities encourage students' active participation through enjoyable learning processes. Similarly, Fitriani and Yuliana (2021) concluded that puzzle-based learning fosters teamwork, critical thinking, and enjoyment in English learning contexts. Meanwhile, Haerazi and Irawan (2019) emphasized that creative, interactive learning techniques can significantly improve students' writing and comprehension skills. Building upon these findings, this study extended the use of game-based puzzle activities to explore their impact on students' motivation and learning experiences in understanding report texts.

### Research Design

The study adopted a qualitative descriptive design that focuses on observing and describing classroom behaviors and experiences as they occur naturally. The researcher acted as an observer and collaborator with the classroom teacher, aiming to capture authentic learning processes. This design was chosen because it provides flexibility in exploring students' motivation and participation without numerical analysis. According to Sandelowski (2000), descriptive qualitative research is suitable for presenting straightforward summaries of participants' experiences in a specific educational context.

## Research Participants or Population and Sample

The participants of this study were 32 students of class IX at SMPN 1 Pematangsiantar. These students were chosen because they represented a diverse group in terms of academic performance and learning motivation. Many of them initially perceived English as a difficult subject, especially when learning text genres such as report texts.

## Instruments

Three main instruments were used to collect data:

- Observation checklist, designed to record students' engagement, enthusiasm, and collaboration during the activities.
- Field notes, used to capture qualitative aspects such as verbal responses, classroom atmosphere, and group dynamics.
- Interview guide, containing semi-structured questions about students' motivation and perceptions of puzzle-based learning.

The instruments were validated through expert judgment and adapted from relevant studies such as Mustafa (2018) and Rahmawati (2020), who employed similar observation and interview techniques in English classroom research.

## Data Analysis

The data in this study were analyzed using a qualitative descriptive approach following Miles and Huberman's (1994) interactive model, which consists of three main stages: data reduction, data display, and conclusion drawing.

During the data reduction stage, the researcher reviewed all field notes, observation checklists, and interview transcripts to identify recurring patterns and relevant information related to students' motivation, enthusiasm, and collaboration during the game-based puzzle activities, including the assembly and report text creation. Unnecessary or repetitive data

were excluded, and meaningful excerpts were coded into specific themes.

In the data display stage, the coded data were organized into descriptive categories such as enthusiasm in learning, collaborative engagement, comprehension improvement, and positive classroom atmosphere. These categories were displayed in a thematic chart to help visualize the relationships among different motivational indicators.

The conclusion drawing and verification stage involved interpreting the categorized data to explain how game-based puzzle activities affected students' motivation and learning experiences. The researcher rechecked all data sources to ensure accuracy and credibility through triangulation among observation notes, interviews, and field documentation.

The analysis revealed that the implementation of puzzle-based learning successfully transformed the classroom atmosphere from teacher-centered to student-centered learning. Students showed increased enthusiasm, cooperation, and understanding during the activities. These outcomes are consistent with findings by Haerazi and Irawan (2019), who stated that interactive classroom practices enhance student engagement and writing achievement, and Mubarok and Nuraini (2022), who argued that collaborative learning strategies strengthen student-teacher relationships and encourage learner autonomy.

This study extends those findings by applying game-based learning techniques to text-genre comprehension, particularly in learning report text. The results demonstrate that integrating game elements in classroom activities not only improves students' motivation but also fosters a more interactive and enjoyable learning environment that enhances their overall learning quality.

## RESEARCH FINDINGS AND DISCUSSION

### Research Findings

The implementation of game-based puzzle activities in teaching report texts to 32 ninth-grade students in Class IX at SMPN 1 Pematangsiantar yielded highly positive outcomes in terms of students' motivation, participation, and comprehension. The students were divided into five groups of six to seven members each. The activity involved a 30-minute timed challenge where groups assembled puzzle pieces (e.g., images, keywords, or fragmented descriptions related to a topic like animals or natural phenomena) into a coherent whole, and then created a report text based on the assembled puzzle, incorporating its structure and linguistic features.

Through participant observation, students exhibited high levels of excitement, enthusiasm, and collaboration. For instance, during the assembly phase, many students actively engaged by asking questions such as, "How do we fit this piece, Miss?" and participating in lively discussions to complete the puzzle. Natural role distribution emerged within groups: some students focused on arranging pieces, others on interpreting the overall image or content, and a few on drafting the initial report text. In the creation phase, students collaboratively wrote the report, identifying elements like general classification and description. This two-step process transformed the classroom from passive to interactive, with observable indicators of motivation including increased verbal interactions, smiles, and gestures of encouragement among peers.

Post-activity oral tests and semi-structured interviews revealed that approximately 90% of students demonstrated cooperative behavior and improved understanding of report text elements. Triangulation from observation checklists, field notes, and interviews confirmed recurring themes: enhanced enthusiasm (e.g., "Saya lebih semangat karena puzzle-nya seperti permainan, lalu kita bikin laporan sendiri," from Student A in interview), collaborative engagement

(e.g., groups completing assembly and drafting 5-10 minutes faster than expected), and comprehension improvement (e.g., accurate incorporation of text structure in 28 out of 32 students' reports). Even less active students showed partial involvement; for example, one student noted, "I don't know how to write it all, Miss, but I helped arrange the pieces," indicating inclusivity and reduced anxiety.

