

A COGNITIVE-ORTHOGRAPHIC ANALYSIS OF SPELLING ERRORS IN DESCRIPTIVE WRITING AMONG INDONESIAN EFL STUDENTS

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ABSTRACT

This study investigates the types of spelling errors found in descriptive texts written by Indonesian EFL learners and examines the linguistic factors contributing to these errors. Using a descriptive qualitative design with an error analysis approach, the study analyzed 39 spelling errors produced by 24 eleventh-grade students at SMA Muhammadiyah Kutoarjo. The errors were classified based on the Surface Strategy Taxonomy, including omission, substitution, addition, and transposition. The findings revealed that omission was the most frequent error type (38.46%), followed by substitution (30.77%), addition (20.51%), and transposition (10.26%). The analysis indicates that students' spelling difficulties are strongly influenced by the inconsistency of English orthography and interference from Indonesian phonological patterns. The findings also suggest that learners tend to rely on phonetic spelling strategies when dealing with unfamiliar English words. Although limited by a small sample size and a single educational context, this study provides valuable insights into the orthographic challenges experienced by Indonesian EFL learners. The study further offers pedagogical implications for EFL teachers to provide more explicit instruction and targeted feedback on problematic spelling patterns, particularly silent letters and vowel combinations, to improve students' writing accuracy.

Keywords: Descriptive Writing, EFL Students, Error Analysis, Orthographic Challenges, Spelling Errors

INTRODUCTION

Writing is widely recognized as one of the most complex skills in English as a Foreign Language learning (Hapsari et al., 2022). This complexity arises because writing requires not only mastery of vocabulary and grammar but also precision in mechanical aspects such as punctuation and spelling. According to Masagus and Syahri (2022), learners must integrate these multiple linguistic components simultaneously, a task that is often challenging as it requires balancing creative thinking with strict adherence to formal rules. Furthermore, beyond generating and organizing ideas, accuracy at the word level remains critical, particularly in spelling (Haryadi & Aminuddin, 2023). In many cases, even when students have a thorough grasp of the topic, their inability to master these technical details can significantly hinder the overall quality and clarity of their work. Despite its importance,

writing development remains a significant hurdle for Indonesian EFL learners, who often encounter various linguistic and cognitive challenges (Batubara & Fithriani, 2023). These difficulties frequently manifest in the form of mechanical inaccuracies, such as spelling errors, which can hinder the clarity of the students' descriptive texts.

In EFL classes in Indonesia, students are usually introduced to various text genres, including descriptive writing, as a mandatory part of the secondary school curriculum (Anggraeni, 2022). Descriptive texts require students to present detailed and organized information about a person, place, or object (Febriani, 2024). While the main goal is to convey a clear mental image to the reader, the effectiveness of a description heavily depends on the student's ability to choose the right words. Although its structure is relatively simple, this genre demands high linguistic precision and the use of appropriate vocabulary (Muman & Rahayu, 2025). In practice, however, the simplicity perceived in descriptive writing often leads students to underestimate the importance of technical accuracy, especially in how they construct sentences. The fundamental role of vocabulary in writing has been extensively documented. For instance Ismayanti et al. (2021) found a significant correlation between vocabulary mastery and students' success in constructing descriptive texts at the junior high school level. This suggests that spelling errors as a subset of vocabulary and mechanical skills could be a primary factor hindering the writing quality of senior high school students as well. This indicates that the gap between understanding descriptive concepts and accurately implementing them in written form remains a significant barrier for many Indonesian students.

Both research and instruction often neglect spelling, one of the many facets of writing (Imtiaz et al., 2023). Educators often prioritize higher-level skills such as content creation and organization over language mechanics (Pratama et al., 2026). This educational gap frequently leads to the misunderstanding that the technical correctness of particular phrases is unimportant as long as the meaning is communicated. Spelling errors are often dismissed as minor surface-level mistakes; however, evidence suggests that proficient spellers implicitly apply 'morpho-graphic' regularities to mark grammatical functions (Heyer, 2021). Therefore, these errors reflect the degree of a learner's experience and their ability to deduce complex rules from language input. But ignoring these mistakes as simple "slips of the pen" hinders a more thorough comprehension of the pupils' true phonetic and morphological difficulties. This viewpoint undervalues how crucial spelling is to preserving accuracy and clarity in written communication (Yani et al., 2025). To guarantee that EFL learners can generate competent and understandable academic works, it is imperative that the emphasis be returned to these basic mechanics.

