



# Grammatical Accuracy in Graph Description Among EFL Learners

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**Abstract.** *The ability to describe graphs accurately in English is an essential academic skill for EFL learners, particularly in higher education contexts where students are required to interpret and communicate visual data. However, many learners still experience difficulties in producing grammatically accurate graph descriptions. This study aims to investigate the level of grammatical accuracy demonstrated by EFL learners in graph description tasks and identify the grammatical aspects that require further improvement. Employing a descriptive qualitative approach, the research analyzed 30 samples of students' written graph descriptions produced by undergraduate learners. The analysis focused on several grammatical aspects, including subject–verb agreement, tense consistency, article usage, sentence structure, prepositions, and punctuation. The findings reveal that students frequently struggle with subject–verb agreement and article usage, while punctuation errors occurred less frequently. The study highlights that grammatical accuracy remains an important challenge for EFL learners in academic writing tasks involving data interpretation. Therefore, it is recommended that grammar instruction be integrated more intensively into graph description activities in English classes. The findings are expected to contribute to the development of more effective teaching strategies in academic writing instruction for EFL learners.*

**Keywords:** *Academic Writing; Efl Learners; English Grammar; Grammatical Accuracy; Graph Description.*

## 1. BACKGROUND

In academic contexts, the ability to interpret and describe graphical information is considered an essential writing skill. Students are frequently required to explain data presented in the form of bar charts, line graphs, pie charts, and tables in order to communicate information clearly and effectively. This skill is particularly important in higher education because graph description is commonly used in academic reports, presentations, research papers, and professional communication. Therefore, learners are expected not only to understand visual data but also to express the information accurately using appropriate grammatical structures (Wibowo et al., 2025; Secaresmi et al., 2025).

For English as a Foreign Language (EFL) learners, producing graph descriptions in English can be challenging. Many students encounter difficulties when organizing ideas into grammatically accurate sentences. In many cases, grammatical inaccuracies reduce the clarity and effectiveness of the information being conveyed. Problems related to subject–verb agreement, tense consistency, article usage, sentence structure, and prepositions frequently appear in students' writing. These grammatical issues indicate that learners may still struggle to apply English grammar appropriately in academic writing contexts. Prasetyo and Lestari (2021) highlighted that academic writing remains one of the most challenging skills for Indonesian EFL learners, particularly in organizing ideas and applying grammatical rules appropriately (Giri et al., 2025; Dewi et al., 2025).

Grammatical accuracy plays a significant role in successful academic writing. Accurate grammar helps learners communicate ideas clearly, systematically, and effectively. In graph description tasks, grammatical accuracy becomes particularly important because students are required to present numerical and visual information precisely. Inaccurate grammatical forms may cause misunderstanding and reduce the communicative quality of the writing. Consequently, improving grammatical accuracy should become an important focus in English language instruction, especially in academic writing courses (Setianingsih & Indriani, 2025).

Previous studies have investigated grammatical problems in EFL students' writing. Research has shown that learners commonly experience difficulties in maintaining tense consistency, applying correct sentence patterns, and using articles appropriately in academic writing tasks (Fitrawati & Safitri, 2021). Other studies also revealed that grammatical issues remain one of the major challenges faced by Indonesian EFL learners in producing effective written communication (Tambunan et al., 2022; Rizqullah et al., 2023). However, studies specifically focusing on grammatical accuracy in graph description tasks are still limited, particularly in Indonesian higher education contexts. Most previous research mainly analyzed grammatical errors in general writing activities rather than in data interpretation tasks such as graph descriptions.

Considering the importance of grammatical accuracy in academic communication, this study aims to investigate the grammatical accuracy demonstrated by EFL learners in graph description tasks. The study focuses on identifying grammatical aspects that students perform well in and those that still require improvement. Through this analysis, the research is expected to provide practical insights for lecturers and curriculum developers in designing more effective grammar instruction for academic writing courses.

## **2. LITERATURE REVIEW**

Grammatical accuracy is considered one of the essential components of successful academic writing in English as a Foreign Language (EFL) contexts. It refers to learners' ability to produce sentences that conform to the grammatical rules of the target language.

