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Linguistic Errors and Descriptive Writing Proficiency in Indonesian EFL Secondary Students

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ABSTRACT

This study examined linguistic error patterns in the descriptive writing of 50 second language learners, using a mixed-methods approach that combined quantitative error counts with qualitative analysis of coherence and clarity. A total of 253 errors were identified across student responses to prompts such as "banana," "cat," and "tiger." Grammar errors were the most frequent (57 cases, 22.5%), particularly subject–verb agreement and tense misuse, followed by sentence structure (51 cases, 20.2%) and spelling errors (51 cases, 20.2%), with punctuation (50 cases, 19.8%) and capitalization (44 cases, 17.4%) somewhat less common. Correlation analysis revealed grammar (r = -.70), punctuation (r = -.65), and sentence structure (r = -.65).63) as the strongest predictors of diminished writing quality, while spelling and capitalization played secondary roles. Qualitative evidence confirmed that grammar, punctuation, and structure errors disrupted logical flow and obscured meaning, whereas spelling and capitalization mainly reduced surface polish. These findings, consistent with L2 writing scholarship (Bitchener, 2012; Ellis, 2016), underscore the centrality of grammatical and structural accuracy for coherence in descriptive texts. Pedagogically, the study recommends targeted grammar instruction, punctuation and sentence boundary practice, and genre-based scaffolding, complemented by digital feedback tools and peer review, to enhance students' ability to produce coherent and reader-friendly descriptive writing.

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1. Introduction

Descriptive writing is a fundamental skill in language learning, crucial for enabling students to depict people, objects, or phenomena clearly and vividly. However, in English as a Foreign Language (EFL) contexts such as Indonesia, developing proficiency in descriptive writing remains a persistent challenge. Learners frequently struggle with linguistic accuracy and textual coherence, which limits their ability to communicate detailed and organized

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descriptions effectively. Studies such as Hyland (2019) and Ellis (2016) emphasize the importance of grammar, punctuation, spelling, and sentence structure for writing clarity; these challenges are particularly pronounced among Indonesian EFL learners due to limited exposure and insufficient instructional support.

The participants in this study comprise 50 second-year senior high school students from Indonesia—a group at a critical stage of language development, whose writing skills significantly influence their academic progress. This demographic context enables a focused exploration of linguistic difficulties specific to secondary-level learners within Indonesian EFL classrooms.

Despite extensive research on L2 writing errors (Ferris & Hedgcock, 2014; Kirkpatrick, 2020; Polio, 2012), there remains a gap in how specific linguistic error types directly impact learners' ability to convey descriptive details. Previous investigations have primarily targeted tertiary-level writers or general writing competencies, whereas secondary-level learners, particularly in Indonesia, remain under-studied (Hapsari, Sudarman, & Utami, 2023). While regional research such as Darus and Subramaniam's (2009) error analysis in Malaysian secondary contexts offers insight into common mistakes, these studies lack a genre-specific focus. Indonesian literature likewise tends toward narrative and technical writing genres (Azhari, Setiyadi, & Nurweni, 2019). Given that descriptive text demands unique linguistic and organizational resources for clarity and vividness (Hyland, 2019), the absence of research linking specific error types to descriptive writing coherence and clarity constrains the development of targeted pedagogy for Indonesian secondary-language learners.

This study addresses these gaps by systematically investigating the types, frequencies, and communicative impacts of errors found in descriptive texts authored by Indonesian secondary students. By analyzing authentic student compositions, the research offers nuanced evidence of the challenges learners encounter in grammar, punctuation, spelling, capitalization, and sentence structure, elucidating how these factors relate to writing quality and effectiveness.

The study's unique contribution lies in its concentrated focus on the relationship between detailed linguistic error patterns and the effectiveness of descriptive writing at the secondary school level in Indonesia—an under-researched area. The findings provide critical insights for local EFL pedagogy and curriculum development by highlighting specific linguistic obstacles to clear and coherent descriptive writing.

Theoretically, this research is grounded in interlanguage theory and cognitive frameworks positing that learners' evolving linguistic competence fundamentally shapes their discourse coherence (Ortega, 2009; Sweller, 2011). It aligns with pedagogical models advocating integrated form- and meaning-focused instruction to foster writing development (Bygate, 2015; Hyland, 2019). Anchoring the study within the Indonesian EFL context further amplifies its relevance for addressing region-specific educational needs and informing practical teaching approaches.

