

THE EFFECTIVENESS OF GAMIFIED THINK-PAIR-SHARE THROUGH COLORFUL PLANE MEDIA ON STUDENTS' WRITING SKILLS

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Abstrak

Writing is one of the productive skills that Indonesian vocational high school students still find challenging, especially when composing narrative texts that require content, organization, vocabulary, grammar, mechanics. This study investigated the effectiveness of Gamified Think-Pair-Share (TPS) through Colorful Plane Media in enhancing the narrative writing skills of tenth-grade students at SMKN 1 Mojoanyar. A quantitative approach using a pre-experimental One-Group Pretest-Posttest Design was applied, involving 72 students selected through purposive sampling from two classes. Students' writing was assessed analytically across five aspects: content, organization, grammar, vocabulary, and mechanics. The data were analyzed using descriptive statistics, the Kolmogorov-Smirnov normality test, a paired-sample t-test, and Cohen's d. The mean score increased from 59.62 in the pretest to 80.87 in the posttest, representing an average gain of 23.25 points. The paired-sample t-test revealed a statistically significant difference between the two scores, $t(71) = -25.375$, $p < .001$, while the effect size reached $d = 2.99$, which was categorized as large. These findings suggest that combining a structured cooperative strategy with a simple game-based medium can provide meaningful support for narrative writing instruction in vocational classrooms. However, because the study did not include a control group, the findings should be interpreted as evidence of within-group improvement rather than proof of superiority over other instructional methods.

Keywords: Gamified Think-Pair-Share (TPS), Colorful Plane Media, narrative writing, vocational EFL

Introduction

Writing occupies a strategic position in English language learning, especially in vocational secondary education, because it functions both as a communication tool and as a means for students to organize ideas systematically and coherently (Herawati, 2024). Within the vocational curriculum, narrative text is one genre that tenth-grade students are required to master, since it demands the ability to sequence events chronologically, apply the simple past tense correctly, and build a plot that leads to a resolution. Composing a narrative text is therefore not a simple task. Students must coordinate several linguistic and cognitive demands at once, and this complexity often results in

writing that is disorganized, grammatically inconsistent, or underdeveloped in content (Falihah et al., 2022).

International assessment data reinforce the urgency of this issue. The 2022 Programme for International Student Assessment reported that only around a quarter of Indonesian students reached at least Level 2 in reading literacy, far below the OECD average of roughly three-quarters (Indonesia, 2022). Although this figure describes reading performance, it reflects a broader literacy gap that also affects students' capacity to plan, organize, and express ideas in writing, since reading and writing competencies tend to develop in tandem. In the specific setting of this study, preliminary data collected during the researcher's field teaching practice at SMKN 1 Mojoanyar showed that students in classes X KA-1 and X KA-2 consistently produced narrative texts with weak organization, limited vocabulary variation, and frequent grammatical errors, particularly in maintaining a consistent past tense throughout the story.

One factor that plausibly contributes to this condition is the instructional approach still commonly practiced in vocational English classrooms. Writing lessons are often delivered through a teacher-centered format in which students receive explanations and examples but are given little structured space to think, discuss, and refine their ideas before producing a text. Such a format tends to lower student motivation and reduce opportunities for peer interaction, both of which are important for developing writing ability. Think-Pair-Share (TPS), a cooperative learning strategy that guides students through independent thinking, paired discussion, and whole-class sharing, has repeatedly been shown to counter this pattern by giving students a structured pathway to build and test their ideas before writing (Septy et al., 2025). A study conducted at SMKN 3 Payakumbuh, for instance, found that TPS improved students' writing performance across several rubric aspects, including organization, vocabulary, and grammar, to the point of meeting the school's minimum mastery criteria (Septy et al., 2025). Comparable improvement has also been reported in other cooperative writing contexts, where guided pair discussion helped students clarify ideas and reduce anxiety before drafting (Fatimah & Thoyyibah, 2024).