Accurate grammar contributes significantly to clarity, coherence, and effectiveness in written communication. In academic writing tasks, learners are expected to demonstrate sufficient control of grammatical structures such as subject–verb agreement, tense usage, article usage, sentence structure, and prepositions. However, many EFL learners still experience difficulties in applying these grammatical features consistently in their writing.

Previous studies have reported that grammatical inaccuracies remain one of the major problems faced by EFL learners. Fitrawati and Safitri (2021) found that students frequently struggle with tense consistency, sentence construction, and subject–verb agreement in academic writing tasks. Similarly, Tambunan et al. (2022) revealed that grammatical problems continue to appear in Indonesian EFL students' writing despite the use of automated writing feedback tools. These findings indicate that grammatical competence remains an important issue in English language learning, particularly in academic writing contexts. In addition, Monny and Pratiwi (2022) found that grammatical errors frequently appear in EFL learners' writing, particularly in sentence construction and grammar usage. Similarly, Mubarok and Budiono (2022) emphasized that grammatical problems remain one of the major challenges in English academic writing among Indonesian learners. Aziz et al. (2020) also found that grammatical inaccuracies frequently appear in EFL students' academic writing and may affect the clarity and effectiveness of communication.

In higher education, graph description has become an important academic writing activity because students are often required to interpret and communicate visual data in written form. Graph description tasks involve explaining trends, comparisons, percentages, and changes presented in charts or graphs. To produce effective graph descriptions, students need not only analytical skills but also adequate grammatical competence. Without grammatical accuracy, the information presented may become unclear and difficult to understand. Lee (2019) stated that graph description activities help students develop academic writing skills through visual data interpretation. Through graph description tasks, learners are encouraged to transform numerical data into meaningful written explanations using appropriate grammatical structures.

Several studies have highlighted that EFL learners commonly encounter difficulties when describing data in English. Problems related to article usage, tense consistency, sentence structure, and prepositions frequently appear in students' graph descriptions and descriptive writing tasks (Rizqullah et al., 2023). These grammatical issues may reduce the clarity and communicative quality of the writing. Therefore, grammatical accuracy plays a crucial role in ensuring that visual information can be communicated effectively in academic contexts. Firdausi (2022) explained that grammatical error analysis remains important in understanding learners' writing difficulties in academic contexts.

Although numerous studies have discussed grammatical problems in EFL writing, research specifically focusing on grammatical accuracy in graph description tasks remains limited, particularly in Indonesian higher education settings. Most previous studies mainly

focused on general writing activities rather than academic data interpretation tasks. Therefore, this study aims to investigate the grammatical accuracy demonstrated by EFL learners in graph description writing in order to provide deeper insights into students' grammatical performance in academic writing contexts.

### **3. RESEARCH METHODOLOGY**

This study employed a descriptive qualitative research design to investigate the grammatical accuracy demonstrated by EFL learners in graph description writing tasks. The descriptive qualitative approach was considered appropriate because the study aimed to explore and describe the grammatical features found in students' written work in detail. Through this approach, the researcher was able to identify common grammatical patterns and examine the areas in which students still experienced difficulties when describing graphs in English.

The participants of this study consisted of 30 undergraduate students from Universitas Amikom Purwokerto who were enrolled in an English course. The participants were selected purposively because they had experience in completing graph description tasks as part of their academic writing activities. These students represented EFL learners who were still developing their academic writing competence, particularly in relation to grammatical accuracy.

The data were collected from students' written assignments in which they were instructed to describe several types of graphs, including bar charts, line graphs, and pie charts. The graph description tasks required students to interpret visual data and explain the information using English sentences. The students' written texts served as the primary data source for the analysis.

The collected data were analyzed by examining the grammatical accuracy of the students' writing. The analysis focused on several grammatical aspects, namely subject-verb agreement, tense consistency, article usage, sentence structure, prepositions, and punctuation. Each sentence produced by the students was carefully examined in order to identify grammatical inaccuracies. The identified grammatical problems were then categorized based on the grammatical aspects being analyzed.

To ensure the trustworthiness of the findings, the researcher conducted repeated readings of the students' written texts during the analysis process. The researcher also compared the identified grammatical issues with standard English grammatical rules to maintain consistency and accuracy in the interpretation of the data.

The findings of this study are expected to provide insights into the grammatical performance of EFL learners in graph description tasks and contribute to the development of more effective grammar instruction in academic writing courses.