The intricacy of English spelling adds to students' writing challenges (Almaiman, 2024). It is difficult for students to accurately encode words since English spelling exhibits an uneven relationship between sounds and letters (AlAmir, 2026). Despite the irregularity of English phoneme-grapheme correspondences, this inconsistency frequently puts students in a "phonetic trap" where they try to spell words exactly as they hear them. As a result, when writing in English, EFL students frequently use phonetic methods (Almurashi, 2023). Although these techniques are a normal element of learning, they frequently result in systematic errors that impede the growth of professional writing. This dependency often

leads to spelling mistakes such as omission, substitution, addition, and transposition (Khalifa & Abusrafa, 2023). By categorizing errors into these four distinct categories, we can pinpoint the specific areas where students' phonological awareness or morphological knowledge falters, thereby establishing a foundation for more effective corrective feedback.

Spelling mistakes made by EFL learners in various settings have been the subject of an increasing amount of research (Sabtan & Elsayed, 2019). According to these studies, substitution and omission are the most common types of errors (Muhassin et al., 2020). Spelling errors in students' descriptive texts are often more than technical carelessness. In line with the argument of Kahn-Horwitz and Harel (2026), Phonological difficulties and limited vocabulary are often closely related to the emergence of these spelling errors. Although these results offer a useful starting point, prior research has a clear tendency to stop at the superficial level of error identification. Despite the consistency of these results, the majority of the work currently in publication is descriptive in nature, concentrating mostly on detecting and measuring different kinds of errors without offering adequate explanations of the underlying cognitive processes. As a result, these studies constrain their instructional uses by not fully understanding why particular error patterns persist among learners across many contexts (Putra et al., 2024). This restriction draws attention to a critical gap since it is insufficient to merely comprehend "what" the errors are without also understanding "how" they appear in particular learning settings. To close this gap and offer more useful suggestions for classroom instruction, a more focused and thorough analysis is needed.

Although previous studies have identified common spelling errors such as omission and substitution, most of them remain limited to descriptive classification without providing deeper explanations of the underlying linguistic and cognitive processes. Furthermore, existing research rarely examines spelling errors within specific writing genres, particularly descriptive writing, where learners must simultaneously manage content development and linguistic accuracy. As a result, it remains unclear how spelling errors are systematically produced in such contexts and how they reflect learners' language development. This limitation highlights the need for a more focused and explanatory analysis.

A critical limitation of previous research lies in the lack of context-specific and genre-based analysis (Fakhrudin et al., 2023). While many studies examine spelling errors in isolated tasks, Yahrif et al. (2025) highlight the importance of analyzing errors through authentic written tasks within the classroom setting to better understand students' linguistic development. Furthermore, most studies rely heavily on quantitative approaches with limited attention to the deeper cognitive and linguistic processes. As Masruddin & Nasriandi (2022) argue, writing is a complex activity that inherently involves cognitive processes, which are often overlooked in purely descriptive or quantitative error counts. This quantitative dominance often obscures the individual nuances of why certain students struggle more than others with specific word structures, such as their varying levels of language proficiency, prior knowledge, and personal learning experiences. It is crucial to investigate novel approaches to improve spelling abilities because traditional spelling training frequently lacks engagement and contextual relevance. English songs provide an engaging, multimodal strategy that enhances both cognitive and emotional learning

characteristics when incorporated into spelling teaching, as suggested by (Fatwassani et al., 2025).

