INVESTIGATING THE GRAMMATICAL ERROR IN DESCRIBING GRAPHS AMONG THE VOCATIONAL STUDENTS

Yessy Purnamasari[1], Danny Gandana Nugraha[2]

English Department, Politeknik Negeri Bandung, Indonesia
[1] yessy.purnamasari@polban.ac.id, [2] danny.nugraha@polban.ac.id

Abstract

In learning English, the learners make some common mistakes in applying the correct grammar. One of the mistakes is the error in explaining graphs in English. This competency is highly needed to be applied in many aspects, especially for vocational university students. Thus, this study is aimed to identify the types of grammatical errors typically done by the learners. By applying the descriptive qualitative methodology, the 30 data used in this study are taken from the sample of students' writing in explaining a chart in English. The steps taken are done by doing data categorization based on Dulay's surface strategy taxonomy which mentions four types of errors: addition, omission, misformation, and misordering. The results show that omission is the type of error mostly done by learners with 34,78%, followed by addition with 31,88% occurrence, and the least error found in the data is misorder with 10,14%. It is suggested that students should be equipped with basic Grammar understanding in explaining a graph in English, so this kind of error will be minimized. This study is also expected to give insight to lecturers in composing the General English syllabus that emphasizes the student's understanding of basic Grammar.

Keywords: Grammatical Errors; Graph; Surface Strategy Taxonomy; English

INTRODUCTION

Four basic skills in learning English include listening, reading, speaking, and writing (Powers, 2010). The vocational students' learning process to master two of these four skills is divided into two semesters, with English 1 focusing on speaking skills and English 2 focusing on reading skills. As for the other two skills, listening and writing, they are optional for each program and can be included in advanced English courses in the following semester. However, in practice, all four components are still taught comprehensively in 14 sessions outlined in the Course Material Delivery Plan (RPMK). One of the topics covered in English 1 is describing graphs as a way to develop writing skills. Describing graphs in English is a topic that requires learners to accurately read graphs and explain their contents in the appropriate sentences. For both engineering and non-engineering students, graphs are important elements used in various contexts, such as financial reports, client presentations, or budgeting. In the healthcare field, for example, using graphs in presentations helps convey information more clearly (Durbin, 2004). The importance of accurate graph descriptions reflects learners' mastery of graph content. However, grammatical errors in describing graphs, especially in English, are sometimes found. Grammatical errors in describing graphs in English are closely related to Error Analysis (EA) studies. EA focuses on identifying errors made by learners related to a specific topic from linguistic and cognitive perspectives (Al-Khresheh, 2016). EA is an improvement over the Comparative Analysis (CA) method previously used, but limited in predicting the main errors made by learners as seen in EA. Thus, through the EA approach, grammatical errors in describing graphs can be analyzed more comprehensively.

Identifying and analyzing students' errors in describing a graph can be done using the Error Analysis (EA) approach. EA was introduced by Stephen Pit Corder in the 1960s as an alternative to Comparative Analysis (CA) (Rustipa, 2011). Unlike CA, EA considers the interference of the source language (SL) to affect errors made by learners of the target language (TL). In its application, EA focuses not only on the negative interference of the SL as the main source of errors, as in CA but also considers other factors related to TL learners that contribute to the occurrence of errors. Thus, EA can analyze errors not only from a pedagogical perspective but also from a scientific perspective.