#### 4. RESULTS AND DISCUSSION

##### Research Result

The data for this study were collected from students' graph description assignments conducted during the academic writing course at Universitas Amikom Purwokerto. The data collection process was carried out during the 2025 academic year. Students were instructed to analyze and describe several types of graphs, including bar charts, line graphs, and pie charts, using English written explanations. The collected data were then analyzed to investigate the grammatical accuracy demonstrated in students' graph descriptions. Table 1 presents the frequency of grammatical inaccuracies identified in the students' writing.

**Table 1.** Frequency of Grammatical Inaccuracies in Students' Graph Descriptions.

No	Grammatical Aspect	Frequency
1	Subject–Verb Agreement	18
2	Article Usage	15
3	Tense Consistency	13
4	Sentence Structure	11
5	Prepositions	7
6	Punctuation	5
	<b>Total</b>	<b>69</b>

Based on Table 1, subject–verb agreement appeared as the most frequent grammatical issue found in students' graph descriptions. Meanwhile, punctuation errors occurred less frequently compared to other grammatical aspects. The following sections discuss each grammatical aspect in detail.

##### Subject–Verb Agreement

Subject–verb agreement was identified as the most common grammatical problem in students' writing. Many learners used singular verbs with plural subjects or plural verbs with

singular subjects. This issue indicates that students still experience difficulties in applying basic grammatical rules consistently.

Example:

“The number of students increase every year.

Correct form:

“The number of students increases every year.”

This finding suggests that learners may still have limited understanding of the relationship between subjects and verbs in English sentence construction. In graph description tasks, subject–verb agreement is important because inaccurate verb forms may reduce sentence clarity and grammatical correctness.

This result is consistent with Fitrawati and Safitri (2021), who found that subject–verb agreement remains one of the major grammatical challenges experienced by EFL learners in academic writing activities. Rusmiati (2021) also reported that subject–verb agreement errors frequently occur among Indonesian EFL learners, particularly in academic writing activities.

### **Article Usage**

Article usage was identified as another frequent grammatical issue in students’ graph descriptions. Many students omitted articles such as “a,” “an,” and “the,” or used them incorrectly within sentences.

Example:

“Graph shows increase in population.”

Correct form:

“The graph shows an increase in population.”

This problem may occur because article systems in English differ significantly from the students’ first language. As a result, learners may struggle to determine when articles should be used appropriately in academic writing.

The findings support previous research conducted by Rizqullah et al. (2023), which reported that article omission frequently appears in descriptive writing tasks among EFL learners.

### **Tense Consistency**

Tense inconsistency was also commonly found in students’ graph descriptions. Several learners mixed present tense and past tense forms within the same sentence or paragraph when explaining data trends.

Example:

“The sales increased in 2020 and rise again in 2021.”

Correct form:

“The sales increased in 2020 and rose again in 2021.”

This inconsistency may confuse readers and reduce the coherence of the writing. In graph description activities, tense usage is particularly important because students often explain changes occurring over different periods of time.

This finding is in line with Tambunan et al. (2022), who found that tense inconsistency remains a common grammatical problem among Indonesian EFL students.

### **Sentence Structure**

Several students also demonstrated difficulties in constructing complete and grammatically appropriate sentences. Some learners produced incomplete sentences or awkward sentence constructions.

Example:

“The highest percentage in 2022.”

Correct form:

“The highest percentage was recorded in 2022.”

These structural problems affected the clarity and readability of the graph descriptions. Effective sentence construction is important in academic writing because readers rely on clear and complete explanations to understand the presented information.

### **Prepositions**

Preposition usage was another grammatical aspect that caused difficulties for students. Some learners used inappropriate prepositions when describing numerical changes or comparisons in graphs.

Example:

“The percentage increased on 20%.”

Correct form:

“The percentage increased by 20%.”

Although the frequency of preposition errors was lower than other grammatical issues, these inaccuracies still affected the grammatical quality of the students' writing.

### **Punctuation**

Punctuation errors occurred less frequently compared to other grammatical aspects. However, several students still omitted commas or periods in their graph descriptions.

Proper punctuation is important because it helps readers understand sentence boundaries and improves the readability of academic writing. Although punctuation errors may appear minor, they can still influence the overall clarity of written communication.