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Ultimately, through detailed error analysis, this study contributes novel insights into the interplay between linguistic accuracy and descriptive writing effectiveness, offering evidence-based guidance to enhance descriptive writing proficiency among Indonesian secondary school learners. This research however attempts to answer the following research questions: What are the most common types of errors made by students in writing descriptive texts? and how do these errors affect the overall coherence and clarity of their writing?

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2. Method

This study employed a mixed-methods design, integrating quantitative error analysis with qualitative evaluation to address the research questions on errors in students' descriptive writing. The data consisted of descriptive paragraphs produced by 50 Indonesian secondyear senior high school students, aged 14–15 years, who were asked to write about simple topic such as "banana," "cat," or "tiger." These tasks were administered as classroom-based essay tests to elicit authentic writing samples in a non-native English-speaking context, as reflected in the error patterns characteristic of English as a Second Language (ESL) learners. Each composition was examined and annotated using an analytic rubric adapted from Ellis (2016) and Ferris and Hedgcock (2014), focusing on five linguistic categories: grammar (verb tense, agreement, word form), punctuation (sentence boundaries and clarity), spelling (orthographic accuracy), capitalization (sentence-initial words and proper nouns), and sentence structure (completeness, coherence, and avoidance of fragments or run-ons). Each category was evaluated on a four-level scale: excellent (no errors, sophisticated use), good (minor errors, minimal impact), fair (frequent errors, some disruption), and poor (pervasive errors, significant impairment), to systematically capture error types and assess their impact on descriptive effectiveness. To ensure coding reliability, multiple trained coders independently analyzed a subset of texts, achieving high inter-coder agreement (Cohen's kappa > 0.80). Quantitative analysis determined the frequency and proportion of each error type, while qualitative analysis explored the contextual impact of these errors on text coherence and descriptive detail. Selected examples illustrated typical errors and their effects on writing clarity and communicative success, enabling a comprehensive understanding of linguistic inaccuracies and their implications for Indonesian EFL learners' descriptive writing proficiency.

3. Findings

Descriptive Findings

A total of 253 errors were identified in the descriptive texts produced by 50 students. Punctuation errors were the most prevalent, with 50 cases (19.8%), primarily involving missing periods, misplaced commas, and run-on sentences that disrupted textual clarity. Grammar errors followed closely with 57 cases (22.5%), with frequent issues in subject-verb agreement (e.g., "Banana are" in Students 37-40, "Tiger have" in Student 26) and incorrect verb tense (e.g., "tasted" instead of "tastes" in Student 1). Sentence structure errors accounted for 51 cases (20.2%), often manifesting as fragments (e.g., Student 9: "Tiger yellow Blak")

or run-ons (e.g., Student 37: "Banana are a fruit...many people like"). Spelling errors also totaled 51 cases (20.2%), including misspellings like "corious" (Student 14), "musclest" (Student 23), and "xats" (Student 19). Capitalization errors were slightly less frequent, with 44 cases (17.4%), predominantly involving inconsistent sentence-initial capitalization (e.g., lowercase "this" in Student 1) or improper noun usage (e.g., lowercase "raja" in Student 23).