Nevertheless, applying TPS on its own does not automatically resolve every obstacle in writing instruction, particularly for vocational students who tend to respond better to concrete, activity-based learning than to purely verbal discussion. Integrating a game-based element into the cooperative structure offers a way to sustain engagement throughout the Think, Pair, and Share stages. Gamification is commonly defined as the application of game design elements, such as points, challenges, and immediate feedback, within a non-game setting to strengthen motivation and participation (Deterding & Dixon, 2011). When gamification is designed with a clear pedagogical purpose rather than used merely for entertainment, it has been found to raise students' involvement in writing tasks and to support the generation and organization of ideas (Manthofani et al., 2024). The Colorful Plane Media used in the present study operationalizes this idea in a low-cost, classroom-friendly form. It consists of colored paper airplanes that contain writing prompts, so that students physically select or receive a prompt before working through the TPS stages, an approach broadly consistent with findings that simple game-based media can stimulate creative thinking and cooperative behavior in the classroom (Keterampilan et al., 2023).

Despite the growing body of research on TPS and on gamified writing instruction, these two lines of work have mostly been examined separately. Studies on TPS tend to rely on discussion and conventional worksheets without an accompanying game-based medium, while studies on gamification often test game elements as a stand-alone intervention without a structured cooperative framework such as TPS. In addition, most of the available evidence comes from general junior or senior high school settings, leaving the vocational context comparatively underexamined even though vocational students arguably need a more activity-oriented approach given their

orientation toward practical, workplace-relevant competencies. This gap is the starting point of the present study, which combines TPS with gamification through Colorful Plane Media to teach narrative writing at a vocational high school. The novelty of the study lies precisely in this combination, examined in a setting and with a medium that earlier research has not directly tested together.

Building on this background, the present study investigates whether the implementation of Gamified Think-Pair-Share through Colorful Plane Media is effective in improving the narrative writing skill of tenth-grade students at SMKN 1 Mojoanyar. The purpose of this article is to report the empirical results of that investigation and to discuss what they indicate about combining structured cooperative interaction with a simple game-based medium in a vocational EFL writing classroom. Theoretically, the findings are expected to add empirical evidence on how a cooperative strategy and a game-based medium can be integrated to support the cognitive and social dimensions of writing. Practically, the findings are expected to give English teachers, particularly in vocational schools, a concrete and inexpensive instructional option for making writing lessons more participatory without requiring extensive resources or preparation time. The remainder of this article proceeds as follows. The next section reviews the theoretical foundations of TPS, gamification, and narrative writing, and situates the present study within the resulting research gap. This is followed by a description of the research method, the presentation of the statistical results, a discussion that interprets those results against the reviewed literature, and a conclusion that summarizes the study's contribution and its practical implications for vocational English teaching.

Literature Review

This section explains the theoretical and empirical foundations underlying the present study. It emphasizes the integration of Think-Pair-Share and gamification in writing instruction and describes the learning procedure for Gamified Think-Pair-Share through Colorful Plane Media. These perspectives establish the conceptual foundation for understanding how the instructional strategy was developed and applied to support students' participation and engagement throughout the writing process.

TPS and Gamification

Think-Pair-Share (TPS) and gamification constitute two instructional approaches that can complement each other in writing instruction. TPS offers a structured framework through the sequential stages of individual thinking, peer discussion, and classroom sharing. This sequence enables students to develop initial ideas independently before improving them through interaction with a partner and conveying their understanding to a broader audience. Previous studies have indicated that structured peer interaction through TPS can assist idea organization, grammatical development, and students' confidence in expressing ideas in writing (Septy et al., 2025), (Fatimah & Thoyyibah, 2024).

Despite these benefits, the effectiveness of TPS can be affected by students' participation and engagement levels throughout each stage of the learning process. Problems such as unequal participation, restricted classroom time, and challenges in maintaining students' involvement may reduce the effectiveness of collaborative activities when sufficient structure and facilitation are absent. Within this context, gamification can offer an additional motivational dimension to the application of TPS.

Gamification refers to the incorporation of game design elements into non-game learning environments to enhance students' motivation and engagement. Typical elements include challenges, points, immediate feedback, and rewards. Research examined in the present study

suggests that these elements can stimulate greater participation, assist idea development, and promote more organized written expression (Manthofani et al., 2024). Nevertheless, the inclusion of game elements alone does not automatically enhance learning outcomes. Gamification becomes more meaningful when its elements are regularly linked to instructional objectives and the learning activities that students are expected to complete (Deterding & Dixon, 2011).

