FOSTER JELT
Journal of English Language Teaching


Vol.7, No. 2, April 2026
***e*-ISSN: 2723-4126**
***p*-ISSN: 2776-8880**

# INVESTIGATING THE EFFECT OF PROBLEM-BASED LEARNING ON STUDENTS' RECOUNT WRITING SKILLS IN AN INDONESIAN EFL CLASSROOM

Dewi Aprillavien Syahrani[1*], Andrian Nuriza Johan [2], & Basuki [3]
[1,2,3] Universitas Muhammadiyah Purworejo, Purworejo, Indonesia

prilliavine@gmail.com

**ABSTRACT**

Writing is a challenging skill for students in English as a Foreign Language (EFL) contexts, particularly in producing recount texts due to difficulties in generating ideas, organizing content, and applying appropriate language features. This study aims to investigate the effect of Problem-Based Learning (PBL) on students' recount text writing skills. A quantitative pre-experimental design with a one-group pretest–posttest approach was employed, involving 32 tenth-grade students. The data were collected through writing tests and analyzed using descriptive and inferential statistics, including the Wilcoxon Signed-Rank Test. The findings revealed a statistically significant difference between pre-test and post-test scores; however, the results indicated a decline in students' writing performance after the implementation of PBL. This suggests that PBL, in this context, was not effective in improving students' recount text writing skills. The findings highlight that the effectiveness of PBL is influenced by factors such as the duration of implementation, the level of instructional scaffolding, and students' readiness to engage in student-centered learning. Therefore, it is recommended that PBL be implemented gradually with sufficient guidance and longer duration to achieve optimal results. This study contributes to the understanding of the practical challenges in applying student-centered learning approaches in EFL writing classrooms.

Keywords: EFL Writing Instruction, Problem-Based Learning (PBL), Recount Text, Student-Centered Learning, Writing Skills

## INTRODUCTION

Writing is one of the most essential yet challenging skills in English as a Foreign Language (EFL) contexts (Graham et al., 2020; Lee, 2020). It requires students to generate ideas, organize them coherently, and apply appropriate vocabulary and grammatical structures simultaneously (Hyland, 2019, 2021). In secondary education, students are expected to master various text types, including recount text, which involves retelling past events in a logical and chronological order using appropriate language features, particularly past tense forms (Fatmawati et al., 2022). However, many students still encounter difficulties in writing, such as limited vocabulary, a lack of ideas, low motivation, and problems in organizing texts effectively (Nguyen & Habók, 2022; Sun & Zhang, 2022). These challenges

FOSTER JELT
Journal of English Language Teaching


Vol.7, No. 2, April 2026
***e*-ISSN: 2723-4126**
***p*-ISSN: 2776-8880**

indicate that writing instruction in EFL classrooms requires more effective and student-centered approaches to support students in developing their writing skills.

Writing is also a complex cognitive and social process that requires the integration of multiple skills (Abdel Latif, 2021). According to Graham et al. (2020), writing involves the coordination of cognitive, linguistic, and metacognitive processes. Lehman et al. (2024) further emphasize that writing is socially situated, requiring awareness of audience and purpose. From a cognitive perspective, writing is viewed as a problem-solving activity involving planning, translating ideas into text, and revising (Graham, 2018; Graham et al., 2020). These perspectives highlight that writing is a multifaceted and intellectually demanding skill, particularly for EFL learners. In the context of secondary education, recount text requires students to retell past events in a clear chronological order using appropriate grammatical structures, which remains a challenge for many students.

In line with these theoretical perspectives, based on the researcher's teaching experience during the School Field Practice Program (PLP) at MAN Purworejo, several problems were identified in students' writing performance. Students demonstrated limited vocabulary, a lack of ideas, low motivation, and fear of making mistakes. In addition, classroom activities were often teacher-centered, resulting in low student engagement and minimal participation in writing tasks. These conditions negatively affect students' ability to produce meaningful and well-structured recount texts. The challenges in teaching writing are also closely related to instructional approaches. Traditional teacher-centered strategies often restrict students' active engagement and do not facilitate meaningful learning experiences. Modern educational research underscores the importance of learner-centered instruction, active engagement, and self-regulated learning (Morris et al., 2025; Panadero, 2017; Quibrantar & Ezezika, 2023).

