

Improving Students' Mastery of Noun Phrases Through The 3-Dimensional Grammar Framework

Hendrik Jacob Maruanaya¹, Henry Latuheru¹, Dian Natalia Usmany¹

¹ Pattimura University, Indonesia

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ABSTRACT

This study aims to explore the effectiveness of implementing the *3-Dimensional Grammar Framework* in improving students' mastery of *noun phrases* in the context of English as a Foreign Language (EFL) learning. The research was conducted at SMAN 5 Ambon using a Classroom Action Research (CAR) approach, which consisted of two cycles. Each cycle included the stages of planning, action, observation, and reflection. The participants of this study were 36 eleventh-grade students selected purposively. Research instruments included tests (pre-test and post-test), observation, and questionnaire. In conclusion, the systematic implementation of the *3D Grammar Framework* in grammar instruction successfully enhanced students' mastery to use *noun phrases* effectively. This approach is recommended as an alternative strategy in grammar teaching within EFL classrooms, as it emphasizes form, meaning, and contextual use in an integrated manner.

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Corresponding Author:

Henry Latuheru

Pattimura University, Indonesia; henry.latuheru@lecturer.unpatti.ac.id

1. INTRODUCTION

Grammar is a fundamental component of language learning that provides the structural foundation for effective communication. A clear understanding of grammar enables learners to convey ideas accurately and appropriately in various contexts (Larsen-Freeman et al., 2016). According to Freeman (2006), grammar is not merely a collection of rules but a dynamic system that supports learners in achieving communicative competence. In English as a Foreign Language (EFL) context, grammar mastery contributes significantly to students' writing, speaking, reading, and listening abilities, particularly in academic settings.

Within grammatical structures, phrases play an essential role in constructing meaningful sentences. A phrase consists of one or more words functioning as a unit without forming a complete sentence (Leech et al., 1982). Among different types of phrases, noun phrases are particularly important because they commonly function as subjects, objects, and complements in sentences (Zandrotto et al., 2024). Noun phrases consist of a noun and its modifiers, enabling writers to provide more precise and detailed information. In academic writing, noun phrases help students express abstract, descriptive, and technical

ideas effectively (Yilmaz, 2018). Therefore, mastering noun phrases is essential for EFL learners, especially in producing coherent and well-developed written texts.

Despite their importance, many students still experience difficulties in constructing grammatically accurate noun phrases. Previous studies revealed that students frequently make errors in the use of determiners, modifiers, and noun phrase structures. Laoli (2023) found that students often misplaced modifiers and misused determiners in sentence construction. Similarly, Ferdiansyah (2020) identified that most noun phrase errors occurred in pre-modifiers (53.85%), followed by head errors (41.02%) and post-modifier errors (5.13%). Comparable findings were also reported by Amaliah et al. (2021) and Poppyosa and Safitri (2023), indicating that pre-modifiers remain one of the most problematic aspects for students. These findings suggest that students require more contextualized and meaningful grammar instruction to improve their mastery of noun phrases.

The teaching of grammar has evolved from traditional rule-based instruction to more communicative and contextualized approaches (Larsen-Freeman et al., 2016). Contemporary grammar instruction emphasizes not only grammatical accuracy but also the relationship between form, meaning, and language use (Larsen-Freeman, 2006). One approach that reflects this perspective is the three-dimensional grammar framework proposed by Larsen-Freeman and Murcia (1999). This framework integrates grammatical form, semantic meaning, and pragmatic use, allowing learners to understand grammar as a functional and communicative system rather than isolated rules.

Several studies have demonstrated the effectiveness of the three-dimensional grammar framework in improving students' grammatical competence. Hirliana et al. (2022), for example, reported that the framework improved students' understanding of passive voice, while Liu (2023) found positive results in teaching phrasal verbs. However, although previous studies have examined the implementation of this framework in various grammatical areas, limited research has specifically explored its application in teaching noun phrases, particularly in Indonesian secondary school EFL contexts. This gap indicates the need for further investigation into how the framework can support students' mastery of noun phrases in meaningful learning situations.

In this study, noun phrases were taught within the context of analytical exposition texts. Although noun phrases are not explicitly listed as a primary language feature of analytical exposition texts, they play an important role in constructing academic and persuasive arguments. Technical terms and descriptive expressions commonly found in analytical exposition texts are frequently realized through noun phrases, such as environmental problems, technological development, and the harmful effects of smoking. By learning noun phrases through authentic texts, students are expected to understand not only their grammatical structure but also their communicative function in conveying arguments effectively.