Thus, integrating gamification into TPS involves more than simply adding games to cooperative learning activities. Instead, game elements can be incorporated into the established Think, Pair, and Share sequence to encourage participation at every stage. Challenge-based tasks can motivate students to take part in the individual thinking process, whereas points and collaborative tasks can encourage participation during peer discussions. Immediate feedback and recognition can further motivate students to remain engaged while presenting and revising their work. In this manner, TPS offers a structured process for cognitive and collaborative engagement, while gamification aims to reinforce students' motivation and sustained participation throughout the process.

In the present study, this integration was carried out through Colorful Plane Media. The gamified component included writing challenges delivered through colored paper airplanes, a point system associated with participation and task performance, immediate feedback, and rewards. Significantly, these elements were incorporated into the TPS learning activities instead of being presented as separate entertainment. Therefore, the integration was designed to ensure that the game-based component strengthened the instructional purpose of TPS while sustaining students' engagement in the cognitive and collaborative processes involved in writing.

Learning Procedure for Gamified TPS Using Colorful Plane Media

The learning procedure for Gamified TPS using Colorful Plane Media was structured according to the three stages of Think, Pair, and Share. Gamification elements were integrated into these stages as components of the instructional activity to support students' participation, collaboration, and engagement throughout the writing process.

In the Think stage, the teacher presents the learning objectives and explains the activity rules. Each student then chose or received a Colorful Plane containing a writing prompt associated with the narrative text topic. Students read the prompt, identified relevant ideas, and independently developed their initial responses before participating in a discussion with a partner. The prompt became the foundation of the writing task and encouraged students to investigate and arrange their ideas during the initial phase of the learning process.

In the Pair stage, students exchanged and discussed the ideas they had independently developed with a partner. The discussion included sharing perspectives, organizing the sequence of events, selecting suitable vocabulary and grammatical forms, and giving feedback on each other's ideas. Points were given based on students' participation, cooperation, and completion of the assigned task. At this stage, the point system was designed to encourage active involvement and shared responsibility among the members of each pair.

In the Share stage, each pair presented the outcomes of their discussion to the class. Students have opportunities to receive comments from their classmates and feedback from the teacher. The feedback focuses on relevant writing aspects, such as content, organization, grammar, vocabulary, and mechanics. Recognition or rewards were also given for active participation and the successful completion of the learning tasks. These activities allowed students to obtain feedback on their developing ideas while sustaining their participation in the collaborative learning process.

The procedure was conducted through organized treatment sessions in which students repeatedly followed the Think, Pair, and Share sequence using prompts provided in the Colorful

Plane Media. Points were assigned for active participation, teamwork, and task completion, while a small reward was presented to the pair that obtained the highest cumulative score. Throughout the treatment sessions, the procedure enabled the gamification elements to function within the TPS framework rather than independently of it. Consequently, the use of Colorful Plane Media served as an essential part of the instructional process by connecting the writing task with the individual, collaborative, and sharing activities completed by the students.

Research Method

This study used a quantitative, pre-experimental One-Group Pretest-Posttest Design (Capili & Anastasi, 2025). A single group of participants completed a pretest, received the treatment, and then completed a posttest, which allowed the researcher to measure the change in students' narrative writing scores as an indicator of the treatment's effect. This design was selected because it fit the practical constraints of conducting research inside an active school schedule at SMKN 1 Mojoanyar, where forming a separate control group would have disrupted the regular instructional program. The research was carried out over two weeks during the 2025/2026 school year and involved five main activities: pretest administration, two introductory and implementation sessions of Gamified Think-Pair-Share through Colorful Plane Media, a guided writing session, and posttest administration.