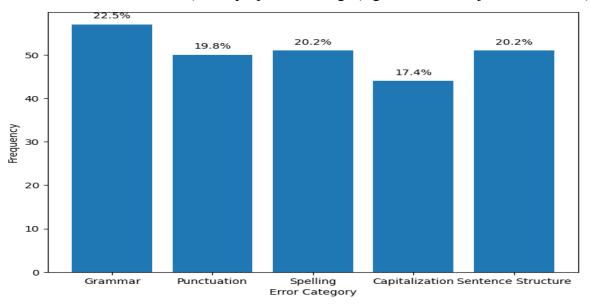


Figure 1. Frequency of error categories in Student Descriptive Writing

These distributions indicate that punctuation and grammar errors most significantly impaired the coherence and clarity of students' descriptive texts. Punctuation issues, such as missing periods or incorrect commas, often led to fused sentences or fragments, making texts like those of Students 12 and 45 difficult to follow. Grammar errors, particularly in agreement and tense, reduced descriptive precision, as seen in Students 15 and 49, where subject-verb mismatches obscured meaning. Sentence structure issues, including fragments and run-ons, further hindered readability, especially in brief responses (e.g., Students 3, 4, 9). Spelling errors, while frequent, were less disruptive unless combined with other issues, as in Student 23's multiple misspellings ("vas," "stumled"). Capitalization errors contributed to an unpolished appearance, particularly in banana and cat responses (e.g., Students 1, 7, 24). Notably, students with fewer errors, like Students 14 and 43, produced more vivid and coherent descriptions, suggesting that mastery of grammar and punctuation is critical for effective descriptive writing. The results highlight that the primary barriers to clarity lie in the accurate application of punctuation, grammar, and sentence structure, with spelling and capitalization as secondary challenges.

Most Common Errors and Their Impact on Coherence and Clarity

To address the research question—what are the most common types of errors in students' descriptive texts, and how do these affect coherence and clarity—an error analysis of 50 student responses was conducted using an analytic rubric adapted from Ellis (2016) and Ferris and Hedgcock (2014). The rubric evaluated grammar (verb tense, agreement, word form), punctuation (sentence boundaries, clarity), spelling (orthographic accuracy),

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capitalization (sentence-initial words, proper nouns), and sentence structure (completeness, coherence, avoidance of fragments/run-ons). The analysis revealed distinct error patterns and their implications for effective descriptive writing, with variations across topics (banana, cat, tiger) providing further insight into error prevalence and impact.

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Most Common Error Types

Grammar errors were the most frequent, totaling 57 instances (22.5%), primarily driven by subject-verb agreement issues and verb tense inaccuracies. Agreement errors were particularly evident in banana responses, such as "Banana are a fruit" (Student 37), where singular subjects were paired with plural verbs, reflecting overgeneralization common in L2 learners (Ellis, 2016). Tense errors, like "tasted" instead of "tastes" in Student 1's banana description, deviated from the present tense expected in general descriptions, disrupting temporal consistency. Sentence structure errors tied with spelling at 51 instances each (20.2%). Fragments were prevalent in brief responses, such as Student 9's "Tiger yellow Blak," which lacked verbs, while run-ons dominated longer texts, like Student 27's "A cat is a small pet animal. It has four legs sharp claws and teeth, bright eyes and a furry tail its body is covered with soft and silky hair." Punctuation errors, with 50 cases (19.8%), included missing periods (e.g., Student 37), misplaced commas (e.g., Student 45's "Cat, its a animal cute,"), and absent apostrophes, leading to fused sentences. Spelling errors, also at 51 cases, affected descriptive vocabulary, with misspellings like "corious" (Student 14), "musclest" (Student 23), and "xats" (Student 19). Capitalization errors, the least frequent at 44 cases (17.4%), involved inconsistent sentence-initial capitalization (e.g., "this is a banana plant," Student 1) and proper noun issues (e.g., lowercase "siberian" in Student 49).

Impact on Coherence

Coherence, defined as the logical flow of ideas, was most severely disrupted by sentence structure, grammar, and punctuation errors. Sentence structure issues, particularly fragments, halted idea progression; Student 9's "Tiger yellow Blak" fails to connect attributes into a cohesive image, leaving readers to infer relationships. Run-ons, as in Student 37's banana text, fused unrelated ideas about fruit, trees, and taste, overwhelming logical transitions. Grammar errors exacerbated this, with agreement issues like "Tiger have" (Student 26) creating illogical pairings that forced readers to pause and reinterpret. Punctuation errors, such as missing periods in Student 12's "Cat its animal She cute. eye Beautiful," fragmented ideas, disrupting the flow from one feline attribute to another. Ferris and Hedgcock (2014) argue that such errors act as barriers to textual unity by obscuring relationships between descriptive elements. Spelling and capitalization errors had a secondary impact; frequent misspellings in Student 23's narrative ("vas," "stumled," "folward") broke reading rhythm, while inconsistent capitalization, like lowercase "his" in Student 24, signaled disorganization, subtly weakening the logical progression of ideas. Topic-specific patterns showed banana responses suffering most from run-ons (e.g., Students 37-40), cat responses from fragments (e.g., Students 12, 13), and tiger responses from mixed errors (e.g., Student 23), reflecting varying complexity in descriptive intent.