Grammatical error analysis cannot be separated from the definition of error itself. Error differs from a mistake in terms of its origins. Mistakes are made by learners spontaneously due to fatigue, lack of focus, or other reasons that can naturally be corrected by the learners themselves based on their prior knowledge of the SL. In contrast, learners make errors due to their lack of knowledge in mastering the SL, making it difficult for learners to immediately correct those errors (Sompong, 2013). In simple terms, errors arise because learners lack competence in the SL. Thus, EA is an effort to analyze linguistic errors that focus on the learners' side, not just the SL side (Khansir, 2012). In analyzing EA, several approaches can be used, and one of them is the surface strategy taxonomy proposed by Dulay, Burt, and Krashen in 1982. In addition to the surface strategy taxonomy, Dulay et al. also mentioned three other strategies: linguistic strategy, comparative strategy, and communicative strategy (Ayuningtyas & Wenanda, 2013). The use of surface strategy taxonomy aims to describe structural or arrangement errors made by learners, either in the form of adding or omitting elements from the base sentence (BS) to the base sentence structure (BSS). In surface strategy taxonomy, there are four types of errors: addition, omission, misformation, and misordering. In the addition type, learners make errors by adding unnecessary words, resulting in errors in their writing (Rusmiati, 2019). For example, the sentence "They creates a good presentation slide" indicates an error in adding the letter 's' in the word 'create', which does not match the subject 'they'. This means that the learner made an error by adding an unnecessary letter, resulting in an error. The second type is the omission, which refers to learners' errors in omitting a structure or item that is actually needed in the sentence and affects its grammatical function (Sari et al., 2021). In the sentence "The class is cleaned janitor," the preposition 'by' is omitted, making the sentence unclear. Furthermore, in the misformation type, learners make errors related to morphemic or structural form errors (Monny & Pratiwi, 2022). For example, the sentence "The palace was build in the early 1990s" contains an error in the use of the word 'build' that does not match the past context. The fourth type is misordering, which relates to errors in placing a morpheme or group of morphemes in a sentence, such as in the example "How they can manage the business during the pandemic?" which indicates an error in the placement of the modal 'can' and should be placed before the subject 'they' because the sentence is in the form of a question.

Previous studies that focused on EA topics have been conducted by researchers using diverse data samples. One of them examined learners' errors in explaining a series of stories in English related to their speaking ability (Hidayat & Krismanti, 2022). Through the transcription process, the learners' errors were analyzed, and it was found that the dominant errors were omission and misformation, indicating that learners have a limited understanding of applying correct English grammar rules. Another study on EA concluded that the Grammatical Competence Enhancement Program (GCEP) is one solution to minimize learners' errors, especially in terms of misformation, which is considered the most dominant error (Esmalde, 2020). Through the GCEP, instructors can identify preventive steps in teaching to address learners' errors. EA has also been applied to investigate learners' errors in presentation activities (Dewi et al., 2021). Learners often make errors in organizing the content of their presentations, leading to misperception by the audience. This study found that various errors related to grammatical mistakes in presentation materials are associated with learners' lack of competence in

understanding proper English grammar and their tendency to read presentation texts rather than explain them in their own words. EA can also be used to investigate learners' errors in the domain of writing. By analyzing samples of student writing that implement passive voice, it was found that students' weakness in using the passive voice is closely related to their difficulty in transforming active sentences into passive sentences, resulting in misformation errors being the most common mistake made by students.

Various previous studies conducted using EA have shown that this approach has many benefits, especially in developing learners' competence in mastering grammatical English skills in various aspects. However, research on EA that focuses on specific topics, such as the ability to describe graphs in English, is still relatively rare. Therefore, this study is innovative in terms of data usage and its implications, which will be beneficial for English teaching, particularly in enhancing learners' competence in describing graphs in English.

Based on this information, this study aims to identify the types of grammatical errors made by students, particularly in describing graphs. Various grammatical errors found in this study include errors based on the surface structure taxonomy proposed by Dulay, Burt, and Krashen in 1982. Through this approach, students' errors in describing graphs can be identified, categorized, and evaluated. Thus, this research is expected to identify grammatical errors made by learners in describing graphs in the English 1 course.

METHOD

This study employs a qualitative descriptive method and is conducted through four stages. First, the collection of learner data samples was taken from the topic of describing graphs in English. Second, the identification of errors found in the data. Third, the grouping and categorization of data related to the errors found in the sample of graph descriptions. Fourth, the explanation of each type of error is based on the researched data samples. Data analysis is conducted using descriptive methods according to the collected data. The data used in this study consist of 30 samples of engineering students' writings describing graphs in English. The students have received explanations about the material of describing graphs in English as part of their English 1 course in the first semester. This material focuses on developing students' abilities to read, analyze, and then explain the content of a simple graph, which is then presented using English.

RESULTS AND DISCUSSION

Results

Based on the analysis of the 30 data samples, a total of 69 errors were found in students' descriptions of graphs in English, with each type of error detailed in the following table:

Table 1. Types of errors found in the sample data

NO DATA	ERRORS CLASSIFICATION				TOTAL ERRORS
	OMISSION	ADDITION	MISFORMATION	MISORDER	
Data 1	0	2	0	0	2
Data 2	1	0	2	0	3
Data 3	1	1	2	0	4
Data 4	1	0	0	0	1
Data 5	2	1	0	3	6
Data 6	3	0	0	0	3
Data 7	0	1	0	3	4
Data 8	1	1	0	0	2