This study was conducted collaboratively with the classroom teacher in class XI-3 at SMAN 5 Ambon, a class identified as experiencing difficulties in grammar learning, particularly in noun phrase construction. Using an action research design, this study aimed to explore the implementation of the three-dimensional grammar framework in improving students' mastery of noun phrases. By integrating form, meaning, and use within contextualized learning activities, this study seeks to contribute to more effective grammar instruction in EFL classrooms. Furthermore, this study offers practical insights into how the three-dimensional grammar framework can support students in developing more accurate and meaningful written communication.

2. METHODS

This study employed Classroom Action Research (CAR) based on the model proposed by Kemmis and McTaggart (2014), consisting of four stages: planning, action, observation, and reflection. The study aimed to improve students' mastery of noun phrases through the implementation of the three-dimensional grammar framework in English learning activities. The cyclical nature of CAR enabled the researcher and classroom teacher to evaluate and refine the instructional process continuously based on students' learning progress and classroom conditions.

The study was conducted at SMAN 5 Ambon from April to May 2025. The participants were eleventh-grade students of class XI-3. This class was selected based on discussions with the classroom teacher, who identified that the students experienced difficulties in understanding and constructing noun phrases in writing activities. The collaborative nature of the study allowed the researcher and teacher to work together in identifying problems, implementing instructional strategies, and reflecting on the learning outcomes.

The research was conducted in two cycles. In the planning stage, lesson plans, teaching materials, and research instruments were prepared. The instructional materials focused on teaching noun phrases through analytical exposition texts using the three-dimensional grammar framework integrating form, meaning, and use. During the action stage, the researcher implemented the learning activities through contextual grammar exercises, sentence analysis, writing activities, and classroom discussions. In the observation stage, students' participation, classroom interaction, and learning difficulties were observed and documented. Finally, during the reflection stage, the researcher and teacher evaluated the effectiveness of the instructional process and identified necessary revisions for the following cycle.

The study employed both quantitative and qualitative data collection techniques. Quantitative data were obtained through pre-tests and post-tests administered before and after the implementation of the instructional treatment. The tests aimed to measure students' improvement in constructing noun phrases accurately within writing contexts. Qualitative data were collected through classroom observations and questionnaires. Classroom observations were conducted using observation checklists and field notes to document students' engagement, participation, and responses during the learning process. In addition, questionnaires were distributed to gather students' perceptions toward the implementation of the three-dimensional grammar framework. The questionnaire used a four-point Likert scale to encourage students to express clear opinions regarding their learning experiences.

The instruments used in this study included writing tests, observation checklists, field notes, and questionnaires. The writing tests focused on students' ability to identify and construct noun phrases appropriately in analytical exposition texts. Observation checklists were used to monitor classroom activities and students' participation, while questionnaires were used to examine students' responses toward the instructional approach.

The collected data were analyzed using both quantitative and qualitative techniques. Quantitative data from the tests were analyzed by calculating students' mean scores and percentages to determine learning improvement across the research cycles. Meanwhile, qualitative data obtained from classroom observations, field notes, and questionnaires were analyzed descriptively to identify students' learning behaviors, difficulties, and responses toward the teaching implementation.

3. FINDINGS AND DISCUSSION

The Implementation of the 3-Dimensional Grammar Framework

The implementation of the 3-Dimensional Grammar Framework was conducted through two research cycles integrating form, meaning, and use in teaching noun phrases. During Cycle 1, students learned the structure of noun phrases through grammar identification, sentence analysis, and guided exercises. Although students began to recognize noun phrase components, many still experienced difficulties in applying them accurately in writing tasks. In Cycle 2, the learning activities became more contextual and interactive through collaborative tasks, guided writing, and classroom discussions. Students showed greater participation, confidence, and improvement in constructing noun phrases in meaningful communication contexts.

Table 1. Comparison Summary: Pre-Test, Post-Test Cycle 1, and Post-Test Cycle 2.

Test	Mean Score (M)	Standard Deviation (SD)	Students \geq KKM (82)
Pre-Test	37.42	18.21	2
Post-Test Cycle 1	77.27	6.51	6
Post-Test Cycle 2	86.97	4.67	30

Table 1 shows that the students' mean scores increased from 37.42 in the pre-test to 86.97 in the final post-test. The number of students achieving the minimum mastery criterion also increased from 2 students to 30 students after the implementation of the framework. Further statistical analysis using a paired sample t-test confirmed that the improvement was statistically significant.

Table 2. Paired Sample t-Test Analysis: Pre-Test vs. Post-Test Cycle 2

Paired Comparison	Mean Difference	t-value	df	Sig. (2-tailed)
Pre-Test – Post-Test Cycle 2	-49.545	-15.480	2	0.000

The significance value of 0.000 (< 0.05) indicates that the implementation of the 3-Dimensional Grammar Framework significantly improved students' mastery of noun phrases. Classroom observations also showed that students became more confident in identifying and using noun phrases in writing activities during Cycle 2.