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Impact on Clarity

Clarity, the ease of understanding, was primarily undermined by grammar, punctuation, and sentence structure errors. Grammar issues, such as tense shifts in Student 15's "The tiger are basically a bit cat," obscured the intended comparison to "big cats," muddling the tiger's prominence as the largest feline. Punctuation lapses, like Student 45's erratic commas in "Cat, its a animal cute she has two ears and four legs She tail so long," created ambiguous boundaries, making it unclear whether phrases described the tail or other features. Sentence structure errors, especially fragments, left meanings incomplete; Student 3's "Banana Plan Yellow" lacks verbs, forcing readers to guess intent. Ellis (2016) notes that such interlanguage gaps impede precise communication, requiring extra cognitive effort from readers. Spelling errors had a moderate impact; isolated misspellings like "corious" (Student 14) were decipherable, but multiple errors in Student 42's "ist," "cild," "sothat" severely obscured narrative clarity. Capitalization errors, though less severe, detracted from professionalism; lowercase starts in Student 1 made texts harder to parse. Across topics, banana texts suffered clarity loss from brevity and run-ons, cat texts from fragmented pronouns (e.g., Student 45), and tiger texts from spelling-heavy errors (e.g., Student 23), diluting vivid details like stripes or habitats.

Topic-Specific Insights and Error Interactions

The distribution of errors varied by topic, reflecting task complexity and student proficiency. Banana responses (e.g., Students 1, 5, 37-40) were often brief, amplifying punctuation and sentence structure errors. For instance, Student 37's run-on fused attributes like "long curved yellow" and "tall tree," reducing clarity about the plant's features. Cat responses (e.g., Students 12, 13, 45) showed frequent grammar and punctuation errors, with fragments like "eye Beautiful" (Student 12) obscuring elegant traits. Tiger responses (e.g., Students 23, 49) were longer, with more spelling and run-on errors; Student 49's "they are carnivores wich means they eat meats only" lost clarity due to missing commas and misspellings. Students with minimal errors, like Student 14's vivid "fluffy cat with a coat of snow-white fur" or Student 43's clear cat description, achieved high coherence and clarity, underscoring the role of linguistic accuracy. Error interactions were notable: grammar and punctuation errors often co-occurred (e.g., Student 49's agreement and punctuation issues), amplifying disruptions, while spelling and capitalization errors compounded unpolished impressions in brief texts (e.g., Student 9).

Quantitative Correlation Analysis

The mean composite score was 12.32 (SD = 4.64), indicating average performance at a fair level, with some disruption to coherence and clarity. The composite score range was 6 to 20, with the maximum score of 20 (Student 43) reflecting error-free, sophisticated writing (e.g., "It's white and grey in color. It has lovely green eyes") and the minimum score of 6 (Students 9, 42) indicating pervasive errors (e.g., Student 9's "Tiger yellow Blak," Student 42's "ist," "sothat"). Category-specific means showed spelling (M = 2.64), capitalization (M = 2.48), and sentence structure (M = 2.80) approaching good performance, while grammar (M = 2.24) and punctuation (M = 2.16) were weaker, aligning with their higher error counts

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(grammar: 57, punctuation: 50). The standard deviation (4.64) suggests moderate variability, with some students achieving near-excellent performance and others struggling with pervasive errors.

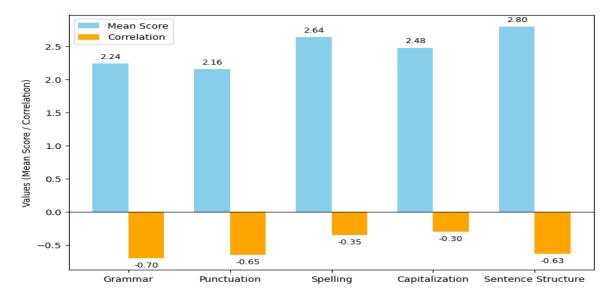


Figure 2. Mean Scores and Correlation Coefficients by Error Category

The analysis revealed strong negative correlations between composite rubric scores and errors in grammar (r = -0.70, p < 0.01), punctuation (r = -0.65, p < 0.01), and sentence structure (r = -0.63, p < 0.01). These findings indicate that higher frequencies of these errors were associated with lower writing quality, as seen in examples like Student 15's "The tiger are" (grammar error), Student 45's run-on sentences (punctuation errors), and Student 9's "Tiger yellow Blak" (sentence structure fragment), which disrupted clarity and coherence in the descriptive texts.