Data 9	2	1	2	0	5
Data 10	0	1	1	0	2
Data 11	1	0	0	0	1
Data 12	3	1	1	0	5
Data 13	2	0	0	0	2
Data 14	0	0	0	0	0
Data 15	0	0	0	0	0
Data 16	2	2	2	0	6
Data 17	1	0	0	0	1
Data 18	0	1	2	1	4
Data 19	0	0	1	0	1
Data 20	0	3	0	0	3
Data 21	0	1	0	0	1
Data 22	0	2	0	0	2
Data 23	2	3	1	0	6
Data 24	1	1	0	0	2
Data 25	1	0	1	0	2
Data 26	0	0	0	0	0
Data 27	0	0	0	0	0
Data 28	0	0	0	0	0
Data 29	0	0	1	0	1
Data 30	0	0	0	0	0
TOTAL	**24**	**22**	**16**	**7**	69
%	34,78	31,88	23,19	10,14	100

From Table 1, the errors made by students when describing a graph in English vary, but the most frequently occurring error is omission, with 24 instances, while the least frequent error is misordering, with only 7 instances. In terms of percentage, these errors are presented in the graph below:
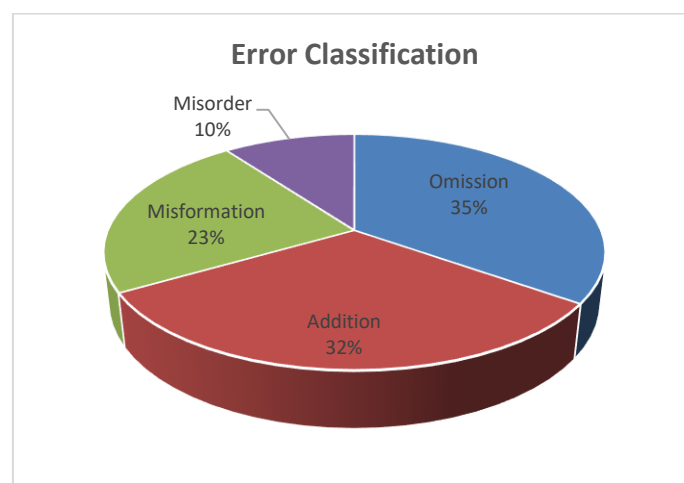

Figure 1. Types of errors based on the percentage

Discussion

After analyzing the 30 data samples, the following explanations of the types of errors found, according to their percentage of occurrence, are as follows:

a. Omission
Errors in the form of omission are marked by the absence of items that should be included in the text. The missing items can be articles (a, an, the), prepositions, punctuation, or possessive case. For example:
• *It can be concluded from data above, cats get most gains...* (Data 2)
The omission of the article 'the' in the above sentence indicates a grammatical error in the form of omission, where the student did not include the article 'the' before the words 'data' and 'most'. The correct sentence according to English grammar rules should be:
• *It can be concluded from the data above, cats get the most gains...* (Data 2)

Another example showing an omission error is as follows:
• *And then the second highes of pet do people own...* (Data 5)
The omission of punctuation marks in the form of a comma after the word 'then' indicates a grammatical error in the form of omission. In the same data, the student also omitted the letter 't' from the word 'highes', which changes its meaning. The correct sentence structure according to English grammar rules is:
• *And then, the second highest of pet do people own...* (Data 5)

b. Addition
Unlike omission, errors in the form of addition are characterized by the presence of unnecessary items in the sentence. For example:
• *Dogs are pets that quite a lot of people have.* (Data 16)
The addition of the word 'quite' in the above sentence is a grammatical error in the form of addition because the word 'quite' has no function in the sentence when followed by the phrase 'a lot of'. Thus, the more appropriate sentence would be:
• *Dogs are pets that a lot of people have.* (Data 16)
Another example showing an addition error is as follows:
• *Majority of people are owned cat as their pet...* (Data 21)
The addition of the word 'are' before the word 'owned' is not only a grammatical error but also changes the phrase into the passive voice. Therefore, the correct sentence structure should be:
• *Majority of people owned a cat as their pet...* (Data 21)

c. Misformation
The third type of grammatical error is misformation, which is marked by errors in grammar. For example:
• *Then it turns out that goldfish are more desirable...* (Data 23)
The misformation error in the above sentence is characterized by the use of 'are' which does not agree with the subject 'goldfish' in its singular form. The correct sentence structure would be:
• *Then it turns out that goldfish is more desirable...* (Data 23)
Another example showing a misformation error is as follows:
• *...then second there are dogs with 8 owners.* (Data 25)
The grammatical error in the form of misformation in the above sentence is marked by the inappropriate use of the word 'second' to indicate position. The correct sentence should be:
• *...then secondly, there are dogs with 8 owners.* (Data 25)

d. Misorder

Misorder is the type of error with the least frequency of occurrence found in the 30 data samples in this study. This type of error is characterized by placing words in an incorrect order, not in accordance with grammatical aspects. For example:

• *The highest kind of pet do people own is cat with 11 points.* (Data 5)

The misorder error in the sentence above is the use of the word 'do' which does not fit the type of sentence that is a statement, not a question. The more accurate sentence structure would be:

• *The highest kind of pet people own is a cat with 11 points.* (Data 5)

CONCLUSION

The learners' understanding of graphs needs to be accompanied by their ability to explain the graphs, especially using the English language. Based on this study, it can be seen that the grammatical errors made by the learners vary, with omission accounting for 34.78%, followed by addition with a percentage of 31.88%, and the least common type of error being misorder with 10.14%. Therefore, the material on reading and explaining graphs in English, particularly in the English 1 course, needs to emphasize the use of proper grammar in writing texts, so that the above errors can be minimized or even eliminated. Consequently, the findings of this research can be utilized to design teaching methods for accurate and precise explanations of graphs in English.

ACKNOWLEDGMENTS

REFERENCES

Al-Khresheh, M. H. (2016). A Review Study of Error Analysis Theory. *International Journal of Humanities and Social Science Research*, 2, 49–59. https://www.researchgate.net/publication/299456806

Ayuningtyas, D. I., & Wenanda, D. (2013). Analisis Kesalahan Aspek Grammatika Karangan Mahasiswa Semester 3 Program Studi Sastra Inggris Universitas Trunojoyo Madura. *Pamator*, 6(1), 17–30.

Dewi, N. L. D. S., Utami, G. W. N. U., & Wardhana, I. G. N. P. (2021). Surface Strategy Taxonomy Analysis in Students' Presentation Using Mind Mapping. *Journal of English Educational Study (JEES)*, 4(2), 131–139.

Durbin, C. G. (2004). Effective Use of Tables and Figures in Abstracts, Presentations, and Papers. *RESPIRATORY CARE* , 49(10), 1233–1237.

Esmalde, V. S. (2020). Surface Strategy Taxonomy in Error Analysis: Basis for Grammatical Competence Enhancement Program (GCEP). *International Journal of Science and Research (IJSR)*, 9(7), 785–792. https://doi.org/10.21275/SR20707113109

Hidayat, F., & Krismanti, N. (2022). Students' Surface Strategy Taxonomy Errors in Narrating A Story: A Morpho-Syntactical View. *Journal of English Educational Study (JEES)*, 5, 49–56.

Khansir, A. A. (2012). Error analysis and second language acquisition. *Theory and Practice in Language Studies*, 2(5), 1027–1032. https://doi.org/10.4304/tpls.2.5.1027-1032

Monny, M. O. E., & Pratiwi, N. P. D. I. (2022). The Implementation of Surface Strategy Taxonomy Through Report Text Translation. *Retorika: Jurnal Ilmu Bahasa*, 8(1), 79–89. https://doi.org/10.55637/jr.8.1.4344.79-89

Powers, D. E. (2010). *The Case for a Comprehensive, Four-Skills Assessment of English Language Proficiency*.

Rusmiati. (2019). Surface Strategy Taxonomy on Foreign Language Writing: A Study on Verb Tense Usage. *Jurnal Serambi Ilmu*, *20*(2), 189–201.

Rustipa, K. (2011). Contrastive Analysis, Error Analysis, Interlanguage and the Implication to Language Teaching. *Ragam Jurnal Pengembangan Humaniora* , *11*(1), 16–22. http://en.wikipedia.org/wiki/Second_

Sari, Y. A., Septiyana, L., Suhono, S., Anggaira, A. S., & Hasyim, U. A. F. A. (2021). Corrective Feedback in Learning Interaction: Integration of Surface Strategy Taxonomy. *AL-ISHLAH: Jurnal Pendidikan*, *13*(3), 2266–2280. https://doi.org/10.35445/alishlah.v13i3.847

Sompong, M. (2013). Error Analysis. In *Thammasat Review β* (Vol. 109, Issue 2).