



Analyzing Grammatical Errors Among Non-Native English Speakers in Higher Education

Pietra Dorand^{1*}, Muhamad Roihan², M. Farhan Maulana³, Choirul Basir⁴

¹⁻³Telkom University Jakarta, Indonesia

⁴Universitas Pamulang, Tangerang Selatan, Banten, Indonesia

*Corresponding Author: pietra@telkomuniversity.ac.id

Abstract. Accurate grammar mastery is a crucial foundation for non-native English-speaking students, directly influencing the clarity of academic writing and serving as a key indicator of proficiency. This study employs a Systematic Literature Review to comprehensively analyze EFL students' grammatical errors by identifying dominant error frequencies, examining native language interference through contrastive analysis, classifying patterns using the Surface Strategy Taxonomy, and formulating evidence-based pedagogical recommendations. Findings reveal that prepositions (95.7%), articles, and subject-verb agreement are the most dominant errors, primarily due to the lack of logical transparency. Negative L1 transfer from Spanish, Arabic, and Thai systematically distorts sentence structures, highlighting the need for contrastive instruction and enhanced metalinguistic awareness. Based on the Surface Strategy Taxonomy, omissions (74%) emerge as the most prevalent pattern, reflecting students' tendency toward structural simplification. These errors remain consistent across academic genres despite differing linguistic demands, underscoring the need for targeted feedback. The study concludes that prepositions, articles, and subject-verb agreement are critical areas requiring focused pedagogy, while systematic L1 transfer must be addressed through contrastive approaches. Dominant omissions provide a clear roadmap for material development, confirming that basic grammatical competence remains foundational to all academic tasks.

Keywords: Academic Writing; English as a Foreign Language (EFL) Students; Grammatical Errors; Native Language Interference; Surface Strategy Taxonomy.

1. INTRODUCTION

Accurate grammar mastery is a fundamental pillar of academic competence for non-native English-speaking students in higher education. This skill determines the clarity and credibility of academic writing including essays, research reports, and theses and serves as a critical benchmark of proficiency in academic evaluations. In this context, error analysis provides a crucial lens for understanding internal language learning processes, diagnosing persistent difficulties, and informing effective pedagogical practices. The scope of this study encompasses the identification, classification, and investigation of root causes of grammatical errors produced by English as a Foreign Language (EFL) learners in academic settings. Recent scholarships indicate a shift from mere error correction toward analytical and preventive approaches. A persistent challenge is the prevalence of specific errors, such as prepositions and articles, even among intermediate and advanced learners.

This issue is compounded by complex native language interference and limited exposure to authentic input. Current trends emphasize not only documenting error types but also examining their relationship with specific writing genres and developing intervention strategies based on linguistic error taxonomies to address bottlenecks in grammar mastery. Ideally, EFL college students should produce coherent, argumentative, and grammatically

accurate academic writing aligned with international standards. However, global empirical evidence reveals a starkly different reality. In synthesizing recent global cohorts, (Hakim, 2025) reported preposition errors at 95.7%, while (Zewitra & Fauziah, 2020) found omission errors as high as 74%. Cumulative global documentation further confirms that errors in basic grammatical elements remain systemic rather than random across various educational landscapes, frequently extending into high-stakes academic genres such as thesis abstracts and presentation tasks (Irawansyah, 2024). This gap between expectation and reality stems from multiple factors. The primary cause is strong first language (L1) interference, where native structures are imposed onto English, as widely documented among Arabic, Spanish, and Asian-language speakers. Additionally, classroom grammar instruction often remains deductive and decontextualized, providing insufficient opportunities for students to apply rules in authentic writing (Nurbolatova & Seidaliev, 2026). Internal factors, including limited practice, restricted vocabulary, and performance lapses, further perpetuate grammatical incompetence.

Although numerous studies have separately mapped error types or L1 influence, a critical research gap persists. Few studies holistically integrate four dimensions—specific error types, L1 interference, theoretical classification, and genre context—into a unified analytical framework across diverse global EFL populations. Previous research typically isolates one or two aspects within a single local context, failing to capture the dynamic interaction of causal factors in complex academic genres and modes, which impose distinct rhetorical and grammatical demands on different international cohorts.