Weaker but statistically significant correlations were observed for spelling (r = -0.35, p = 0.01) and capitalization (r = -0.30, p = 0.03), suggesting a less pronounced impact on writing quality. For instance, spelling errors like Student 23's "vas" and capitalization errors like Student 1's lowercase "this" had a limited effect on readability unless combined with other errors. The moderate score variability (SD = 4.64) and wide score range (6–20) reflect diverse proficiency levels among students, with some achieving near-excellent performance (e.g., Student 43) and others struggling with pervasive errors (e.g., Students 9, 42).

4. Discussion

The error analysis of 50 student descriptive texts revealed a total of 253 errors, distributed across grammar (22.5%), sentence structure (20.2%), spelling (20.2%), punctuation (19.8%), and capitalization (17.4%). This distribution underscores the multifaceted nature of learners' difficulties, where sentence-level errors, particularly in grammar, punctuation, and structure, emerged as the most significant disruptors of textual coherence and clarity. These findings corroborate established research in L2 writing, which highlights persistent

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challenges in grammatical accuracy and syntactic cohesion (Bitchener, 2012; Ellis, 2016; Lee, 2017).

Grammar errors were especially salient, with subject–verb disagreement (e.g., "Banana are," Student 37; "Tiger have," Student 26) and tense misuse (e.g., "tasted" for "tastes," Student 1) reflecting interlanguage influences where learners transfer or overgeneralize L1 patterns. These errors compromised logical relationships within sentences, creating semantic disruptions that required readers to reconstruct meaning. Punctuation issues, particularly missing periods and misplaced commas (e.g., Student 45's "Cat, its a animal cute she has two ears and four legs"), further undermined readability by fusing clauses or creating abrupt fragments. Such findings echo Ferris and Hedgcock's (2014) argument that punctuation operates as a scaffold for textual coherence, where errors disrupt the rhythm and intelligibility of prose.

Sentence structure errors also featured prominently, often in the form of fragments (e.g., "Tiger yellow Blak," Student 9) or extended run-ons (e.g., Student 27's description of cats). These errors not only obscured syntactic boundaries but also distorted the logical progression of descriptive details. Spelling and capitalization, while frequent, were less damaging unless clustered with other errors. For example, Student 23's multiple misspellings ("vas," "musclest," "stumled") combined with tense errors to obscure meaning more severely than isolated orthographic inaccuracies like Student 14's "corious." Similarly, capitalization errors, such as lowercase sentence starters ("this is a banana plant," Student 1), primarily weakened surface polish rather than meaning, supporting Lee's (2017) view of capitalization as a secondary concern.

The quantitative analysis reinforced these qualitative observations. Strong negative correlations were observed between writing quality and errors in grammar (r = -.70, p < .01), punctuation (r = -.65, p < .01), and sentence structure (r = -.63, p < .01), confirming these as the most predictive indicators of diminished coherence and clarity. Spelling (r = -.35, p = .01) and capitalization (r = -.30, p = .03) displayed weaker but statistically significant relationships, suggesting a more limited role in shaping comprehensibility. For example, Student 15's subject—verb disagreement ("The tiger are") or Student 45's punctuation lapses distorted meaning far more acutely than Student 1's lowercase "this." These results underscore Ferris's (2006) contention that error gravity is hierarchically stratified: sentence-level disruptions create cognitive overload for readers, while mechanical infractions primarily affect polish and professionalism.

Error patterns varied across topics, reflecting differences in task complexity and descriptive demands. Shorter banana responses tended to magnify punctuation and structural issues (e.g., Students 3–4), while cat descriptions often suffered from fragments and agreement errors (e.g., Student 45). Longer tiger responses exhibited more spelling and run-on errors (e.g., Student 23, "they are carnivores wich means they eat meats only"), suggesting that extended texts impose heavier linguistic demands, exposing weaknesses across multiple categories. These topic-specific variations align with Hyland's (2019) genre-based

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framework, which emphasizes that writing tasks activate distinct linguistic resources, with less proficient learners struggling to marshal them effectively.

