EFFECTS OF 3D FRAMEWORK GRAMMAR TEACHING TO THE COMPETENCE AND METALINGUISTIC KNOWLEDGE AMONG ESL LEARNERS

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ABSTRACT

With few studies investigating the use of multi-dimensional grammar framework in the teaching of grammar, this study attempts to examine the effectiveness of this language teaching strategy in enhancing the grammar competence and metalinguistic knowledge of English Education students in a state university. This paper employed the Three-Dimensional Grammar Framework of Larsen-Freeman as the teaching strategy intervention. Using mixed-method design, with single-group pretest and post-test and interview session, this study used statistical tools to measure if there is significant difference in the grammar and metalinguistic test scores of the participants. Meanwhile, content analysis was used to analyze the participants' perceptions on the use of metalanguage instruction. Findings disclosed that there is a significant difference between the pre and post test scores of the participants, concluding that their competence in grammar improved as well as their metalinguistic knowledge. This is evident as well in their interview citing that explaining a sentence based on its form, meaning, and use aided them to gain insights about the meaning of a text and enable them to correct and understand their own command of English language. Nonetheless, they mentioned that having sufficient metalinguistic knowledge is a pre-requisite to learning the grammar using the framework.

Keywords: Metalanguage, Three-Dimensional Grammar Framework, Teaching Of Grammar, Quasi-Experimental

INTRODUCTION

Learning the structures or grammar of English has been taught in isolation as a separate body of knowledge not linked to learning of language through reading and teaching of literature as the case of some schools in Lanao del Sur, a province in the southern-most part of Mindanao, Philippines. Moreover, learning of English grammar has been largely based on the use of traditional language pedagogies such as the grammar-translation method and the structural approach. This relates to what

Keen (1997) mentioned that teaching grammar has become a matter of knowing and memorizing the rules and structures without consideration whether there is learning or not.

A different approach to teaching English grammar is what this paper wants to propose. Metalanguage technique could be added to the list of valuable methods for English language teaching. Metalanguage technique is considered to be a novel in the studies on language teaching as Hu (2010) mentioned how several action researches or studies on English language teaching has not paid attention on the effectiveness of the use of metalanguage in classroom.

1.1. Metalanguage and Metalinguistic Knowledge

Metalanguage is generally defining as the language used to explain another language (Richards & Schmidt, 2010) which uses concrete terms to describe language (Ellis, 2016). Metalanguage may not be successful without the metalinguistic knowledge of the learners. Metalinguistic knowledge refers to the learners' ability to analyze and reflect on a given text, sentence, or clause using their knowledge of the forms, structure, and other aspects of a language (Richards & Schmidt, 2010). It further pertains to the ability of learners to identify, explain and describe errors in a sentence and be able to provide correct answers to the errors (Roehr, 2008; Aydin, 2018). Metalinguistic knowledge is a construct that is variedly operationalized in different studies (Richards & Schmidt, 2010). Nevertheless, according to Roehr (2008) recent operationalization of metalinguistic knowledge has included the L1 language-analytic ability. Berry (as cited in Ellis, 2016) contends that metalinguistic knowledge is unique to human because it is only humans who have the ability to reflect on how they communicate or the ability to reflect on their language.

To demonstrate how metalanguage is used and applied in language classroom task, and is operationally used in this present study, sentence 1 below is discussed:

(1) Jimmy cannot dance tonight – he has hurt his ankle

To explain the sentence above using metalinguistic knowledge, the learner should be able to answer that the sentence is in present perfect because of the form has + past participle (has hurt) and that the action is something that happened in the past and is relevant or linked to the present because Jimmy hurt his ankle at some point in time in the past and because of that pain in the ankle; he presently cannot join the dance tonight.

From the given example above, one can say that metalanguage poses a big challenge to the learners of second language as well as to the language teachers because to be able to apply metalanguage, teachers are expected to have expertise in the nuances of morphological, grammar and syntax of English language as well as the semantic and pragmatic aspects of the language. This is also supported by Tessa (2017) in her paper on the use of metalanguage in teaching spelling wherein she proposed that language teachers should also have the metalinguistic competence or knowledge to enable them to employ metalanguage in teaching spelling.

This present paper aims to explore the benefits and novelty of metalanguage as a strategy in teaching language to L2 learners by finding answers to the following research questions: 1) What is the pre and post rest scores of the participants? 2) Is there a significant difference between the pre and post test scores of the participants? 3) What are the participants' perceptions on the use of metalanguage as a language teaching method?