Therefore, innovative and student-centered teaching strategies are necessary to address students' writing difficulties. Problem-Based Learning (PBL) is considered a potential approach for improving students' writing skills, as it promotes active learning and student engagement through problem-solving activities, collaboration, and inquiry-based processes that promote active knowledge construction (Guo et al., 2024; Yew & Goh, 2016). It encourages students to actively construct knowledge, develop critical thinking skills, and engage in meaningful learning experiences. In the context of writing, PBL can facilitate idea generation, organization, drafting, and revision through authentic tasks and collaborative activities.

Previous studies have shown that PBL has a positive impact on students' writing ability. For example, Soffiany & Purbani (2020) and Susanti et al. (2020) found that PBL improved students' ability to organize ideas and use appropriate language features. Similarly, Ilham (2025) and Hakimah (2023) reported increased student motivation and engagement in writing activities through PBL implementation. Balqis et al. (2025) also showed that PBL improved students' recount text writing in terms of language and organization. However, despite these findings, several important gaps remain. Most previous studies focus on general writing skills rather than specific text types such as recount text. In addition, previous research tends to use classroom action research or quasi-experimental designs, while limited studies apply a pre-experimental design to measure effectiveness more

FOSTER JELT
Journal of English Language Teaching


Vol.7, No. 2, April 2026
***e*-ISSN: 2723-4126**
***p*-ISSN: 2776-8880**

specifically. Furthermore, previous studies have not sufficiently connected the implementation of PBL with actual classroom problems such as students' lack of ideas, low motivation, and fear of making mistakes. Therefore, research that specifically examines the effectiveness of PBL in improving recount text writing using a pre-experimental design, based on real classroom conditions, is still limited.

Therefore, this study aims to investigate the effectiveness of Problem-Based Learning in improving the recount text writing skills of tenth-grade students at MAN Purworejo. This study tests the hypothesis that Problem-Based Learning has a significant effect on students' writing performance. The findings are expected to contribute to the development of more effective and student-centered instructional strategies in EFL writing classrooms.

## METHODS

This study employed a quantitative pre-experimental design using a one-group pretest–posttest approach to investigate the effect of Problem-Based Learning (PBL) on students' recount text writing skills (Creswell & Creswell, 2022; Fraenkel & Wallen, 2019). This design involves administering a pre-test, followed by the implementation of the treatment, and a post-test to measure students' improvement. The design can be represented as $O_1$–X–$O_2$, where $O_1$ refers to the pre-test, X represents the treatment (PBL), and $O_2$ indicates the post-test. The research was conducted at MAN Purworejo, Central Java, Indonesia, during the 2025/2026 academic year. The population consisted of all tenth-grade students. A purposive sampling technique was used to select one class consisting of 32 students (Nuryadi et al., 2017). The class was chosen based on several considerations, including the teacher's recommendation, students' initial writing ability, and the feasibility of implementing PBL within the available instructional time. Therefore, the selected class was considered representative of typical EFL learners with moderate writing proficiency who experience difficulties in writing recount texts. The independent variable in this study was Problem-Based Learning (PBL), while the dependent variable was students' recount text writing skills. The PBL treatment was implemented over four meetings, each lasting 90 minutes. The instructional procedures followed the main stages of PBL, which emphasize problem-solving, collaborative learning, and reflective processes: (1) problem orientation, (2) organizing students, (3) guiding investigation, (4) developing and presenting work, and (5) reflection (Guo et al., 2024; Yew & Goh, 2016).