Therefore, this study aims to conduct a comprehensive, integrated meta-synthesis of grammatical errors among EFL college students across international contexts. Building on prior findings, the specific objectives are to: (1) identify and map the frequency of dominant grammatical errors, including prepositions, articles, and subject-verb agreement, across various academic genres; (2) analyze native language influence and systematic catalysts as root causes of interlingual and intralingual interference; (3) classify error patterns using the Surface Strategy Taxonomy to reveal misguided learning strategies; and (4) formulate evidence-based, genre-specific pedagogical recommendations to enhance grammatical accuracy. The urgency of this research lies in the critical need to address EFL students' academic competency deficits that hinder scholarly success and participation in global academic discourse. The findings are expected to provide an empirical and strategic roadmap for institutions to revitalize grammar curricula and instructional methodologies, thereby equipping graduates with accurate, credible, and internationally benchmarked academic writing skills.

2. METHOD

This study employed a Systematic Literature Review (SLR) to identify, evaluate, and synthesize empirical evidence from scientific literature in a structured and replicable manner. The SLR approach was selected to minimize selection bias and to generate comprehensive, evidence-based conclusions that address specific research questions through a transparent process. The SLR procedure followed four systematic stages guided by the PRISMA 2020 framework: identification, screening, eligibility assessment, and inclusion.

First, in the identification stage, a comprehensive literature search was conducted across three major electronic databases: Google Scholar, Scopus, and Web of Science. The search strategy combined keywords relevant to grammatical errors, EFL learners, and academic writing, adapted to each database's syntax to maximize coverage. The initial search yielded 715 articles: 240 from Google Scholar, 295 from Scopus, and 180 from Web of Science. Prior to screening, duplicates and ineligible records were removed. A total of 142 duplicate articles, 11 records flagged by automation tools as inappropriate publication types such as conference abstracts, and 8 records removed for other reasons such as language barriers or retraction were excluded. This left 554 articles for screening.

Second, in the screening stage, titles and abstracts of the 554 articles were independently reviewed by two researchers to assess initial relevance based on predefined inclusion criteria. The criteria included: (1) empirical studies, (2) focus on grammatical errors in EFL higher education contexts, and (3) publication in peer-reviewed journals. At this stage, 408 articles were excluded due to mismatched topics, irrelevant populations, or non-empirical publication types such as editorials. The remaining 146 articles were sought for full-text retrieval. However, 34 articles could not be retrieved due to access restrictions or unavailability, resulting in 112 full-text articles assessed for eligibility.

Third, in the eligibility stage, the 112 full-text articles were evaluated in detail against the inclusion and exclusion criteria. Exclusion reasons included: topic irrelevance after full reading (n=25), inadequate methodological quality such as weak design or insufficient sample size (n=28), incomplete or unextractable outcome data (n=29), and inappropriate population characteristics (n=20). Any disagreements between reviewers were resolved through discussion and consensus.

Fourth, in the inclusion stage, 10 articles that fully met all criteria were included in the final synthesis. This represents 1.4% of the initial 715 records, reflecting a rigorous selection process to ensure methodological quality and relevance. Data from the 10 included studies were extracted using a standardized form covering study characteristics, methodology, error types,

and main findings. The extracted data were then synthesized narratively to address the research questions.

3. RESULTS AND DISCUSSION

Systematic Mapping of Empirical Studies

The distribution of grammatical errors, pedagogical contexts, and underlying causes across various global studies is comprehensively summarized in table 1.

Table 1. Systematic Mapping of Grammatical Error Analysis Studies.