Students' Perceptions toward the 3-Dimensional Grammar Framework

The questionnaire findings indicated that students had positive perceptions toward the implementation of the 3-Dimensional Grammar Framework. Most students agreed that the framework helped them understand noun phrases more clearly and made grammar learning more engaging.

Table 3. Students' Perceptions of the Effectiveness of the Framework

No	Item	Mean	Category
1	The examples given by the teacher help me understand noun phrases more clearly	3.52	Strongly Agree
2	The exercises provided help me practice noun phrases effectively	3.55	Strongly Agree
3	I now understand the structure of noun phrases	3.58	Strongly Agree
4	I find it easier to learn with more examples and explanations	3.52	Strongly Agree
5	I have enough opportunities to ask questions and get help from the teacher	3.61	Strongly Agree
6	Group or individual assignments help me understand the material	3.30	Strongly Agree
7	This method makes me more enthusiastic about learning grammar	3.33	Strongly Agree
8	This method should be used again in future grammar lessons	3.30	Strongly Agree
9	Overall, this learning method was helpful and effective	3.33	Strongly Agree

The highest mean score was found in Item 5 (3.61), indicating that students felt supported through teacher guidance and classroom interaction. The questionnaire results also showed that students experienced relatively few difficulties during the learning process.

Table 4. Students' Perceptions of Difficulties during the Learning Process

No	Item	Mean	Category
10	Some parts of this method are difficult to understand	2.27	Disagree
11	I need more time to understand noun phrases	2.12	Disagree
12	Some exercises are too difficult to do independently	2.36	Disagree
13	I still find it difficult to use noun phrases after learning with this method	2.12	Disagree
14	I find it hard to remember the parts of a noun phrase	2.18	Strongly Agree

Overall, the findings indicate that the 3-Dimensional Grammar Framework effectively improved students' mastery of noun phrases and created positive learning experiences in the EFL classroom.

Discussion

The Implementation of the 3-Dimensional Grammar Framework in Teaching Noun Phrases

The findings revealed that the implementation of the 3-Dimensional Grammar Framework helped students learn noun phrases more meaningfully through the integration of form, meaning, and use. During the instructional process, students were gradually introduced to the structural components of noun phrases, the meanings conveyed by different phrase constructions, and the communicative use of noun phrases in analytical exposition texts. This integrated approach enabled students not only to identify grammatical structures but also to understand how noun phrases function in authentic communication. The findings support Larsen-Freeman's (2003, 2006, 2014) view that grammar should be taught as a dynamic and functional system rather than isolated rules. When students learned noun phrases through contextual writing activities and analytical exposition texts, they became more aware of how grammatical structures contribute to meaning-making. Similarly, Larsen-Freeman et al. (2016) emphasizes that grammar instruction should connect structural accuracy with communicative purposes. In this study, students demonstrated better understanding when grammar learning moved beyond rule memorization toward contextualized language use.

The implementation process also showed that students initially experienced difficulties in constructing complex noun phrases, particularly in organizing modifiers and maintaining grammatical accuracy. Some students tended to apply literal translation patterns from Indonesian into English. However, after the second cycle, students showed noticeable improvement in constructing more accurate and meaningful noun phrases within writing tasks. This improvement suggests that repeated exposure to contextual grammar activities and reflective learning processes supported students' grammatical development. Furthermore, the use of collaborative learning activities, peer discussions, and contextual writing tasks increased students' classroom participation and engagement. Students became more active during discussions and demonstrated greater confidence in expressing ideas through writing. These findings align with Devi (2017), who argues that integrating form, meaning, and use promotes both grammatical awareness and communicative competence. The findings are also consistent with Fandana and Rohiyatussakinah (2023), who found that contextual and communicative grammar learning can improve students' grammatical accuracy and fluency simultaneously.

Overall, the implementation of the 3-Dimensional Grammar Framework transformed grammar learning into a more active, meaningful, and communicative process. The framework enabled students to connect grammatical structures with authentic language use, supporting the development of both grammatical competence and communicative ability in the EFL classroom.