REVIEW OF RELATED LITERATURES

Ellis (2016) mentioned that use of metalanguage for language instruction is "controversial" (p.143), mainly due to opposing views as to the effectiveness or usefulness of metalanguage as a technique in learning or teaching a language. Moreover, there is also argument as to the assumptions that proficiency in language equates to metalinguistic knowledge. For Garret (1986) and Mohammed (as cited in Ellis, 2016), metalanguage impedes and defeats the purpose of acquiring language for communication and the focus on meaning. The study of Alderson, Clapham and Steel (as cited in Ellis, 2016) found a weak correlation between metalinguistic knowledge and language proficiency. No significant difference was also found in the pre and post-test design study of Serrano (2011) between the experimental and control group.

On the other hand, those who support metalanguage (e.g. Keen 1997; Ellis 2016; Ellis 2004; Shakoor, Rehman, & Raees 2013, Pelger & Sigrell 2016; Papademetriou & Makri, 2015) maintain that it should be adopted for language instruction, literacy teaching and is useful as it allows language teachers to explain sentence construction because accordingly, metalanguage is a natural language where

"human brain naturally tries to understand patterns" (Ellis 2016, p.144) and sharpens' learners' understanding of the target language (Ellis, 2004). According to Vakili (2022), this explicit instruction accentuates a clear and explicit discussion of the concept of grammar where learners are consciously engaged in the learning process. For instance, the study of Elder and Manwaring (2004), Golonka (2006), and Roehr (as cited in Ellis 2016), they found metalinguistic knowledge as the strongest predictors of learners who reach advanced L2 levels.

Serrano's (2011) paper also revealed how students with high metalinguistic knowledge performed better in the pre and post tests, while the paper of Shakoor, Rehman, and Raees (2013) disclosed how their participants – students and teachers – positively respond to the use of metalanguage because it made them proficient in L2 by translating English to their Urdu native language. A more recent study by Tighe and colleagues (2019) indicated how metalinguistic knowledge accounts for not less than 90% predictor of reading comprehension abilities of the struggling adult readers. The problem with Tighe and her colleagues' paper was that they did not arrive at a conclusion.

Reviewing the studies cited above, it shows that there were many studies already done on metalinguistic knowledge but very few on metalanguage. Hence, there is seemingly apparent scarcity on studies done on the effectiveness of metalanguage as a method in improving the language proficiency among L2 learners and this is where this study is grounded from. Below is the framework of the present study.
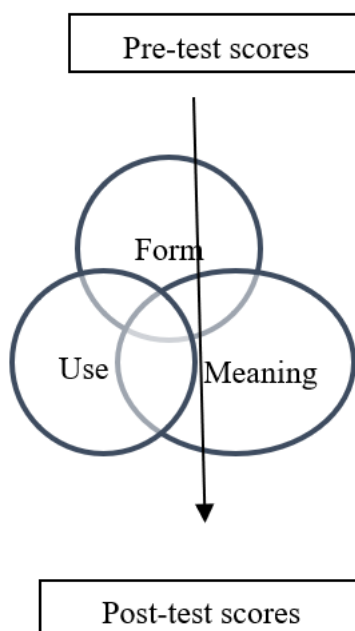
Figure 1. Conceptual framework of the present study

METHODS

This study used a pre-post-test single group design, with metalanguage instruction as an intervention to test its effectiveness in improving the grammatical competence of the participants. This is also qualitative in nature because of the interview utilized after the post test. Frequency, percentage, mean and standard deviation and T-test were the main statistical tools used in this study.

Participants

Purposive sampling was used in determining the ninety-four (94) total number of participants who were all first year college students in their second semester. These students are all taking up the bachelor's degree in secondary education with English as their field of specialization. All the participants were also interviewed after they took the post-test.

Instrumentation

The main instrument used in this study was the 100-item Oxford Practice Grammar Test from Oxford University Press 2010. It consists of five-item multiple choice and fill-in the blanks tests. Table 1 below displays the table of specifications of the tests. As can be seen in the table below, after the pre-test, the item numbers

were jumbled for the post test. This is to ensure that participants would not be able to recall the content in the pre-test given to them. The researchers also believed that with the four (4) months interval, it may be difficult, if not impossible, for the participants to recall any item from the pre-test.