The population from which the sample was drawn consisted of all tenth-grade students enrolled at SMKN 1 Mojoanyar in the 2025/2026 school year, a group of roughly 501 students spread across several study programs with varying initial English proficiency. Tenth grade was chosen as the target level because narrative text writing is a core competency in the English syllabus at this stage under the Merdeka Curriculum currently applied in Indonesian vocational schools, making it the point in the curriculum where the research problem is most directly relevant. From this population, the participants were 72 tenth-grade students from classes X KA-1 and X KA-2, selected through purposive sampling because both classes shared similar learning characteristics, were taught by the same English teacher, and had schedules compatible with the research timeline (*Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, n.d.). Students' narrative writing was measured through a prompt-based writing test administered as both pretest and posttest, using equivalent topics drawn from students' personal experience so that both versions carried a comparable level of difficulty. Each writing sample was scored analytically on five components adapted from an established writing assessment framework, namely content, organization, vocabulary, grammar, and mechanics (Brown, 2004). Two raters, the researcher and an experienced English teacher at the school, scored every text independently to reduce bias, and a third rater was consulted whenever the two initial scores diverged substantially.

Before the writing test was administered, both the prompt and the analytic scoring rubric were reviewed by two experts in English language teaching and educational assessment, and the instrument was revised according to their feedback. Inter-rater consistency was checked using Cohen's kappa, with a coefficient of .70 or higher treated as an acceptable level of agreement between the two raters, consistent with common practice for analytic writing assessment (Brown, 2004). This step was taken because analytic scoring, which evaluates several writing components separately rather than assigning one holistic score, is only as trustworthy as the consistency of the raters applying it, and a single rater's judgment can be idiosyncratic even when the rubric itself is sound.

The research procedure unfolded across three phases. In the pre-treatment phase, the pretest was administered to all 72 students under standardized conditions, with 45 minutes allocated to compose a narrative text based on a given prompt drawn from personal experience. In the treatment

phase, students worked through three structured sessions combining TPS with Colorful Plane Media. Each session followed the Think, Pair, and Share sequence, with students individually reading a prompt drawn from a colored paper airplane, discussing and refining their ideas with a partner, and finally sharing their results with the class. Points were awarded for active participation, teamwork, and task completion, and the pair with the highest cumulative score in each session received a small reward, following the general principle that gamification elements should be tied directly to the intended learning behavior rather than functioning as free-standing entertainment (Deterding & Dixon, 2011). The first session introduced students to the rules of the activity and let them practice a sample round before any scored task began, the second session applied the full TPS cycle to an actual narrative writing prompt, and the third session combined a final guided cycle with independent composition, after which accumulated points were tallied and the highest-scoring pair received a small reward. In the post-treatment phase, the posttest was administered to the same 72 students under conditions identical to the pretest, using a different prompt of equivalent difficulty, and scored by the same two raters using the same rubric.

Data were analyzed with IBM SPSS version 27. Descriptive statistics summarized the pretest and posttest scores, the Kolmogorov-Smirnov test with Lilliefors correction checked whether the data satisfied the normality assumption required for parametric testing (Sulewski & Stoltmann, 2026), a paired sample t-test compared the pretest and posttest means at a significance level of .05, and Cohen's d was calculated to estimate the practical size of the treatment effect, interpreted using the conventional benchmarks in which d below 0.2 is negligible, 0.2 to 0.5 is small, 0.5 to 0.8 is moderate, and above 0.8 is large (Cohen et al., n.d.).

Results and Discussion

Descriptive Statistics

Table 1 summarizes the pretest and posttest scores of the 72 participating students. The mean score increased from 59.62 in the pretest to 82.87 in the posttest, a gain of 23.25 points, which corresponds to an improvement of roughly 39 percent relative to the pretest baseline. Equally noteworthy is the change in the standard deviation, which dropped from 8.46 in the pretest to 4.08 in the posttest. A shrinking standard deviation alongside a rising mean indicates that the treatment did not simply lift already strong writers further ahead. Instead, it appears to have pulled the weaker writers up toward the stronger ones, narrowing the performance gap within the two classes rather than widening it.