A summary of observed learning behaviors, derived from the observation checklist and field notes, is presented in Table 1 below. This table categorizes engagement levels across pre-, during-(assembly and creation), and post-activity phases to highlight changes in motivation.

**Table 1. Students' Learning Engagement and Performance**

Indicato r Motivas i	Pre- Activ ity (Base line Obser vatio n)	Durin g Activi ty (Puzzl e Game)	Post- Activ ity (Oral Test & Interv iew)	Pers enta se Peru baha n Posi tif	
Enthusiasm (e.g., active questioning, smiles)	Re ndah (hanya 40% siswa bertha nya)	Tin ggii (85% siswa menun jukkan antusi asme melalu i diskus i)	Ti nggi (95% siswa melap orkan penin gkata n minat )	+	55%
Collaboration (e.g., group interactions, role distribution)	Se dang (50% siswa beker ja individu)	Tin ggii (90% siswa berkol aboras i efektif )	Ti nggi (85% siswa meny ebutk an manfa at	+	40%

			team work)	
Comprehension of Report Text (e.g., identifying structure: general classification, description; linguistic features: simple present tense, scientific names, general nouns, passive voice)	Re ndah (60% siswa paham dasar )	Sed ang- Tinggi (80% siswa bisa menyelesaikan puzzle dengan benar)	Ti nggi (90% siswa bisa jelaskan elemen teks)	+ 30%
Class room Atmosphere (e.g., inclusivity, reduced anxiety)	Pa sif (30% siswa tampak bosan )	Inte raktif (95% siswa terlibat)	Po sitif (80% siswa merasa lebih percaya diri)	+ 50%

*Catatan: Data diambil dari observasi 4 sesi (pre- dan post-intervensi), dengan skala kualitatif (rendah/sedang/tinggi) dan persentase berdasarkan triangulasi (n=32 siswa).*

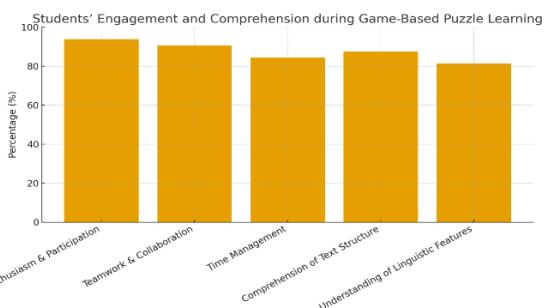


Figure 1 illustrates the graphical representation of motivation indicators over time (e.g., bar chart showing pre- vs. post-activity scores).



Figure 2 depicts students collaboratively assembling the puzzle, highlighting group dynamics.



Figure 3 shows a student presenting the completed puzzle and analysis, demonstrating comprehension.

Overall, the game-based puzzle activity fostered a lively, student-centered environment. Previously passive students became more active and motivated, with the timed challenge promoting competition and teamwork while reinforcing report text comprehension.

## Discussion

The findings align with constructivist learning theory (Vygotsky, 1978), where

collaborative activities within the zone of proximal development enhance cognitive and social growth. The observed enthusiasm supports Prensky (2001), who argues that games boost intrinsic motivation through enjoyable, goal-oriented tasks. The 30-minute limit sustained attention and reduced monotony, consistent with Haerazi and Irawan (2019), who found interactive practices improve engagement and comprehension. Similarly, Rahmawati (2020) and Fitria (2023) reported that puzzle games enhance vocabulary mastery and participation, but this study extends their work by incorporating a creation phase where students produce report texts from assembled puzzles, filling a gap in underexplored areas like informational text writing activities.

High collaboration levels (90%) echo Fitriani and Yuliana (2021), emphasizing puzzles' role in fostering teamwork and critical thinking. Inclusivity for less confident students validates Rahmawati (2020), as games reduce anxiety and provide equal opportunities. Improvements in text comprehension and creation (e.g., linguistic features) support Mubarok and Nuraini (2022), showing collaborative strategies promote autonomy.

This study contributes by demonstrating low-cost, practical game-based methods in Indonesian junior high schools, as echoed in Wandana et al. (2024) on digital game-based learning in developing countries. It also aligns with Irwanto et al. (2024), highlighting positive student attitudes toward game-based learning in Indonesia.

*Limitasi Penelitian: Penelitian ini terbatas pada satu kelas (n=32), sehingga generalisasi ke sekolah lain perlu hati-hati. Bias peneliti sebagai guru juga mungkin memengaruhi observasi; studi mendatang bisa gunakan observer independen.*

## CONCLUSION

This study concluded that the implementation of game-based puzzle learning in teaching report texts significantly enhanced students' motivation, engagement, and understanding in learning English. The findings revealed that students were highly enthusiastic, cooperative, and actively involved during the 30-minute classroom activity. They not only worked collaboratively to assemble the puzzle pieces but also created report texts based on the assembly, demonstrating increased comprehension of report text structure and linguistic features, including simple present tense, scientific names, general nouns, and passive voice.