No	Author (Year)	Participants	Skill & Genre	Most Frequent Error	Reported Main Cause
1	Hakim (2025)	University students	Writing	Prepositions 95.7%, Verb forms 84.3%, Articles 60%	L1 interference, grammar complexity, limited exposure
2	Congacha et al. (2024)	26 university students	Writing: compound sentences	Run-on sentences 75%, Subject omission 18.33%	L1 Spanish interference
3	Alnajjar & Hadwan (2024)	EFL students, Coll. of Education	Writing	Verbs 24%, S-V agreement 21%, Articles 19%	Negative transfer from Arabic, developmental factors
4	Hua & Zhang (2024)	College students	Writing: final comp.	Error types classified, no % specified	L1 interference, teaching methods
5	Al-Tawiti (2022)	EFL learners, Al-Dayer Univ.	Writing	Punctuation & Mechanical 32.7%, Most Serious Issues 26.9%	L1 Arabic interference
6	Anh et al. (2022)	Second-year English majors	Academic writing	S-V agreement 25.5%, Prepositions 14.2%, Verb tense 13.7%	Limited vocab, carelessness, rule uncertainty
7	Tarigan et al. (2022)	EFL students, UKIP	Writing: descriptive	S-V agreement, Punctuation & capitalization, Coherence	L1 interference, instructional feedback gaps
8	Sutakote (2024)	EFL students	Speaking	Formation errors 69.62%; S-V agreement 25.32%, Verb forms 17.72%	L1 interference
9	Zewitra & Fauziah (2020)	EFL students	Writing: final project	Surface strategy taxonomy: Omission 74%, Addition 1%, etc.	L1 interference
10	Purnamasari & Nugraha (2023)	EFL students, English 1 course	Writing: graph desc.	Surface strategy taxonomy: Omission 34.78%, Addition 31.88%	Low grammatical understanding

Sources: Data synthesized from the respective listed primary literature (2020–2025).

Theoretical Synthesis and Discussion

Extensive research across diverse global educational landscapes demonstrates that non-native English speakers consistently face severe challenges in mastering English grammar. As mapped in table 1, these studies span multiple geographical cohorts including Southeast Asia, the Middle East, and Latin America revealing that grammatical vulnerabilities transcend

specific geographical regions but are highly intertwined with the learners' native language (L1) typologies.

Linguistic analyses indicate that syntactic and morphological deviations remain the most pervasive errors across both productive skills. In writing domains, subject-verb (S-V) agreement and erroneous verb configurations represent a major structural hurdle, as explicitly documented among Vietnamese, Yemeni, and Indonesian undergraduates (Alnajjar & Hadwan, 2024; Anh et al, 2022; Tarigan et al., 2022). Recent empirical data underscores that these exact morphological deviations consistently corrupt the syntactic fluidity of paragraph structures in formal student essays (Hamdani, et.al., 2025). This pedagogical bottleneck extends heavily into oral production; (Sutakote, 2024) discovered that morphological formation errors dominated Thai EFL learners' speech at 69.62%, a finding corroborated by contemporary speaking performance evaluations showing that S-V and verb tense mismatches continuously compromise communicative clarity (Permatasari & Ningrum, 2026). Furthermore, word-level errors involving prepositions and articles heavily distort sentence accuracy, frequently fossilizing within critical summaries like thesis abstracts (Irawansyah, 2024). (Hakim, 2025) reported an overwhelming 95.7% error rate in preposition usage, while (Alnajjar & Hadwan, 2024) noted that 19% of Yemeni learners struggled with English articles.

When analyzed through established linguistic frameworks, these errors frequently present distinct structural patterns. Employing Dulay's surface strategy taxonomy, Indonesian researchers observed that "omission" of required linguistic elements represents the single most dominant error type in academic writing, ranging from 34.78% in graph descriptions to a striking 74% in final graduation projects (Purnamasari & Nugraha, 2023; Zewitra & Fauziah, 2020). Moving beyond word-level constraints, macro-structural and mechanical issues heavily compromise text quality. In Ecuador, (Congacha, 2024) determined that 75% of compound sentence errors stemmed from run-on sentences, showing poor mastery of punctuation. Similarly, (Al-Tawiti, 2022) highlighted that punctuation and mechanical constraints comprised the largest error share (32.7%) among Saudi Arabian learners, suggesting that macro-writing skills require equal instructional attention.

The empirical consensus across the mapped studies attributes these pervasive errors to two primary catalysts: interlingual and intralingual interference. In contemporary second language acquisition (SLA) literature, this structural dichotomy is continuously evaluated through the modernized lens of classical Error Analysis (EA) frameworks originally posited by Corder and Richards as cited in (Hashim, et.al., 2021; Zhang & Cheung, 2021). Under these

modern paradigms, errors are treated as dynamic manifestations of the learner's developing "interlanguage" and transitional linguistic competence, rather than mere behavioral failures.