While students may master the macro-structural organization of a specific genre, significant gaps often remain in their micro-linguistic competence. As Simanjuntak & Tambunan (2025) point out, even after receiving genre-based instruction, learners frequently struggle with grammatical realizations such as misinformation and omission, which can compromise the clarity of their written instructions. Descriptive writing in EFL classrooms remains underexplored in terms of how spelling errors are produced and distributed (Sari, 2022). While students may understand the descriptive concept, their focus on vivid description often leads to a lapse in mechanical precision, resulting in frequent spelling errors that can hinder the overall quality of their writing. Classifying errors can provide insight into the cognitive-linguistic factors that contribute to spelling difficulties (Cidrim et al., 2024). Addressing this gap is essential for developing more effective and targeted instructional strategies. By bridging these aspects, educators can move beyond simple correction toward more preventive teaching methods that not only address spelling errors but also enhance students' overall linguistic understanding and skills.

From a theoretical perspective, this study is grounded in the concept of interlanguage proposed by Selinker (1972), which explains that second language learners develop a transitional linguistic system influenced by both their first language and the target language. Within this framework, learner errors are not random but systematic and meaningful, reflecting the learners' current stage of language development. Therefore, spelling errors should be interpreted as part of an evolving linguistic system rather than merely mechanical inaccuracies. Therefore, this study aims to analyze spelling errors in students' descriptive writing through a cognitive-orthographic lens. Specifically, this research seeks to address the following questions:

1. What are the most frequent types of spelling errors classified into omission, addition, substitution, and transposition found in Indonesian EFL students' descriptive writing?
2. How do these error patterns reflect the learners' developing interlanguage system and the specific phonetic and orthographic challenges they encounter?

By addressing these questions, this study provides a more comprehensive understanding of students' spelling difficulties compared to previous descriptive research. We anticipate that the findings will contribute to EFL writing research and provide practical pedagogical insights for enhancing spelling instruction in classroom practice.

METHODS

Research Design

This study employed a descriptive qualitative research design using an error analysis approach to investigate spelling errors in descriptive writing produced by Indonesian EFL students. The study focused not only on identifying the types and frequency of spelling errors but also on exploring the linguistic and cognitive factors underlying these errors. Since spelling errors may reflect students' developing interlanguage system and their strategies in

processing English orthography, the study combined quantitative frequency analysis with qualitative interpretation. Through this approach, the researcher aimed to provide a more comprehensive understanding of how spelling difficulties occur in authentic classroom writing contexts.

The error analysis framework in this study was adapted from the Surface Strategy Taxonomy proposed by Dulay, Burt, and Krashen, which categorizes errors into omission, addition, substitution, and transposition. This framework was selected because it allows systematic identification and classification of spelling patterns commonly found in EFL learners' writing. In addition, the study incorporated cognitive and linguistic perspectives to interpret how students' spelling errors were influenced by phonological interference, orthographic confusion, and first language (L1) transfer.

Participants

The participants of this study were 24 eleventh-grade students from SMA Muhammadiyah Kutoarjo, Indonesia. The students were between 16 and 17 years old and had previously studied descriptive texts as part of their English learning curriculum. The participants were selected using purposive sampling because they met the criteria relevant to the objectives of the study, particularly their experience in writing descriptive texts in English.

The participants represented intermediate-level EFL learners who regularly engaged in English writing activities in the classroom. After collecting and reviewing the students' written texts, the researcher identified 16 students who produced spelling errors relevant to the focus of the study. From these texts, a total of 39 spelling error occurrences were identified and analyzed. The selection of these participants and error samples was intended to provide authentic data regarding students' spelling difficulties within a real classroom learning context.

Instruments

The primary instrument used in this study was a writing test designed to elicit authentic examples of students' spelling performance in descriptive writing. In the test, students were asked to write a descriptive text on familiar and personally meaningful topics, such as describing a person, favorite place, pet, or object. The use of familiar topics was intended to help students focus on expressing ideas naturally while allowing the researcher to observe their spontaneous spelling production without excessive cognitive pressure from unfamiliar content.

The writing prompts were developed based on the eleventh-grade English curriculum used at the school. To ensure content validity, the prompts were reviewed and evaluated by an English teacher experienced in teaching EFL writing at the senior high school level. The evaluation focused on several aspects, including clarity of instructions, suitability of the

topics for students' proficiency levels, and relevance to the learning objectives of descriptive writing.

The writing test was chosen because it allowed the researcher to collect natural written language data directly from students rather than relying on isolated vocabulary exercises or multiple-choice tests. As a result, the instrument provided more authentic evidence of spelling difficulties occurring in meaningful writing contexts.