1. *Table 1. 1 Descriptive Statistics of Pretest-Posttest*

Statistic	Pretest	Posttest
N	72	72
Mean	59.62	82.87
Standard Deviation	8.46	4.08
Minimum Score	46	78
Maximum Score	77	92
Mean Gain Score	23.25	

Looking at the individual-level data reported for all 72 students, every single student showed an increase from pretest to posttest, with gains ranging from 6 points at the low end to 43 points at the high end. Before treatment, scores clustered mainly between 46 and 77, a range consistent with the below-average performance identified in the researcher's preliminary observation and with earlier findings that Indonesian EFL learners commonly struggle with content development, organization, and consistent use of the simple past tense when writing narrative texts (Falihah et al.,

2022). After treatment, scores clustered much more tightly between 78 and 92. The consistency of this shift, in which no student regressed and the majority converged toward the higher end of the scale, is a stronger signal than the mean difference alone, because it suggests the improvement was broadly shared across students with different starting points rather than concentrated in a few high-performing cases.

Inferential Statistics

Before testing the mean difference, the Kolmogorov-Smirnov test with Lilliefors correction was applied to both score sets. The pretest data produced a statistic of $D(72) = 0.108$ with $p = .341$, and the posttest data produced $D(72) = 0.148$ with p greater than .05. Because both significance values exceeded the .05 threshold, the pretest and posttest scores could be treated as normally distributed, which justified the use of a parametric paired sample t-test rather than its non-parametric alternative, the Wilcoxon Signed-Rank Test (Sulewski & Stoltmann, 2026).

2. **Table 1. 2** Summary of Normality Test, Paired Sample t-Test, and Effect Size

Statistical Test	Result	Interpretation
Kolmogorov-Smirnov (Pretest)	$D(72) = 0.108, p = .341$	Normally distributed
Kolmogorov-Smirnov (Posttest)	$D(72) = 0.148, p > .05$	Normally distributed
Paired Sample t-Test	$t(71) = -25.375, p < .001$	Significant difference
95% Confidence Interval	21.42 to 25.08	Mean difference range
Cohen's d	$d = 2.99$	Large effect

The paired sample t-test yielded a mean difference of 23.25 points, with a standard deviation of the difference scores of 7.77 and a standard error of the mean of 0.916. The test statistic was $t(71) = -25.375, p < .001$, two-tailed, well below the .05 significance threshold, with a 95 percent confidence interval for the mean difference ranging from 21.42 to 25.08. On this basis, the null hypothesis, which stated that there was no significant difference between the pretest and posttest means, was rejected in favor of the alternative hypothesis. This result indicates that the implementation of Gamified Think-Pair-Share through Colorful Plane Media produced a statistically significant improvement in students' narrative writing performance at SMKN 1 Mojoanyar.

To assess the practical size of this effect beyond statistical significance, Cohen's d was calculated using the pretest and posttest means and the standard deviation of the difference scores, producing $d = 2.99$. Referenced against conventional benchmarks in which a value above 0.8 already qualifies as large (Cohen et al., n.d.), this result sits well above the threshold and is considerably larger than the effect sizes typically reported in comparable TPS and collaborative writing studies, which generally fall between $d = 0.5$ and $d = 1.2$ (Cohen et al., n.d.). This unusually large value should not be read at face value as proof of an exceptionally powerful intervention. Part of it is a direct mathematical consequence of the sharp drop in score variability after treatment, since Cohen's d is standardized against the spread of the difference scores, and a smaller spread inflates the resulting value even when the raw mean gain is realistic. In addition, because the One-Group Pretest-Posttest Design does not include a control group, alternative explanations such as maturation, repeated exposure to a similar writing task, or the general effect of increased teacher attention during the research period cannot be fully excluded. The effect size is therefore best interpreted as strong evidence of within-group change rather than as conclusive proof that Gamified TPS through Colorful Plane Media is superior to other instructional strategies.

Beyond the pretest and posttest comparison, the researcher also recorded a formative score for each pair during the three treatment sessions, reflecting how well students performed while actually working through the Think, Pair, and Share stages with the Colorful Plane prompts. These

process-based scores varied more widely than the final posttest scores, ranging from roughly the low 60s to the low 90s across different pairs, which is an expected pattern given that the sessions were still part of the learning process rather than a summative measure. What is more informative than the raw range is the trend across the three sessions, in which most pairs showed a steady upward trajectory from the first orientation session to the final guided writing session. This trend is consistent with the interpretation that the treatment operated cumulatively rather than through a single decisive session, with each round of Think-Pair-Share practice reinforcing the procedural routine and giving students another opportunity to internalize how to move from individual thinking to a finished piece of writing.