In the first meeting, students were introduced to a real-life problem related to personal experiences and recount texts. They discussed the problem in groups and identified key ideas. In the second meeting, students gathered information and developed their ideas collaboratively into a draft of a recount text. In the third meeting, students revised and improved their drafts through peer feedback and teacher guidance. In the fourth meeting, students finalized and presented their recount texts, followed by reflection on the learning process. The instrument used in this study was a writing test in the form of a recount text task administered during both the pre-test and post-test. Students were asked to write a recount text based on a given prompt. The scoring of students' writing was conducted using an analytic rubric adapted from Hyland (2019), which assessed five aspects: content, organization, vocabulary, grammar, and mechanics. To ensure the reliability of the scoring,

FOSTER JELT
Journal of English Language Teaching


Vol.7, No. 2, April 2026
***e*-ISSN: 2723-4126**
***p*-ISSN: 2776-8880**

two raters (the researcher and an English teacher) independently assessed the students' writing. The scores were then compared and averaged to minimize subjectivity. Inter-rater reliability was calculated using percentage agreement to ensure consistency between the two raters. The rubric was reviewed and validated through expert judgment by an experienced English teacher to ensure its appropriateness for assessing students' writing performance.

Data were collected through the pre-test, the implementation of PBL treatment, and the post-test. The data were analyzed using descriptive and inferential statistical techniques. Descriptive statistics included the mean, standard deviation, minimum, and maximum scores. Statistical analysis procedures followed (Field, 2024). Before conducting hypothesis testing, a normality test using the Kolmogorov–Smirnov test was performed. If the data were normally distributed ($p > 0.05$), a Paired Samples T-Test is commonly used; however, in this study, the Wilcoxon Signed-Rank Test was applied as a non-parametric alternative to ensure more robust analysis. Although the data were normally distributed, the Wilcoxon Signed-Rank Test was selected as a more conservative approach due to the small sample size and the presence of score variability, which may affect the robustness of parametric tests (Field, 2024; Pallant, 2020). If the data were not normally distributed, the Wilcoxon Signed-Rank Test was also applied. The level of significance was set at 0.05 using a two-tailed test.

## RESULTS

The students' pre-test and post-test scores were collected after the treatment process. This section presents the findings from the analysis of students' writing performance before and after the implementation of Problem-Based Learning (PBL). The data were analyzed using both descriptive and inferential statistical techniques to examine changes in students' recount text writing skills. The findings include students' raw scores, the overall distribution and tendencies of the data, the classification of students' performance levels, and a detailed analysis of writing aspects. Furthermore, inferential statistical analysis was conducted using the Wilcoxon Signed-Rank Test, followed by the calculation of effect size to determine the significance and magnitude of the treatment effect.

*Table 1. Raw scores of students' pre-test and post-test*

| Student | Pre-Test | Post-Test | Student | Pre-Test | Post-Test |
|---|---|---|---|---|---|
| S1 | 40 | 55 | S17 | 54 | 48 |
| S2 | 47 | 40 | S18 | 57 | 53 |
| S3 | 66 | 71 | S19 | 93 | 61 |
| S4 | 73 | 53 | S20 | 80 | 78 |
| S5 | 81 | 47 | S21 | 84 | 48 |
| S6 | 51 | 62 | S22 | 71 | 42 |
| S7 | 73 | 75 | S23 | 53 | 58 |
| S8 | 76 | 62 | S24 | 92 | 74 |
| S9 | 66 | 67 | S25 | 84 | 89 |
| S10 | 67 | 56 | S26 | 76 | 53 |
| S11 | 91 | 84 | S27 | 80 | 84 |
| S12 | 57 | 54 | S28 | 76 | 82 |