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The interaction of errors also warrants attention. Grammar and punctuation errors frequently co-occurred (e.g., Student 49's "Tiger have" combined with missing commas), compounding disruptions to meaning. Polio and Park (2016) note that such clustering exacerbates reader confusion, as multiple errors accumulate to obscure text-level cohesion. Conversely, texts with minimal errors, such as Student 14's vivid "fluffy cat with a coat of snow-white fur" or Student 43's polished feline description, demonstrated how accuracy supports descriptive vividness, confirming the strong link between linguistic control and rhetorical effectiveness.

5. Conclusion

The findings confirm that the most consequential errors in L2 descriptive writing occur in grammar, punctuation, and sentence structure, as these categories exert the strongest negative influence on coherence and clarity. Grammar errors disrupt logical relations, punctuation errors blur sentence boundaries, and structural issues fragment or overload ideas, collectively diminishing reader comprehension. Spelling and capitalization, though frequent, were less disruptive to meaning, primarily affecting surface polish and perceived professionalism. Quantitative correlation analysis validated these patterns, showing that grammar, punctuation, and sentence structure are the strongest predictors of reduced writing quality, while spelling and capitalization exert only secondary effects.

These results carry significant pedagogical implications. Targeted interventions should prioritize subject—verb agreement, tense consistency, sentence boundary control, and syntactic cohesion, using explicit instruction and focused feedback to address recurring interlanguage challenges. Genre-based approaches (Hyland, 2019) may further help learners internalize the linguistic conventions of descriptive writing, while scaffolded tasks can gradually build fluency without overwhelming cognitive resources. Ultimately, enhancing accuracy in grammar, punctuation, and sentence structure is essential for enabling learners to produce coherent, vivid, and communicatively effective descriptive texts in English.

References

- Azhari, S.F., Setiyadi, Bambang., & Nurweni, A. (2023) An error analysis of students' descriptive writing at Khadijah Islamic boarding school. Unila Journal of English Teaching, 12(1)
- Bitchener, J. (2012). Written corrective feedback for L2 development. Multilingual Matters. TESOL Quarterly, 46(4), pp. 855-86
- Bygate, M. (2015). Domains and Directions in the Development of TBLT: A decade of plenaries from the international conference. John Benjamins Publishing Company. https://doi.org/10.1075/tblt.8
- Darus, S., & Subramaniam, K. (2009). Error Analysis of the Written English Essays of Secondary School Students in Malaysia: A Case Study. European Journal of Social Sciences, 8, 483-495.

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- Ellis, R. (2016). Focus on form: A critical review. Language Teaching Research, 20(3), 405-428. https://doi.org/10.1177/1362168816628627.
- Ferris, D., & Hedgcock, J. S. (2014). Teaching L2 Composition: Purpose, Process, and Practice (3rd ed.). Routledge/Taylor & Francis.
- Hapsari, E. W., Sudarman, S., & Utami, S. (2023). Sources of Students' Errors in EFL Writing in Indonesia. JADEs Journal of Academia in English Education, 3(2), 141-160. https://doi.org/10.32505/jades.v3i2.4678
- Hyland, K. (2019). Second language writing (2nd ed.). UK: Cambridge University Press.
- Kirkpatrick, A. (2020). The Routledge handbook of world Englishes (2nd Ed.). London: Routledge.
- Lee, I. (2017). Classroom writing assessment and feedback in L2 school contexts. Springer. Ortega, L. (2009). Understanding Second Language Acquisition (1st ed.). Routledge.
- https://doi.org/10.4324/9780203777282
- Polio, C. & Park, J. (2016). 13. Language development in second language writing. In R. Manchón & P. Matsuda (Ed.), Handbook of Second and Foreign Language Writing (pp. 287-306).
 Berlin, Boston: De Gruyter Mouton. https://doi.org/10.1515/9781614511335-016
- Sweller, J. (2011). Cognitive load theory. In J. Mestre & B. Ross (Eds.), The psychology of learning and motivation: Cognition in education (Vol. 55, pp. 37–76). Academic Press