Discussion

The pattern of results in this study is broadly consistent with earlier research on TPS and on gamification when each is examined separately, while also extending that research by testing the two together. Prior studies on TPS report that structured peer interaction helps students organize ideas and apply grammar more accurately before they begin writing independently (Septy et al., 2025), and the present findings fit that pattern, since the largest score gains were concentrated among students who started from the lowest pretest scores, exactly the group most likely to benefit from the scaffolded thinking-and-discussion sequence that TPS provides. Similarly, prior studies on gamification report that points, challenges, and immediate feedback raise students' willingness to participate and to keep working on a writing task (Manthofani et al., 2024), and the classroom observations gathered alongside the quantitative data in this study point in the same direction, with most students remaining actively engaged with the colored paper airplane prompts across all three treatment sessions.

Where this study departs from earlier work is in how these two elements were combined. Rather than treating Think-Pair-Share and gamification as separate interventions, Colorful Plane Media embedded the game element directly inside the Think stage, so that selecting a prompt was itself part of the gamified experience rather than an add-on to a conventional discussion activity. This design choice appears to explain why engagement stayed relatively stable across all three sessions instead of tapering off, a pattern sometimes reported when game elements are used only as an opening activity disconnected from the main task (Triantafyllou & Georgiadis, 2025). It also aligns with the theoretical claim that gamification is most effective when its elements are systematically tied to the instructional objective rather than functioning purely as entertainment (Deterding & Dixon, 2011). Because the point system in this study rewarded active participation, teamwork, and task completion within the TPS stages themselves, the gamified layer reinforced rather than competed with the cooperative learning structure.

The improvement in mean scores can also be interpreted through the lens of writing as a dual cognitive and social process (Brown, 2004). The Think stage gave students private space to plan content and generate initial ideas, addressing the cognitive side of composition before any social pressure entered the picture. The Pair stage then let students test those ideas against a partner's feedback, catching organizational gaps and lexical or grammatical errors earlier than a purely individual drafting process would. The Share stage extended this checking process to a wider audience and gave the teacher a natural point to deliver immediate, targeted feedback on the five assessed writing components. Given that narrative writing specifically requires students to sequence events logically and sustain the simple past tense across an entire text (Santosa et al., 2022), this staged rehearsal of content before final composition plausibly explains why organization and grammar were areas where the treatment appeared to have particularly visible impact, based on the

researcher's qualitative observation of the collected texts, even though the current design scored the five components as a single combined total rather than reporting each dimension separately.

At the same time, several limitations temper how far these results can be generalized. The absence of a control group is the most consequential, since it leaves open the possibility that some portion of the observed gain reflects factors external to the treatment itself, such as students becoming more familiar with the writing test format on the second attempt. The relatively short two-week intervention period also means the durability of the writing gains beyond the immediate posttest remains unknown. Finally, because the sample was drawn from two classes in a single vocational school, the findings describe what happened in this specific context rather than establishing a claim that would automatically hold in other schools or with other student populations. These limitations do not undermine the significance of the statistical result, but they do mean the appropriate claim is that Gamified TPS through Colorful Plane Media was associated with a large and statistically significant improvement in this particular group, not that it has been proven more effective than every alternative approach to teaching narrative writing.

These results also make a modest theoretical contribution. Much of the existing literature treats cooperative structure and game-based motivation as separate design choices that a teacher selects between, implicitly framing them as alternative solutions to the same problem of low engagement in writing class. The pattern observed here, in which the largest gains appeared among initially low-scoring students and engagement remained stable across three separate sessions rather than declining after a novelty effect wore off, is more consistent with a view in which structure and motivation function as complementary rather than substitutable components of effective writing instruction. Neither element on its own fully explains the size or the consistency of the improvement documented in Table 1 and Table 2, which is itself indirect evidence that the value of Gamified Think-Pair-Share lies specifically in the interaction between its cooperative and game-based parts rather than in either part considered separately.