The Results of the 3-Dimensional Grammar Framework on Students' Mastery of Noun Phrases

The quantitative findings demonstrated that the implementation of the 3-Dimensional Grammar Framework significantly improved students' mastery of noun phrases. The students' mean scores increased from 37.42 in the pre-test to 77.27 in Cycle 1 and 86.97 in Cycle 2. In addition, the percentage

of students achieving the mastery criterion increased substantially from 6% in the pre-test to 91% in the final post-test. The paired sample t-test results ($p < 0.001$) further confirmed that the improvement was statistically significant. This improvement indicates that integrating form, meaning, and use helped students develop a more comprehensive understanding of noun phrases. Rather than learning grammar as isolated rules, students learned how noun phrases function within meaningful communication contexts. As proposed by Larsen-Freeman (2003), grammar learning becomes more effective when learners can connect grammatical knowledge with communicative practice. Similarly, Larsen-Freeman et al. (2016) argues that grammar instruction should emphasize accuracy, meaning, and appropriateness simultaneously. The findings also demonstrated that students improved not only in grammatical accuracy but also in their ability to produce more complex and meaningful noun phrases in writing activities. Students were able to construct expressions such as “the increasing number of online classes” and “the development of sustainable urban environments,” indicating improvement in both structural understanding and communicative use. This reflects what Larsen-Freeman (2014) describes as the transition from controlled grammatical practice to meaningful language production.

The results of this study are consistent with previous research. Ferdiansyah (2020), Amaliah et al. (2021), and Poppyosa and Safitri (2023) reported that students commonly experience difficulties with determiners, pre-modifiers, and post-modifiers in noun phrase construction. Similar difficulties were observed during the pre-test stage of this study. However, after the implementation of the 3-Dimensional Grammar Framework, students demonstrated considerable improvement in organizing noun phrase components more accurately. The findings also support previous studies conducted by Gul et al. (2022) and Hirliana et al. (2022), which found that the 3-Dimensional Grammar Framework effectively improved students’ understanding of complex grammatical structures. In the present study, the framework proved effective not only for improving grammatical accuracy but also for enhancing students’ ability to use noun phrases meaningfully in writing contexts. Therefore, the study confirms that multidimensional grammar instruction can contribute significantly to EFL learners’ grammatical and communicative development.

Students’ Perceptions toward the 3-Dimensional Grammar Framework

The questionnaire findings revealed that students had highly positive perceptions toward the implementation of the 3-Dimensional Grammar Framework. Most students agreed that the framework helped them understand noun phrases more clearly, increased their motivation, and supported their ability to use grammar in writing activities. The high mean scores across the questionnaire indicate that students perceived the learning activities as meaningful and engaging. These findings support Devi’s (2017) perspective that integrating form, meaning, and use helps learners understand grammar as a communicative system rather than a set of isolated rules. Through contextualized learning activities, students were encouraged to notice grammatical structures, interpret their meanings, and apply them in authentic communication. This multidimensional process likely contributed to students’ positive learning experiences and increased confidence.

The findings are also consistent with Larsen-Freeman’s (2003, 2006, 2014) concept of grammaring, which views grammar as a dynamic process of meaning-making. Students did not simply memorize grammatical rules but actively used noun phrases to express ideas in analytical exposition writing. This experiential learning process helped students become more engaged and communicatively oriented during classroom activities. In addition, students reported relatively low levels of difficulty during the implementation process. Most students disagreed with statements suggesting that the learning activities were confusing or difficult to follow. This indicates that the framework provided clear and supportive learning stages that helped reduce students’ anxiety in learning grammar. These findings align with Larsen-Freeman et al. (2016), who emphasizes that contextualized grammar instruction can improve learners’ confidence and reduce difficulties associated with traditional rule-based teaching approaches.

The positive perceptions identified in this study also support the classroom observation findings, which showed increased student participation, interaction, and engagement throughout the learning cycles. The consistency between questionnaire results and classroom observations strengthens the conclusion that the 3-Dimensional Grammar Framework was both pedagogically effective and positively received by students. Overall, the findings suggest that the 3-Dimensional Grammar Framework provides a learner-centered and communicative approach to grammar instruction. By integrating grammatical form, semantic meaning, and communicative use, the framework helped students develop greater understanding, confidence, and engagement in learning noun phrases within EFL writing contexts.

4. CONCLUSION

This study examined the implementation of the 3-Dimensional Grammar Framework in improving students' mastery of noun phrases in an EFL classroom. The findings showed that integrating form, meaning, and use helped students understand and apply noun phrases more effectively in writing activities. The framework also increased students' participation, confidence, and engagement during the learning process. The study suggests that the 3-Dimensional Grammar Framework provides a meaningful and communicative approach to grammar instruction, particularly for teaching complex grammatical structures such as noun phrases. However, this study was limited to one class and focused only on noun phrases in analytical exposition texts. Future research is recommended to apply the framework to other grammatical topics, text genres, and broader educational contexts.

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