Interlingual interference specifically negative transfer from the students' first language (L1) acts as a prominent barrier where the structural habits of the native tongue directly impede target language output as cited in (Gass, et. al., 2020). The distinct syntactic and typological boundaries of languages like Arabic (Alnajjar & Hadwan, 2024; Al-Tawiti, 2022) and Spanish (Congacha, 2024) directly misguide English construction. Contemporary contrastive analyses confirm that when structural differences between L1 and the target language are steep, persistent literal translation patterns trigger rigid grammatical deviations in writing tasks (Al-Khresheh, 2020). This deeply entrenched native language habits require highly systematic diagnostic tools and contrastive instructional intervention methods within the modern EFL classroom to break the cycle of fossilized errors (Nurbolatova & Seidaliyeva, 2026).

Concurrently, intralingual and developmental factors heavily compound these structural inaccuracies. As established in recent evaluations of target-language-induced errors, intralingual deviations occur completely independent of the native language and stem directly from the systemic complexity of the English rule system itself (Gass, et.al., 2020). This manifests primarily through overgeneralization and incomplete application of rule boundaries, explaining why abstract systems like article distribution and preposition configuration remain deeply problematic even for intermediate learners (Hakim, 2025). Modern SLA pedagogical frameworks demonstrate that this intralingual friction is critically exacerbated by student carelessness, lexical deficits, and a lack of authentic learning exposure in decontextualized classrooms (Anh et al, 2022; Brown & Lee, 2015; Hua & Zhang, 2024) taken together, this global evidence highlights an urgent need for contextualized syllabus redesigns, explicit grammar instruction, and proactive diagnostic feedback in higher education.

4. CONCLUSIONS AND RECOMMENDATIONS

This study conducted a comprehensive meta-synthesis of ten empirical papers published between 2020 and 2025 to map the landscape of grammatical errors made by university-level EFL learners globally. The synthesis confirms that grammatical vulnerabilities transcend geographic boundaries, with non-native speakers across Asia and South America consistently struggling with core morphological and syntactic structures. Syntactic distortions specifically subject-verb agreement and erratic verb tenses along with word-level misuses of prepositions and articles, emerge as the most pervasive errors across academic genres. Furthermore, when structural deviations are decoded via Dulay's Surface Strategy Taxonomy,

"omissions" represent the most dominant structural pattern, distorting the lexical integrity of student texts.

The empirical consensus underscores that these systematic errors are dictated by the dynamic interplay of interlingual and intralingual forces, aligning with classical error analysis paradigms. Structural differences in native languages (such as Arabic and Spanish) provoke severe negative transfer, while the intrinsic complexity of English grammar rules, paired with inadequate target language exposure, generates significant intralingual confusion. Ultimately, these systemic errors act as critical bottlenecks that diminish the clarity, credibility, and overall quality of EFL academic discourse in higher education.

The global patterns identified in this synthesis offer actionable insights for curriculum designers, educators, and institutions aiming to revitalize grammar instruction and mitigate systemic errors: **Transition to Contextualized Grammar Instruction:** Institutions must shift away from abstract, deductive grammar teaching. Grammar rules should be integrated directly into authentic writing tasks and target genres (e.g., proposal writing or data description) so students learn structures in context rather than in isolation. **Implementation of Contrastive Awareness Activities:** Instructors should explicitly address areas of high interlingual friction. By running proactive exercises that highlight the structural differences between the learners' native language (L1) and English, educators can help students anticipate and prevent negative transfer. **Linguistic Strategy Training against Omissions:** Since omission errors are highly prevalent, writing instructors should utilize targeted editing checklists based on the Surface Strategy Taxonomy. Training students to look specifically for omitted subjects, missing verbs, or dropped articles during peer-review sessions can drastically improve text accuracy. **Syllabus Redesign with Diagnostic Feedback:** Higher education curricula should incorporate diagnostic entry assessments to identify local grammatical bottlenecks early on. This data should drive the creation of targeted, genre-specific feedback loops and remedial writing workshops, moving teaching from reactive correction to proactive intervention.

REFERENCES

- Al-Khresheh, M. H. (2020). Re-examining the interlingual and intralingual grammatical errors of Arab EFL learners. *Journal of Psycholinguistic Research*, 49(4), 597–618. <https://doi.org/10.1007/s10936-020-09703-6>
- Alnajjar, A., & Hadwan, E. A. K. L. (2024). Investigation of common grammatical errors in writing: English as a foreign language students at the College of Education-Al Mahrah as a model. *Journal of the Faculty of Education*, 2024(1), 1–20.