FOSTER JELT
Journal of English Language Teaching


Vol.7, No. 2, April 2026
***e*-ISSN: 2723-4126**
***p*-ISSN: 2776-8880**

| | | | | | |
|---|---|---|---|---|---|
| S13 | 84 | 70 | S29 | 68 | 75 |
| S14 | 50 | 54 | S30 | 77 | 78 |
| S15 | 88 | 69 | S31 | 65 | 56 |
| S16 | 92 | 61 | S32 | 89 | 89 |

Table 1 presents the raw scores of students' pre-test and post-test results. The data show that students' scores varied considerably in both tests, with some students experiencing improvement while others showed a decline or no change. For instance, several students such as S3, S7, S25, and S27 demonstrated higher scores in the post-test compared to the pre-test, indicating improvement in their writing performance. However, a number of students, including S2, S5, S19, and S21, showed lower scores in the post-test, suggesting a decrease in performance after the implementation of the treatment. In addition, some students, such as S32, obtained the same score in both tests, indicating no change. Overall, although there are slight improvements in certain students' scores, the distribution of the raw data suggests that the changes in students' writing performance were not consistent across all participants. This indicates that the effect of the treatment varied among students, with no clear pattern of overall improvement.

*Table 2. Results of descriptive statistic and normality test (Kolmogorov–Smirnov)*

| Statistic | Pre-Test | Post-Test |
|---|---|---|
| N | 32 | 32 |
| Mean | 71.91 | 64.00 |
| Median | 74.50 | 61.50 |
| Mode | 76, 80 | 53 |
| Range | 53.00 | 49.00 |
| Variance | 217.25 | 191.03 |
| Standard Deviation | 14.74 | 13.82 |
| Minimum | 40.00 | 40.00 |
| Maximum | 93.00 | 89.00 |
| Normality (Sig.) (Kolmogorov–Smirnov) | 0.81 | 0.67 |

Table 2 presents the results of descriptive statistics and the normality test of students' pre-test and post-test scores. The mean score of the pre-test was 71.91, while the post-test mean decreased to 64.00, indicating a decline in students' performance after the treatment. Similarly, the median score dropped from 74.50 in the pre-test to 61.50 in the post-test. The mode of the pre-test was 76 and 80, whereas in the post-test it was 53, showing a shift toward lower score concentration. The range of the pre-test scores was 53.00, while the post-test range was slightly smaller at 49.00, suggesting a relatively similar spread of scores in both tests. The pre-test variance (217.25) was higher than the post-test variance (191.03), indicating that the scores were more dispersed before the treatment and became slightly more homogeneous afterward. Likewise, the standard deviation decreased from 14.74 in the

FOSTER JELT
Journal of English Language Teaching


Vol.7, No. 2, April 2026
***e*-ISSN: 2723-4126**
***p*-ISSN: 2776-8880**

pre-test to 13.82 in the post-test, showing that the scores became more clustered around the mean. The minimum score remained the same at 40.00 in both tests, while the maximum score slightly decreased from 93.00 to 89.00. The Kolmogorov–Smirnov test showed significance values of 0.81 for the pre-test and 0.67 for the post-test, indicating that both sets of data were normally distributed ($p > 0.05$). Therefore, although the data were normally distributed, a non-parametric test (Wilcoxon Signed-Rank Test) was employed to provide a more robust analysis and to avoid potential violations of parametric assumptions.

*Table 3. Results of Classification of Students' Writing Scores*

| Pre-Test | | |
|---|---|---|
| Category | Score Range | Frequency |
| Very Good | 86–100 | 6 |
| Good | 71–85 | 11 |
| Fair | 56–70 | 7 |
| Poor | ≤55 | 8 |
| Total | | 32 |

| Post-Test | | |
|---|---|---|
| Category | Score Range | Frequency |
| Very Good | 86–100 | 2 |
| Good | 71–85 | 7 |
| Fair | 56–70 | 11 |
| Poor | ≤55 | 12 |
| Total | | 32 |

Table 3 presents the classification of students' writing scores in both the pre-test and post-test. In the pre-test, 6 students were categorized as "Very Good," 11 students as "Good," 7 students as "Fair," and 8 students as "Poor." In contrast, the post-test results show a decrease in the number of students in higher categories, with only 2 students classified as "Very Good" and 7 students as "Good." Meanwhile, the number of students in the "Fair" category increased to 11, and those in the "Poor" category rose to 12. This shift indicates that more students fell into the lower performance categories after the treatment. Overall, the distribution of scores suggests a decline in students' writing performance, as reflected by the reduction in higher-level categories and the increase in lower-level categories in the post-test compared to the pre-test.