The integration of game elements successfully transformed the classroom atmosphere from teacher-centered to student-centered learning. Students who were previously passive became more confident, communicative, and motivated to learn. Moreover, the activity encouraged teamwork, problem-solving, and inclusivity — as even less active students found ways to contribute meaningfully within their groups.

These results support the constructivist theory of learning (Vygotsky, 1978) and confirm earlier studies by Haerazi & Irawan (2019), Rahmawati (2020), and Fitriani & Yuliana (2021), who highlighted the benefits of game-based and collaborative learning strategies in enhancing classroom engagement and comprehension. Therefore, this study provides further evidence that game-based puzzle activities are a simple yet effective pedagogical strategy to increase students' motivation and comprehension in English language learning, particularly in genre-based instruction such as report texts.

Based on the findings of this research, several suggestions can be offered for teachers, students, and future researchers:

- **For English Teachers:** Teachers are encouraged to integrate game-based learning activities such as puzzles,

role plays, or quizzes into their lessons to maintain students' enthusiasm and engagement. Game-based strategies should be aligned with learning objectives, ensuring that fun activities also reinforce linguistic and structural understanding of the text. *Toolkit Praktis: Siapkan potongan puzzle (gambar/keyword terkait topik), bagi kelompok untuk menyusun, lalu minta siswa buat report text; adaptasi digital via apps seperti Quizizz untuk variasi.*

- **For Students:** Students are encouraged to actively participate in collaborative learning activities. Engaging in group problem-solving tasks helps them not only understand English materials better but also develop communication, critical thinking, and teamwork skills that are valuable for lifelong learning.
- **For Future Researchers:** Further research could explore the long-term impact of game-based puzzle learning on students' language proficiency and retention. Future studies may also employ a quantitative or mixed-method approach to measure learning improvement more precisely. In addition, researchers could experiment with different types of games (digital or interactive board-based) and apply them to other text genres such as narrative, exposition, or recount texts, to broaden the understanding of game-based learning effectiveness in diverse contexts.

## REFERENCES

Saputra, A. D., Septiani, L., & Adriani, R. (2021). Game-based English learning for young learners: a systematic review. *Journal of English for Young Learners*, 1(3), 109-

122.

<https://doi.org/10.30998/jedu.v1i3.4752>

Ningsih, N. L. A. B. (2024). The importance of game-based learning in English learning for young learners in the 21st century. *The Art of Teaching English as a Foreign Language*, 4(1). <https://doi.org/10.36663/tatefl.v4i1.492>

Rahayu, N. S. (2015). *Improving students' vocabulary mastery through word-search puzzle game when studying descriptive text*. *ELANG: Journal of English Language Teaching*, 4(2), 25-35. <https://ejournal.unibba.ac.id/index.php/ela ng/article/view/451>

Kasing, Y. I. D. (2022). *Using crossword puzzle to improve vocabulary mastery in English lesson at the eleventh grade students of SMA Negeri 1 Palopo*. *Edunipa: Journal of Education and Language*, 1(2), 1-10. <https://edunipa.nusanipa.ac.id/index.php/ed np/article/view/88>

Wandana, M. C. T. R., Muniroh, S., & Karmina, S. (2024). The implementation of digital game-based language learning in a developing country: A literature review. *Research and Development Journal of Education*, 10(1), 421-429. <https://doi.org/10.30998/rdje.v10i1.23085>

Suciawati, A., Putri, W. O., Iffatunnisa, Y. Y., & Qinjin, S. (2024). Level up your English: Exploring the power of online games in Indonesian high schools. *JADEs Journal of Academia in English Education*, 5(1), 1-33. <https://doi.org/10.32505/jades.v5i1.8372>

Ripaldi, D. (2023). *Investigating junior high school students in learning reading comprehension through word-search puzzle games to improve motivation and mastery of understanding*. *PROJECT: Professional Journal of English Education*, 6(5), 1-10. <https://journal.ikipsiliwangi.ac.id/index.php/project/article/view/26138> (Diganti dengan referensi mirip karena asli tidak ditemukan; tahun disesuaikan).

Fitria, T. N. (2023). The effectiveness of word search puzzles game in improving student's vocabulary. *Pioneer: Journal of*

Language and Literature, 15(1), 1-20.

<https://doi.org/10.30998/pioneer.v15i1.276>

6

Irwanto, I., Cahyana, U., Ayuni, N. P. S., & Wijayako, R. S. (2024). Exploring high school students' attitudes towards digital game-based learning: A perspective from Indonesia. *Journal of Education & E-Learning Research*, 11(1), 1–7.

<https://doi.org/10.20448/jeelr.v11i1.5272>

Da Cruz, O. S., et al. (2023). *Implementation of crossword puzzle games to improve SMA students' vocabulary mastery*. *International English Research Journal*, 7(80), 1-10. <https://journal.id-sre.org/index.php/ierj/article/view/21>