Comparing this study with the two lines of prior research reviewed earlier also helps clarify what the present findings add rather than merely repeat. Research isolating TPS without any accompanying medium tends to report meaningful but comparatively modest gains, often attributing improvement mainly to the structured opportunity for peer feedback (Septy et al., 2025), (Fatimah & Thoyyibah, 2024). Research isolating gamification, meanwhile, tends to report strong motivational effects but says comparatively little about whether that motivation translates into more systematic organization of ideas, since a stand-alone game-based treatment does not necessarily walk students through a thinking-and-discussion sequence before they write (Zhihao, 2022), (Pentikäinen, 2024). The present results sit at the intersection of these two patterns. The scale of the score gain and the narrowing of the standard deviation are more consistent with what a well-supported cooperative structure would predict, while the sustained engagement observed across all three sessions is more consistent with what an effectively designed gamification layer would predict. This pattern offers a plausible, though not conclusive, account of why the combined approach produced a larger shift than either element alone has typically produced in the separate strands of prior research, and it supports the conceptual framework outlined earlier in this article, in which TPS supplies structure and Colorful Plane Media supplies sustained motivation within that structure.

The findings also have a specific implication for how writing instruction is sequenced in vocational classrooms. Rather than treating idea generation, peer feedback, and motivation as separate problems requiring separate fixes, the results suggest that a single, carefully structured activity can address all three simultaneously if the game element is placed at the point where students most need an incentive to engage, namely at the start of the thinking process, rather than as a reward disconnected from it. This has a direct practical consequence for teachers with limited planning

time. Instead of designing a motivational activity and a cooperative activity separately, a teacher can achieve both aims by making the delivery mechanism for a TPS prompt itself into a small game, as Colorful Plane Media does. This principle is not limited to paper airplanes specifically. Any low-cost mechanism that turns prompt selection into a brief, rule-governed activity, whether through a lucky draw, a spinner, or a simple lottery of cards, would plausibly work on the same logic, provided the activity that follows still requires individual thinking, paired discussion, and class sharing in sequence.

Taken together, these findings suggest that combining a structured cooperative strategy with a low-cost, game-based medium is a workable option for vocational English classrooms facing the kind of writing difficulties documented in this study and in related research on Indonesian EFL learners (Falihah et al., 2022). The practical appeal of Colorful Plane Media in particular lies in its simplicity (Saifulloh, 2026; Saifulloh et al., 2023, 2025b, 2025a; Saifulloh & Anam, 2022). It requires only paper, prompts, and a straightforward point system, which makes it a realistic option for teachers working with limited instructional resources, a consideration that matters especially in vocational schools where curriculum time is often prioritized for practical, competency-based subject

Conclusion

This study examined whether Gamified Think-Pair-Share through Colorful Plane Media could improve the narrative writing skill of tenth-grade students at SMKN 1 Mojoanyar. Using a One-Group Pretest-Posttest Design with 72 students, the results showed a rise in mean writing scores from 59.62 to 82.87, a gain of 23.25 points that proved statistically significant, $t(71) = -25.375$, $p < .001$, with a large effect size of $d = 2.99$. Every participating student improved from pretest to posttest, and the narrowing standard deviation indicated that the gain was shared broadly across students rather than concentrated among already strong writers.

These results indicate that embedding a simple game-based medium directly inside the Think, Pair, and Share stages can sustain student engagement while preserving the cognitive and social benefits that make TPS effective for writing instruction. Because the study did not include a control group, the findings should be understood as strong evidence of improvement within this group rather than definitive proof that the strategy outperforms other instructional approaches. For classroom practice, English teachers in vocational schools may consider adopting TPS together with an inexpensive, activity-based medium such as Colorful Plane Media, provided that the game elements are tied clearly to the writing task rather than used as a separate entertainment activity. Future research would benefit from a quasi-experimental or true experimental design with a control group, a larger and more varied sample, a longer intervention period, and separate scoring of each writing component, so that the specific contribution of Gamified TPS to organization, content, grammar, vocabulary, and mechanics can be identified more precisely.

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