*Table 4. Results of writing performance across aspects*

| Aspect | Pre-Test Mean | Post-Test Mean |
|---|---|---|
| Content | 22.50 | 18.90 |
| Organization | 19.06 | 15.72 |
| Grammar | 11.62 | 11.03 |
| Vocabulary | 11.28 | 10.94 |
| Mechanics | 7.44 | 7.41 |

Table 4 presents the results of students' writing performance across five aspects in the pre-test and post-test. The findings indicate that all aspects experienced a decrease in mean scores after the implementation of the treatment. The mean score for content decreased from 22.50 in the pre-test to 18.90 in the post-test, while organization dropped from 19.06 to 15.72, showing notable declines in idea development and text structure. Similarly, grammar showed a slight decrease from 11.62 to 11.03, and vocabulary declined from 11.28 to 10.94, indicating minor reductions in language use. The mechanics aspect also slightly decreased from 7.44 to 7.41, suggesting minimal change in technical writing accuracy.

FOSTER JELT
Journal of English Language Teaching


Vol.7, No. 2, April 2026
***e*-ISSN: 2723-4126**
***p*-ISSN: 2776-8880**

Overall, the results demonstrate that students' writing performance declined across all assessed aspects, with the most substantial decreases observed in content and organization, indicating that the implementation of PBL did not lead to an improvement in students' writing performance in this context.

*Table 5. Results of Wilcoxon signed-rank test and effect size*

| Test | Value |
|---|---|
| W | 131.50 |
| Z | -2.48 |
| Sig. (2-tailed) | 0.01 |
| Effect Size (Cohen's d) | 0.44 |

Table 5 presents the results of the Wilcoxon Signed-Rank Test and the effect size analysis. The test yielded a W value of 131.50 and a Z value of -2.48, with a significance value (Sig. 2-tailed) of 0.01. Since the significance value is lower than 0.05 (0.01 < 0.05), it indicates that there is a statistically significant difference between the pre-test and post-test scores. However, the direction of the difference shows that students' scores decreased after the treatment. Furthermore, the calculated effect size (Cohen's d) was 0.44, which falls into the medium category. This suggests that the magnitude of the treatment effect is moderate in practical terms. Overall, although the statistical test shows a significant difference, the treatment did not lead to an improvement in students' writing skills. This suggests that while the treatment produced a statistically significant change, the change was not in the expected positive direction.

## DISCUSSION

Problem-Based Learning (PBL) was implemented in teaching recount text writing by engaging students in solving contextual problems related to their real-life experiences. In this study, students were guided to transform their experiences into recount texts by considering the generic structure (orientation, events, and re-orientation) as well as relevant language features such as the simple past tense, action verbs, and temporal conjunctions. The learning process involved collaborative discussions, problem identification, outlining, drafting, and revising based on feedback. This approach aligns with constructivist learning theory, which emphasizes that knowledge is actively constructed through experience and problem-solving activities (Guo et al., 2024; Yew & Goh, 2016).