Data Collection

The data collection process was conducted in a controlled classroom environment to maintain consistency during the writing activity. Before conducting the study, the researcher first obtained formal permission from the school administration and coordinated with the English teacher regarding the schedule and implementation of the research.

During the writing session, students were instructed to write a descriptive text individually within a fixed amount of time. To ensure that the collected data reflected the students' actual spelling ability and orthographic knowledge, students were not allowed to use dictionaries, mobile phones, translation applications, grammar-checking tools, or other digital assistance during the writing process. This procedure was intended to minimize external support and encourage students to rely solely on their existing knowledge of English spelling and vocabulary.

The researcher monitored the classroom activity during the writing session to ensure that all students followed the instructions properly. After the allotted time ended, all students' written texts were collected for analysis. The texts were then coded and organized systematically to facilitate the identification and classification of spelling errors.

Procedure

The research procedure consisted of several stages. In the first stage, the researcher prepared the research instruments, developed the writing prompts, and obtained administrative permission from the school. The researcher also consulted with the English teacher to ensure that the writing topics and procedures were appropriate for the students' level and classroom context.

In the second stage, the writing test was administered to the participants during their regular English class. Before the activity began, students received instructions regarding the writing task, including the topic, time allocation, and classroom rules. Students were informed that the activity was intended for research purposes and that their responses would remain confidential.

In the third stage, all collected texts were compiled and reviewed carefully. The researcher identified words containing spelling errors and categorized them according to the Surface Strategy Taxonomy. The identified data were then organized into tables and analytical categories for further quantitative and qualitative analysis.

Data Analysis

The data analysis followed an error analysis framework combined with linguistic and cognitive interpretation. The analysis process consisted of several systematic stages.

First, the researcher conducted error identification by carefully reading all students' descriptive texts to locate words containing spelling inaccuracies. Each misspelled word was underlined and recorded in a data classification sheet.

Second, the identified errors were classified into four categories based on the Surface Strategy Taxonomy: omission, addition, substitution, and transposition. Omission refers to the deletion of required letters, addition refers to unnecessary insertion of letters, substitution refers to the replacement of correct letters with incorrect ones, and transposition refers to incorrect ordering of letters. To improve the reliability of the classification process, a second rater independently reviewed the identified errors and classifications. Any disagreements were discussed until agreement was reached.

Third, the frequency of each type of spelling error was calculated quantitatively using the following formula:

$$P = (F / N) \times 100$$

where P represents the percentage of each error type, F refers to the frequency of a particular error type, and N refers to the total number of spelling errors identified in the data. The quantitative findings were then presented in tables and visual charts to illustrate the distribution of spelling errors clearly.

In addition to quantitative analysis, the study also employed qualitative interpretation to explore the linguistic and cognitive factors influencing students' spelling performance. The researcher analyzed how spelling errors reflected phonological interference from Indonesian, difficulties in English orthographic patterns, reliance on phonetic spelling strategies, and instability in students' orthographic memory. To maintain clarity and conciseness, 20 representative error samples were selected from the total 39 identified errors for deeper qualitative analysis. These examples were examined to explain how students' spelling patterns reflected their interlanguage development and cognitive processing in learning English orthography.

Ethical Considerations

This study adhered to ethical principles concerning research involving human participants. Prior to conducting the study, approval was obtained from the school administration. Students were informed about the purpose of the research and the procedures involved before participating in the writing activity. Participation in the study was voluntary, and students were assured that the results would be used solely for academic purposes.

Although students' names were collected for administrative documentation during data collection, all personal identities were kept confidential throughout the analysis and

reporting process. The researcher ensured that no identifying information appeared in the presentation of findings, thereby protecting the privacy and anonymity of all participants.