The findings of this study indicate that grammatical accuracy remains a significant challenge for EFL learners in graph description tasks. Subject–verb agreement, article usage, and tense consistency emerged as the most problematic grammatical aspects in students' writing. These findings demonstrate that learners still experience difficulties in applying English grammatical rules consistently when interpreting and presenting visual data.

The results of this study are consistent with several previous studies discussing grammatical problems in EFL writing. Fitrawati and Safitri (2021) emphasized that grammatical competence remains an important issue in academic writing instruction. Similarly, Tambunan et al. (2022) and Rizqullah et al. (2023) found that grammatical inaccuracies frequently appear in Indonesian EFL students' descriptive writing tasks. Wang (2020) explained that grammatical errors may reflect learners' developmental stages in second language acquisition. In addition, Wijayanti and Putra (2023) found that guided feedback can help improve students' grammatical accuracy in academic writing activities. Yuliana and Hapsari (2024) highlighted the important role of grammar instruction in improving students' academic writing skills. Hidayat and Krismanti (2022) also reported that Indonesian EFL learners still experience grammatical difficulties in English language production activities.

The findings also imply that grammar instruction should be integrated more intensively into academic writing activities, particularly graph description tasks. Lecturers may provide more focused exercises related to subject–verb agreement, article usage, and tense consistency. In addition, corrective feedback and guided writing practice may help students improve their grammatical accuracy and writing quality. Rosyada (2024) stated that grammatical mistakes and errors are common parts of second language learning processes among EFL learners.

Overall, the findings demonstrate that EFL learners at Universitas Amikom Purwokerto still face several grammatical challenges in graph description writing. Nevertheless, these difficulties may gradually improve through continuous practice, targeted grammar instruction, and increased exposure to academic writing tasks involving data interpretation.

## **5. CONCLUSION AND SUGGESTION**

This study investigated the grammatical accuracy demonstrated by EFL learners in graph description writing tasks at Universitas Amikom Purwokerto. The findings revealed that students still experienced difficulties in several grammatical aspects, particularly subject–verb agreement, article usage, tense consistency, and sentence structure. Among these aspects, subject–verb agreement emerged as the most frequent grammatical issue found in the students’ writing. These findings indicate that although students were able to interpret and describe visual data, grammatical accuracy remained a significant challenge in presenting information clearly and effectively in English academic writing.

The study also highlights the importance of integrating grammar instruction into academic writing activities, especially tasks involving graph description and data interpretation. Providing students with more guided writing practice, corrective feedback, and exposure to model texts may help improve their grammatical competence and writing quality. In addition, lecturers are encouraged to emphasize grammatical aspects that frequently cause difficulties for EFL learners, such as article usage and tense consistency, during writing instruction.

However, this study was limited to a relatively small number of participants from one university and focused only on written graph description tasks. Therefore, the findings cannot be generalized broadly to all EFL learners in different educational contexts. Future research is recommended to involve larger participant groups, different educational institutions, or other forms of academic writing tasks. Further studies may also investigate the effectiveness of specific instructional strategies or digital writing tools in improving grammatical accuracy among EFL learners.