- Al-Tawiti, A. (2022). Exploring grammatical errors in English writing made by EFL Saudi learners at Al-Dayer University College, Jazan University. *Journal of Language Teaching and Research*, 13(4), 812–824. <https://doi.org/10.17507/jltr.1304.18>
- Anh, N. T., Thu, N. T., & Huong, L. T. M. (2022). Grammatical errors in the academic writing of English second-year students. *Vietnam Journal of Educational Sciences*, 18(2), 45–56.
- Brown, H. D., & Lee, P. (2015). *Teaching by principles: An interactive approach to language pedagogy* (4th ed.). Pearson Education.
- Congacha Congacha, W. A., Colta Anrango, J. L., & Abata Checa, F. M. (2024). Análisis de errores en la generación de oraciones compuestas en la escritura de estudiantes universitarios [Error analysis in the generation of compound sentences in university students' writing]. *Revista Scientific*, 9(33), 23–44. <https://doi.org/10.29394/Scientific.issn.2542-2987.2024.9.33.1.23-44>
- Gass, S. M., Selinker, L., & Plonsky, L. (2020). *Second language acquisition: An introductory course* (5th ed.). Routledge.
- Hakim, N. A. (2025). Error analysis of grammar usage among non-native English speakers. *International Journal of Social Science and Human Research*, 8(8), 6221–6229. <https://doi.org/10.47191/ijsshr/v8-i8-42>
- Hamdani, M. S., Thohir, L., Putera, L. J., & Saputra, A. (2025). Analysis of students' errors and writing flow in descriptive paragraph written by the first semester students of English department at the University of Mataram. *Journal of Authentic Research*, 4(2), 114–128. <https://doi.org/10.36312/jar.v4i2.3633>
- Hashim, S. N. A., Nordin, M. N., Aris, H. Z., Ghani, N., & Amin, M. Z. M. (2021). Error analysis, interlanguage and second language acquisition. *Review of International Geographical Education Online*, 11(7), 1056–1065.
- Hua, Z., & Zhang, L. (2024). A study of common grammatical errors in college students' final English compositions. *Research on English Language Writing Education*, 17(1), 89–102.
- Irawansyah, I. (2024). An analysis of grammatical error on students thesis abstract: Frequency and percentage. *SCOPE: Journal of English Language Teaching*, 9(1), 74–82. <https://doi.org/10.30998/scope.v9i1.24730>
- Nurbolatova, Z., & Seidaliyeva, G. (2026). Methods of systematic analysis of grammatical errors in EFL learners: Organisation and classroom application. *International Scientific Research Conference Proceedings*, 282(1), 143–152.
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Thomas, C., Chandler, J., Cumpston, M., Li, T., Page, M. J., Welch, V. A., & Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *Systematic Reviews*, 10(1), 1–11. <https://doi.org/10.1186/s13643-021-01626-4>
- Permatasari, A. A. S. C., & Ningrum, I. A. F. (2026). An error analysis of grammatical errors in EFL students' speaking performance. *JELE: Journal of English Language and Education*, 11(1), 693–702.

- Purnamasari, D., & Nugraha, A. (2023). Grammatical errors in English in the interpretation of graphs in the English 1 course. *Indonesian Journal of EFL and Linguistics*, 8(2), 211–226. <https://doi.org/10.21462/ijefll.v8i2.671>
- Sutakote, C. (2024). Analysis of grammatical errors in English speaking of Thai EFL students. *Journal of Asia TEFL*, 21(1), 134–148. <https://doi.org/10.18823/asiatefl.2024.21.1.9.134>
- Tarigan, S., Simanjuntak, M., & Sitompul, E. (2022). Analisis kesalahan gramatikal pada tulisan deskripsi mahasiswa pendidikan bahasa Inggris [Analysis of grammatical errors in descriptive writing of English language education students]. *Jurnal Pendidikan Bahasa Inggris Indonesia*, 10(1), 12–25.
- Zewitra, H., & Fauziah, N. (2020). Grammatical errors in EFL students' final project writings. *Journal of English Language Pedagogy*, 5(2), 78–91. <https://doi.org/10.36665/jelp.v5i2.322>
- Zhang, L., & Cheung, O. (2021). Theoretical assumptions for error analysis in modern corpus linguistics. *Research on English Language Writing Education*, 14.