RESULTS

Frequency and Distribution of Spelling Error Types

Table 1. Distribution of spelling errors

Type of Error	Frequency (f)	Percentage (%)
Omission	15	38.46%
Substitution	12	30.77%
Addition	8	20.51%
Transposition	4	10.26%
Total	39	100%

Based on the table above, it can be seen that Omission is the most frequent type of spelling error committed by Indonesian EFL students in their descriptive writing, accounting for 38.46% (15 errors). This is followed by Substitution with 30.77% (12 errors) and Addition with 20.51% (8 errors). Meanwhile, Transposition is found to be the least frequent type of error, with only 10.26% (4 errors) of the total 39 identified errors. These findings indicate that students most commonly struggle with missing letters, particularly when dealing with complex English vowel clusters or silent letters that are not present in their native language's phonetic system.

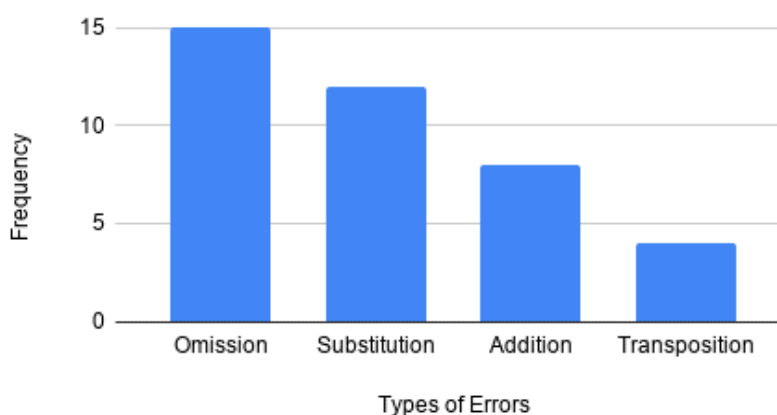


Figure 1. Distribution of spelling error types in students' descriptive writing

As illustrated in Figure 1, the visual representation of the data confirms that Omission is the most frequent type of spelling error committed by the students, with a total of 15 occurrences. This is followed by Substitution (12 occurrences) and Addition (8 occurrences). Transposition appears to be the least frequent error, with only 4 occurrences. The significant height of the 'Omission' bar indicates a strong tendency among Indonesian EFL learners to

simplify English word structures by omitting letters that they perceive as phonetically silent or redundant.

Analysis of Phonetic and Orthographic Challenges in Students' Interlanguage System

Due to space constraints and to ensure conciseness in the presentation of the findings, Table 2 displays 20 representative samples of the identified errors rather than the total 39 occurrences. These samples were strategically selected to illustrate the most significant phonetic and orthographic challenges encountered by the students across all four error categories.

Table 2. Qualitative analysis of students' spelling error patterns

No	Student's Word	Correct Form	Error Type (RQ 1)	Student's Writing Context	Phonetic & Orthographic Challenges (RQ 2)	Reflection of Interlanguage System
1	Introduce	Introduce	Omission	"...introduce my name uma pandita."	Silent Letter Awareness: The final 'ce' is phonetically silent.	Learners simplify L2 orthography by only representing audible sounds.
2	Troble	Trouble	Omission	"...when aim in troble."	Vowel Digraph Complexity: Failure to recognize the 'ou' combination.	Cognitive reduction; removing letters perceived as phonetically redundant.
3	Dellicious	Delicious	Addition	"...smell of dellicious food."	Overgeneralization: Incorrectly applying double consonant rules.	Learners experiment with L2 rules but lack precision in their application.
4	Speacialties	Specialties	Addition	"...local speacialties at affordable prices."	Vowel Insertion: Adding 'a' to simplify complex vowel clusters.	An attempt to make L2 words conform to more familiar phonetic patterns.
5	Parple	Purple	Substitution	"...the color parple and likes snacks."	Phonetic Interference: Mapping the /ə/ sound to 'a' based on L1 logic.	Reliance on L1 (Indonesian) phonology to compensate for L2 vowel inconsistency.
6	All waish	Always	Substitution	"she all waish..."	Acoustic Segregation: Breaking a word based on perceived breath pauses.	Processing words as auditory units rather than fixed orthographic strings.
7	Accopanis	Accompanies	Substitution	"accopanis me when..."	Consonant Displacement: Replacing 'm' with 'p'	Instability in visual memory for long, morphologically complex L2 words.