Table 1. Structures of grammar categories, pre and post-test item numbers

Categories	Pre-test Item number	Post-test Item number
Words and sentences (fill-in the blanks)	1 – 5	96 – 100
Verb 1 (fill-in the blanks)	6 – 10	11- 15
Verb 2 (multiple choice)	11 – 15	16 – 20
Questions, Negatives and Answers	16 – 20	26 – 30
Modal Verbs	21 – 25	31 – 35
The passive 1 (fill-in the blanks)	26 – 30	56 – 60
The passive 2 (multiple choice)	31 – 35	61 – 65
The infinitive and the –*ing* form 1 (fill-in the blanks)	36 – 40	36 – 40
The infinitive and the –*ing* form 1 (multiple choice)	41 – 45	41 – 45
Random closed word class (e.g. this, some, my, etc.)	46 – 50	71 – 75
Nouns and articles	51 – 55	66 – 70
Pronoun 1 (fill-in the blanks)	56 – 60	91 – 85
Pronoun 2 (multiple choice)	61 – 65	76 – 80
Adjectives and adverbs (fill-in the blanks)	66 – 70	46 – 50
Prepositions (multiple choice)	71 – 75	6 – 10
Verbs with prepositions and adverbs (fill-in the blanks)	76 – 80	21 – 25
Reported speech (multiple choice)	81 – 85	81 – 85
Relative clause (fill-in the blanks)	86 – 90	91 – 95
Conditional and wish (multiple choice)	91 – 95	51 – 55
Linking words (fill-in the blanks)	96 – 100	1 – 5

Moreover, guide questions were also utilized for the one-on-one interviews with the participants to elaborate their experience with the metalanguage instruction.

Data Gathering Procedures

The conduct of study from pre to post test run for five months, which started at the first day of class of the university until its end of classes. The researchers administered first the pre-test. Afterwards,

intervention began using metalanguage. In applying the intervention, the teacher-researcher begun by giving a lecture first on the three-dimensional grammar framework by Larsen-Freeman (1997). This framework proposes the interwoven model of utilizing the form, meaning and use in teaching English grammar. After the lecture, it was followed by series of brief lecture on parts of speech wherein student-participants were divided into small groups and were given topic on word classes to metalinguistically discuss in the class. After every lecture, it was followed by a metalanguage instructional activity (oral and written) in which sentences were presented and the student-participants had to analyze and explain using their metalinguistic knowledge. After almost five months of discussion and practice of metalanguage use, post-test was administered and interview was conducted to all the participants.

Data analysis

Frequency, percentage, mean and standard deviation were used to statistically analyze the data on the pre and post tests. Mean and standard deviation were basically used to identify whether the participants generally passed or failed in the two tests, while T-test was utilized to determine the significant difference of the two variables. The passing score is an average mean of 75% in each test. Interview data was analyzed and interpreted using content analysis.

Null Hypothesis

The null hypothesis in this study was tested using 0.05 level of significance which follows that HO1: There is no significant difference between the participants' pre and post tests performance.

RESULTS AND DISCUSSION

In this study, it explored the effectiveness of metalanguage as a strategy in teaching language to L2 learners. In response to the first research question, the data below presents the pre and post rest scores of the participants.

Table 2. Distribution of frequency and percentage of participants' pre-test scores

Pre-test Scores	Frequency	Percentage

46	1	4.00
50	1	4.00
60	1	4.00
65	1	4.00
68	2	8.00
69	1	4.00
70	2	8.00
71	3	12.00
72	2	8.00
73	2	8.00
75	1	4.00
76	1	4.00
77	1	4.00
78	2	8.00
79	1	4.00
80	1	4.00
81	1	4.00
85	1	4.00
Total	25	100.00
Mean		71.12

Table 1 presents the frequency and percentage distribution of pre-test scores of the participants. As can be seen, the lowest score that the respondent got is 46, while the highest is 85. Majority of the participants (64%) failed the pre-test. Moreover, the total mean score of the said test is 71.12 which implies that the participants failed the pre-test.