Previous studies have consistently reported positive effects of PBL on students' writing skills. For instance, Soffiany & Purbani (2020) found that students taught using PBL achieved higher writing scores compared to those taught using conventional methods. Similarly, Ilham (2025) and Hakimah (2023) reported that PBL improved students' writing performance, motivation, and classroom engagement. Susanti et al. (2020) also demonstrated that PBL enhanced students' ability in organizing ideas and using appropriate language features, while Balqis et al. (2025) specifically found improvements in students' recount text writing, particularly in language use and organization. These findings suggest that PBL has strong potential to support writing development in EFL contexts. However, the

FOSTER JELT
Journal of English Language Teaching


Vol.7, No. 2, April 2026
***e*-ISSN: 2723-4126**
***p*-ISSN: 2776-8880**

findings of the present study differ from those of previous research. Although PBL was implemented following appropriate procedures, the results showed that students' writing performance did not improve significantly and even tended to decline. This result clearly indicates that the implementation of Problem-Based Learning did not improve students' writing performance, but instead led to a decline in overall scores. This finding suggests that the effectiveness of PBL in writing instruction is highly dependent on implementation factors such as duration, scaffolding, and students' readiness. From a statistical perspective, although the data were normally distributed ($p > 0.05$), the Wilcoxon Signed-Rank Test was employed to ensure a more robust analysis and to minimize potential bias caused by small sample size and score variability (Field, 2024). The use of non-parametric tests in such conditions is widely recommended to provide more reliable results when assumptions of parametric tests may be sensitive to sample characteristics (Pallant, 2020). This finding supports cognitive load theory, which suggests that when learners are exposed to complex tasks without sufficient guidance, their performance may temporarily decline (Sweller, 2020).

The decline in students' performance can be explained through several pedagogical and cognitive factors. First, the implementation duration of PBL was relatively short. Research indicates that PBL requires sufficient time for students to adapt to new learning roles and processes (Dolmans et al., 2016; Hmelo-Silver, 2017). In short-term implementations, students may experience cognitive overload due to the simultaneous demands of problem-solving and language production, which can negatively affect performance (Sweller, 2020). This is particularly relevant in writing tasks, where students must manage ideas, structure, grammar, and vocabulary at the same time. Second, the students' limited prior knowledge and writing proficiency may have contributed to the decline in scores. According to (Graham et al., 2020), students with lower writing skills often struggle more in open-ended learning environments such as PBL, especially when they lack sufficient linguistic resources. Without strong foundational skills, students may find it difficult to generate ideas and organize texts effectively, leading to lower performance outcomes. Third, the level of scaffolding provided during the implementation may not have been sufficient. Effective PBL requires structured guidance, particularly for novice learners (Hmelo-Silver, 2017). When scaffolding is limited, students may become confused or disengaged, which can reduce the effectiveness of the learning process. This is supported by research indicating that insufficient instructional support in student-centered learning can hinder learning outcomes rather than improve them (Lazonder & Harmsen, 2016).

In addition, students' readiness and learning habits also play a crucial role. Students who are accustomed to teacher-centered instruction may struggle to adapt to PBL environments that require autonomy, collaboration, and active participation (Morris et al., 2025; Quibrantar & Ezezika, 2023). This transition can initially lead to decreased performance before improvement occurs, a phenomenon often referred to as the "adjustment phase" in active learning contexts. Despite the decline in mean scores, it is important to note that the data remained normally distributed and showed reduced variance and standard deviation. This indicates that students' performance became more homogeneous, even though overall achievement decreased. Such findings suggest that PBL

FOSTER JELT
Journal of English Language Teaching


Vol.7, No. 2, April 2026
***e*-ISSN: 2723-4126**
***p*-ISSN: 2776-8880**

may have contributed to reducing performance gaps among students, even if it did not significantly improve overall writing scores. Similar patterns have been reported in educational research, where instructional interventions initially stabilize performance distribution before leading to improvement over a longer period (Dash & Schmidt, 2025).

From a pedagogical perspective, these findings imply that PBL should be implemented with careful consideration of students' readiness, sufficient instructional time, and appropriate scaffolding strategies. Teachers need to gradually introduce PBL, provide clear guidance, and support students throughout the writing process. Furthermore, longer intervention periods and repeated practice are essential to achieve meaningful improvement in writing skills.