					due to articulatory proximity.	
8	Diefferent	Different	Transpositio n	"...But have diefferent blood."	Sequential Processing Error: Confusion over 'i-e' vs 'e-i' vowel order.	Visual memory is unstable despite knowing the required letter components.
9	Whit	With	Transpositio n	"Cat Often Playing whit me..."	Orthographic Displacement: Swapping the positions of 'i' and 'h'.	Performance error; failure in the cognitive execution of letter sequencing.
10	Laenly	Lonely	Transpositio n	"...in troble and laenly."	Phonological-Graphic Conflict: Using 'ae' to represent the /ou/ sound.	Creative interlanguage strategy to represent foreign sounds with known letters.
11	Clening	Cleaning	Omission	"...and clening his little box."	Vowel Digraph Reduction: Omitting 'a' in the 'ea' combination.	Simplifying vowel clusters to a single letter representing the long /i:/ sound.
12	Daya	Day	Addition	"...during the daya."	L1 Open Syllable Pattern: Adding a vowel to match Indonesian word structures.	Transfer of L1 (Indonesian) phonotactic rules into L2 word construction.
13	Succesful	Successful	Omission	"...the most succesful."	Consonant Gemination: Difficulty remembering which consonant is doubled.	Transition stage in mastering the "Deep Orthography" of English.
14	Easilly	Easily	Addition	"Fish can swim easilly."	Morphological Overgeneralization: Incorrectly doubling 'l' in the adverb suffix.	Over-application of morphological rules without considering spelling exceptions.
15	Haped	Shaped	Omission	"...that is haped into long."	Cluster Reduction: Omitting the initial 's' in the 'sh' cluster.	Difficulty capturing complex consonant clusters not present in L1.
16	Serued	Served	Substitution	"...can be serued in soup."	Graphic Substitution: Visual similarity between 'v' and 'u'.	Confusion in processing orthographic symbols with similar shapes or sounds.
17	Foid	Food	Substitution	"...this foid is popular."	Visual Retrieval Failure: Confusing 'oo' with the 'oi' digraph.	Cognitive failure in retrieving the mental lexicon of

						common base words.
18	Rebit	Rabbit	Substitution	"...my pet is rebit."	Auditory-to-Graphic Mapping: Writing 'e' for /æ/ based on hearing.	Interlanguage dominated by auditory perception over visual word memory.
19	Vegeteble	Vegetable	Substitution	"...rotten vegeteble."	Schwa Sound Ambiguity: Confusion in spelling unstressed vowels.	Vulnerability of the spelling system to English sounds that lack clarity.
20	Humbel	Humble	Substitution	"...she very humbel."	Phonetic Consistency: Adapting the word-ending to a phonetic spelling.	Aligning L2 spelling with the most familiar phonetic system (L1).

The data presented in Table 2 provides a qualitative overview of the spelling errors identified in the students' descriptive writing. Each entry illustrates how specific linguistic challenges ranging from phonetic interference to orthographic complexity manifest in actual writing contexts. Although the table only highlights 20 selected cases for the sake of brevity, these examples effectively represent the broader patterns observed in the total 39 errors. They serve as a clear indication of the students' ongoing transition within their interlanguage system, where they actively negotiate the rules of English orthography while still being influenced by their native language's phonetic consistency.

DISCUSSION

The findings of this study provide concrete evidence that spelling errors among Indonesian EFL (English as a Foreign Language) students are not merely mechanical oversights, but rather the result of complex cognitive and linguistic processes. Based on an analysis of 39 errors found in students' descriptive texts, this discussion highlights how these error patterns relate to EFL spelling theories. The results indicate that omissions (the deletion of letters) are the most frequent type of error (38.46%). This reinforces the argument regarding the complexity of English orthography, where students often fall into "phonetic traps" by prioritizing heard sounds over written rules. For example, the omission of silent letters in the word "introdue" (introduce) and the simplification of vowel combinations in "clening" (cleaning) and "troble" (trouble) align well with the findings of Muhassin et al. (2020) and Khalifa & Abusrafa (2023). Students tend to omit letters considered to have no phonetic function. This confirms that when writing descriptive texts that demand high creativity (Anggraeni, 2022; Febriani, 2024), students' cognitive resources are depleted, leading to the neglect of spelling accuracy. This condition demonstrates that students' mental representations of spelling are still in a transitional phase, where they prioritize "comprehensible meaning" over "technical accuracy" (Imtiaz et al., 2023; Pratama et al., 2026).