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## DAFTAR REFERENSI

- Aziz, Z. A., Fitriani, S. S., & Amalina, Z. (2020). Linguistic errors made by Islamic university EFL students. *Indonesian Journal of Applied Linguistics*, 9(3), 733–745. <https://doi.org/10.17509/ijal.v9i3.23209>
- Firdausi, N. A. (2022). Surface strategy taxonomy revisited: Grammatical error analysis in academic writing. *Journal of English Language Studies*, 7(2), 100–115. <https://doi.org/10.30870/jels.v7i2.15186>
- Fitrawati, & Safitri, D. (2021). Students' grammatical errors in essay writing: A pedagogical grammar reflection. *International Journal of Language Education*, 5(2), 74–88. <https://doi.org/10.26858/ijole.v5i2.14633>
- Hidayat, S., & Krismanti, T. (2022). An analysis of grammatical errors in oral storytelling among Indonesian EFL learners. *Journal of English Teaching Studies*, 5(1), 33–44. <https://doi.org/10.33369/jets.v5i1.20453>
- Lee, J. H. (2019). Teaching academic writing through visual data interpretation. *English for Specific Purposes*, 54, 11–22. <https://doi.org/10.1016/j.esp.2019.03.004>
- Monny, S., & Pratiwi, D. (2022). Types of grammatical errors in EFL learners' writing: An error analysis study. *Journal of Language and Education*, 8(2), 67–79. <https://doi.org/10.17358/jle.8.2.67>
- Mubarok, Y., & Budiono, T. (2022). An error analysis on EFL students' writing. *Englisia: Journal of Language, Education, and Humanities*, 9(2), 187–203. <https://doi.org/10.22373/ej.v9i2.11386>
- Prasetyo, H., & Lestari, N. (2021). Academic writing difficulties among Indonesian EFL learners. *Journal of English Education and Linguistics Studies*, 8(1), 55–68.
- Rizqullah, A. M., Sudiro, S., & Karim, S. A. (2023). A closer look at the EFL students' grammatical errors in writing descriptive text. *Ethical Lingua: Journal of Language Teaching and Literature*, 10(1). <https://doi.org/10.30605/25409190.559>
- Rosyada, A. (2024). Errors and mistakes in second language learning: A pedagogical perspective. *International Journal of Applied Linguistics*, 14(1), 45–56. <https://doi.org/10.17509/ijal.v14i1.40001>
- Rusmiati, R. (2021). Subject–verb agreement errors in English writing among Indonesian learners. *International Journal of English Linguistics*, 11(3), 140–146.
- Tambunan, A. R. S., Andayani, W., Sari, W. S., & Lubis, F. K. (2022). Investigating EFL students' linguistic problems using Grammarly as automated writing evaluation feedback. *Indonesian Journal of Applied Linguistics*, 12(1), 16–27. <https://doi.org/10.17509/ijal.v12i1.46428>
- Wang, Y. (2020). Error analysis from a developmental perspective: Understanding learner language. *TESOL Quarterly*, 54(1), 176–183. <https://doi.org/10.1002/tesq.427>
- Wijayanti, E., & Putra, A. (2023). Improving grammatical accuracy in EFL academic writing through guided feedback. *Journal of Applied Linguistics and Language Research*, 10(2), 101–112.
- Yuliana, T., & Hapsari, F. (2024). The role of grammar instruction in improving students' academic writing skills. *Journal of English Language Teaching and Learning*, 5(1), 44–56.

- Ni Luh Kade Yuliani Giri, I Gusti Ayu Gde Sosiowati, I Wayan Pastika, & Made Ratna Dian Aryani. (2025). Grammatical Blocking of Universal Uptake in Japanese Ad-vertising Texts: Wake-Framing, Case Restriction, and Event Packaging. *International Journal of Multilingual Education and Applied Linguistics*, 3(1), 13–28.
- Helmi Wibowo, Benny Daniawan, & Erna Auparay. (2025). Investigating Longitudinal Effects of Adaptive Digital Learning Ecosystems on Self Regulated Learning and Academic Persistence. *International Journal of Educational Technology and Society*, 2(4), 68–77. <https://doi.org/10.61132/ijets.v2i4.466>
- <https://doi.org/10.61132/ijmeal.v3i1.428>
- Monika Gisthi Secaresmi, David Kristiaan Paath, Wilibrordus Megandika Wicaksono, Adit Setiawan, & Siti Maskanah. (2025). Correlation of Reading Interest with Writing Ability of STIKOM Students Yos Sudarso Purwokerto. *International Journal of Educational Development*, 2(3), 62–73. <https://doi.org/10.61132/ijed.v2i3.325>
- Anak Agung Sagung Shanti Sari Dewi, Ni Luh Ketut Mas Indrawati, Ketut Artawa, & Ni Luh Nyoman Seri Malini. (2025). Motivation of Students Learning Indonesian as a Foreign Language in BIPAS: An In-Country Learning Program at Udayana University in Bali. *International Journal of Multilingual Education and Applied Linguistics*, 2(3), 19–29. <https://doi.org/10.61132/ijmeal.v2i3.386>
- Ni Ketut Alit Ida Setianingsih, & Ketut Santi Indriani. (2025). Colloquial Language Use in Public Informational Signs . *International Journal of Multilingual Education and Applied Linguistics*, 2(3), 30–38. <https://doi.org/10.61132/ijmeal.v2i3.385>