## CONCLUSION

This study aimed to examine the effect of Problem-Based Learning (PBL) on students' recount text writing skills. The findings revealed that although there was a statistically significant difference between the pre-test and post-test results, the outcome indicated a decline in students' writing performance following the implementation of PBL. Therefore, it can be concluded that PBL, in the context of this study, was not effective in improving students' recount text writing skills. These findings suggest that the effectiveness of PBL is influenced by several factors, including the duration of implementation, the level of instructional scaffolding, and students' readiness to engage in student-centered learning. The limited duration of the treatment and students' insufficient prior knowledge are likely to have contributed to these results. Accordingly, it is recommended that PBL be implemented gradually with clear and structured guidance to better support students' learning processes. This study also has several limitations, including the use of a pre-experimental design without a control group, a relatively short implementation period, and a limited sample size. Therefore, future research is suggested to employ more rigorous research designs, involve longer intervention periods, and include larger sample sizes. In addition, further studies may explore the integration of PBL with other instructional strategies to enhance its effectiveness in EFL writing contexts.

## REFERENCES

Abdel Latif, M. M. M. (2021). Remodeling writers' composing processes: Implications for writing assessment. *Assessing Writing*, *50*, 100547. https://doi.org/https://doi.org/10.1016/j.asw.2021.100547

Balqis, N. A., Putri, S. R. E., Ruddin, M., Navi, M. W., Suharwati, I., Ahmadi, R., & Sari, I. N. (2025). Efektivitas Model Project Based Learning Berbantuan Wordwall dalam Meningkatkan Keterampilan Menulis Teks Rekon pada Siswa. *Jurnal Kajian Bahasa, Sastra, Dan Budaya Daerah Serta Pengajarannya*, *16*(1), 51–60. DOI:http://doi.org/10.17509/jlb.v16i1.80784

Creswell, J. W., & Creswell, J. D. (2022). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE Publications.

Dash, B., & Schmidt, K. (2025). Evolving Teaching with AI Agents: Reinforcement Learning

Vol.7, No. 2, April 2026
***e*-ISSN: 2723-4126**
***p*-ISSN: 2776-8880**

for Adaptive Educational Support Systems. *ELearn: World Conference on EdTech*, 95–108.

Dolmans, D. H. J. M., Loyens, S. M. M., Marcq, H., & Gijbels, D. (2016). Deep and surface learning in problem-based learning: a review of the literature. *Advances in Health Sciences Education*, *21*(5), 1087–1112.

Fatmawati, M., Irdiyansyah, I., & Sofyan, D. (2022). The Use of Genre Based Approach on Students' Writing Recount Achievement. *Journal of English Teaching and Linguistics Studies (JET Li)*, *4*(1), 1–6. https://doi.org/10.55215/jetli.v4i1.5077

Field, A. (2024). *Discovering Statistics Using IBM SPSS Statistics*. SAGE Publications.

Fraenkel, J. R., & Wallen, N. E. (2019). *How to design and evaluate research in education.* (10th ed.). ERIC.

Graham, S. (2018). A revised writer (s)-within-community model of writing. *Educational Psychologist*, *53*(4), 258–279.

Graham, S., Bañales, G., Ahumada, S., Muñoz, P., Alvarez, P., & Harris, K. R. (2020). Writing strategies interventions. In *Handbook of strategies and strategic processing* (pp. 141–158). Routledge.

Graham, S., Kiuhara, S. A., & MacKay, M. (2020). The effects of writing on learning in science, social studies, and mathematics: A meta-analysis. *Review of Educational Research*, *90*(2), 179–226.