In addition, the high rate of substitution (letter replacement) 30.77% indicates the strong influence of the phonology of the students' native language (Indonesian). The data

show that Indonesian sounds are mapped onto English words, as in the words “parple” for “purple” and “rebit” for “rabbit.” Here, students use L1 sound logic to guess inconsistent English spellings. In line with the theories of Russak (2020) and Yani et al. (2025), these errors reflect students’ survival mechanisms when facing the complex (opaque) English spelling system. The substitution of the letter ‘f’ for ‘v’ in the word “faforit” and the phonetic adaptation in “humbel” (humble) demonstrate the application of Interlanguage theory (Selinker, 1972), where students create an intermediate language system influenced by the rules of their native language. Interestingly, when compared to the views of Selvaraja & Yacob (2026), this study found the phenomenon of “safe words”: students are able to spell simple words well, but their accuracy drops immediately when attempting more difficult descriptive vocabulary such as “vegetable” or “accopanis.”

Errors in addition (20.51%) and transposition (10.26%) indicate that students are actively experimenting with English language rules. Errors such as “dellicious” and “easily” indicate overgeneralization of the double-consonant rule, a stage of linguistic development also noted by (Heyer, 2021). On the other hand, letter position errors (transpositions) such as in the words “whit” (with) and “diefferent” (different) indicate a failure of students’ visual memory to recall the correct word forms. This phenomenon is exacerbated by reliance on digital tools (cognitive offloading), where, according to Yusuf et al. (2025), excessive use of technology can hinder the formation of long-term spelling memory. To bridge this gap, multimodal learning strategies are needed, such as the use of songs suggested by Fatwassani et al. (2025) to strengthen students’ visual and auditory memory of difficult words like “specialties.”

A more in-depth analysis revealed one finding: there was one student with special learning needs who alone accounted for 9 spelling errors, including an omission in the word “haped” (shaped) and a transposition in “laenly” (lonely). This supports Kahn-Horwitz & Goldstein (2024) argument that each individual’s cognitive profile significantly determines their literacy skills. Although this study has limitations regarding sample size (24 students), an in-depth analysis of each misspelled word provides a more concrete and data-grounded perspective compared to mere statistical figures. In line with the recommendations of Putra et al. (2024) and Fakhruddin et al. (2023), future research should expand the sample size; however, the current findings are sufficient as a foundation for teachers to design more inclusive spelling instruction that is mindful of students’ cognitive barriers in EFL classrooms.

CONCLUSION

This study concludes that spelling errors among EFL (English as a Foreign Language) students are a manifestation of the cognitive conflict between the creative demands of descriptive texts and the limitations of orthographic memory. The main findings, which show the dominance of Omission (38.46%) and Substitution (30.77%) errors, prove that students are still in the interlanguage transition stage, where they rely heavily on the phonetic logic of their native language (Indonesian) to process the inconsistent (opaque) English spelling system. The theoretical contribution of this study confirms that descriptive writing creates

a high cognitive load; students tend to sacrifice mechanical accuracy in pursuit of descriptive vocabulary variation.

In practical terms, this study offers strategic recommendations for EFL instruction to bridge this gap. First, teachers are advised to implement the Phonetic-Visual Mapping method, in which the relationship between sounds and graphic symbols (especially silent letters) is explicitly taught to help students avoid “phonetic traps.” Second, it is important to limit reliance on digital technology (such as auto-correct) through periodic handwriting practice to strengthen long-term spelling memory and prevent the phenomenon of cognitive offloading. Third, educators must adopt an inclusive approach that is sensitive to individual cognitive profiles, given the significant variation in learning barriers among students.

This study is limited by its sample size of 24 students from a single institution; therefore, generalizations of the findings should be made with caution. However, this limitation actually provides a deep, data-grounded qualitative foundation regarding the real challenges students face in the field. Future researchers are advised to expand the sample size and explore the effectiveness of multimodal interventions in stabilizing students’ mental representations of spelling across different educational levels.

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