Guo, Q., Jamil, H., Ismail, L., Luo, S., & Sun, Z. (2024). Effects of problem-based learning on EFL learning: A systematic review. *PLOS ONE*, *19*. https://doi.org/10.1371/journal.pone.0307819

Hakimah, N. (2023). Assessing the Impact of Project-Based Learning on Students' Writing Skills: A Pre-Experimental Study. *Acitya: Journal of Teaching and Education*, *5*(2), 434–448. https://doi.org/10.30650/ajte.v5i2.3723

Hmelo-Silver, C. E. (2017). Problem-based learning: What and how do students learn? *Educational Psychology Review*, *16*(3), 235–266.

Hyland, K. (2019). *Second Language Writing*. Cambridge University Press.

Hyland, K. (2021). *Teaching and Researching Writing*. https://doi.org/10.4324/9781003198451

Ilham, I. (2025). The Impact Of Project-Based Learning On Efl Students' Writing Skill: A Systematic Review. *ELTIN JOURNAL: Journal of English Language Teaching in Indonesia p-ISSN*, *13*(2), 355–366.

Lazonder, A. W., & Harmsen, R. (2016). Meta-analysis of inquiry-based learning: Effects of guidance. *Review of Educational Research*, *86*(3), 681–718.

Lee, I. (2020). *Journal of Second Language Writing Utility of focused / comprehensive written*

FOSTER JELT
Journal of English Language Teaching


Vol.7, No. 2, April 2026
***e*-ISSN: 2723-4126**
***p*-ISSN: 2776-8880**

*corrective feedback*. *49*(February).

Lehman, I. M., Tienari, J., Hyland, K., & Alejandro, A. (2024). The case for reflexive writing practices in management communication and organization studies. *Management Communication Quarterly*, *38*(3), 698–729.

Morris, T. H., Bremner, N., & Sakata, N. (2025). Self-directed learning and student-centred learning : a conceptual comparison. *Pedagogy, Culture & Society*, *33*(3), 847–866. https://doi.org/10.1080/14681366.2023.2282439

Nguyen, L. A. T., & Habók, A. (2022). Digital Literacy of EFL Students: An Empirical Study in Vietnamese Universities. *Libri*, *72*(1), 53–66. https://doi.org/10.1515/libri-2020-0165

Nuryadi, N., Astuti, T. D., Utami, E. S., & Budiantara, M. (2017). Dasar-dasar statistik penelitian. *Yogyakarta: Sibuku Media*, 27–28.

Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. Routledge.

Panadero, E. (2017). A review of self-regulated learning: Six models and four directions for research. *Frontiers in Psychology*, *8*(APR), 1–28. https://doi.org/10.3389/fpsyg.2017.00422

Quibrantar, S. M., & Ezezika, O. (2023). Evaluating student engagement and experiential learning in global classrooms: A qualitative case study. *Studies in Educational Evaluation*, *78*, 101290. https://doi.org/https://doi.org/10.1016/j.stueduc.2023.101290

Soffiany, N. K., & Purbani, W. (2020). The effectiveness of project-based learning to teach writing in relation to students' creativity. *LingTera*, *7*(2), 205–214. https://doi.org/10.21831/lt.v7i2.14967

Sun, Q., & Zhang, L. J. (2022). Understanding learners' metacognitive experiences in learning to write in English as a foreign language: A structural equation modeling approach. *Frontiers in Psychology*, *13*(September), 1–18. https://doi.org/10.3389/fpsyg.2022.986301

Susanti, A., Rofidah, N., Trisusana, A., & Retnaningdyah, P. (2020). Improving Students' Writing Skill Through Project Based Learning For EFLStudents. *International Journal of English Linguistics, Literature, and Education (IJELLE)*, *2*(2), 102–115. https://doi.org/10.32585/ijelle.v2i2.700

Sweller, J. (2020). Cognitive load theory and educational technology. *Educational Technology Research and Development*, *68*(1), 1–16.

Yew, E., & Goh, K. (2016). Problem-Based Learning: An Overview of its Process and Impact on Learning. *Health Professions Education*, *2*. https://doi.org/10.1016/j.hpe.2016.01.004