After the treatment period, the students received the post-test questionnaire. As shown below, it presents the distribution of frequency and percentage of post-test scores of the participants

Table 3. Distribution of frequency and percentage of post-test scores

Post-test scores	Frequency	Percentage
57	2	8.00
65	1	4.00
67	1	4.00
71	1	4.00
73	1	4.00

74	1	4.00
75	1	4.00
77	2	8.00
78	3	12.00
81	1	4.00
82	2	8.00
84	4	16.00
85	1	4.00
87	1	4.00
91	1	4.00
92	1	4.00
93	1	4.00
Total	25	100.00
Mean		78.24

As can be seen, the lowest score that the respondent got is 57, while the highest is 93. Majority of the participants (72%) passed the post-test. Moreover, the total mean score of the said test is 78.24 which implies that the participants passed the post-test. The answer to the second research question, which probed about the improvement the English grammar performance of participants, was addressed by analyzing the significant difference of the results from pre and post tests. Hence, the table 4 illustrates the result of the t-test analysis of the participants' pre-test and post-test scores.

Table 4. Significant difference of the pre-test and post test scores

Indicator		t-value	p-value	Remark
Pre-test	Post-test	35.5929	$< .00001$	Significant

As can be seen, it was indicated on the table that the significance value is 0.004292 which is greater than 0.05. The participants have shown improvement as their scores range from 46 to 85 on the pre-test and from 57 to 93 on their post-test. It further reveals that the mean score increased significantly by 7.12. This implies that participants' gained scores were statistically and significantly affected by the metalanguage instruction. Consequently, null hypothesis is rejected. The instruction had a statistically significant effect on the participants'

metalanguage skills. Thus, the use of metalanguage instruction improved the English grammar performance of the participants. The study of Spada and Tomita (2010) also revealed that this instruction of grammar is effective in short-term classes. However, in the study of Serrano (2011), no significant difference was found in the pre and post-test between the experimental and control group.

To answer the third inquiry of the present study, the researchers gathered the data through a one-on-one interview with the participants. All the participants shared their perceptions on the use of metalanguage as a language teaching method.

Based on the interview, the participants defined metalanguage as an ability to correct one's language, to describe and understand another language, and to "sense" the correctness of its forms. These are similar to the claims of other researchers (Richards & Schmidt, 2010; Roehr, 2008; Aydin, 2018) about the metalinguistic knowledge.

They considered it as a good strategy in understanding the language because it basically involves the different aspect of language like its forms and structure. It also widens their vocabulary as it encouraged them to find words that are synonymous

and appropriate when constructing sentences. Thus, it improves their syntactical and meaning-making abilities, and grammatical competence. Through this, they can easily explore each segment by contextualizing and arriving at a meaningful metalanguage. This corroborates to the claim of Ellis (2004) that metalanguage sharpens learners' understanding of the target language.

They tend to translate words into their native language to understand some concepts expressed in English when they find it difficult to understand. Hence, because of this instruction, they believe that they do not need the translation because metalanguage instruction trains them to breakdown the text through deconstructing and meaning-making. With its repetitive process, they become used to it thus making it easy for them to understand the language.

Moreover, they do not only find it beneficial for them but also to their teachers because it enables them to easily explain how language is used. It also helps build interaction between them and their teachers. This is the reason why one participant disclosed that it is a "win-win" situation for them. Interaction can develop the language use specifically if there is an "authentic engagement in meaning-making" (Schleppegrell, 2013, p.156).

Students' participation creates opportunity for them to learn.

Participants illustrated how this instruction as a strategy works inside the classroom. For them, it is by scrutinizing the nature of a certain word, they will able to construct a sentence. Another participant cited a situation in which metalanguage occurs when the teacher gives certain word and the students will understand and describe its meaning and its forms. This shows how both teacher and students develop "explicitness" in the use of the language. They tend to focus on the form and its discussion to understand the language. According to Simard and Jean (2011), focusing on the forms of language and its rules promote more accuracy in second language use. It also "raises students' consciousness about form-meaning relationships" (Schleppegrell, 2013, p.156). With this, it can be said that understanding the language requires metalinguistic knowledge which serves as a foundation of an effective metalanguage instruction. However, given with the effectiveness of this instruction, they expressed that it just takes time to teach it.

The interview also revealed that metalanguage instruction has a positive impact to the participants. As they expressed, it helps them understand the language and it effectively aids them about the language. Similarly, in the study of Shakoor, Rehman, and Raees (2013), they found that their participants have positively responded to the use of metalanguage.

Moreover, the participants find it helpful in a way that it provides elaboration of how words are used in a certain text. This can be understood using concrete terms to describe the language (Ellis, 2016). The finding above supports the claim of Terrell (as cited in Vakili, 2022) that this kind of instruction for grammar play a significant role in acquiring and processing the language and that this has lasting impact on learner's knowledge.

In general, the responses of the L2 learners reflect how effective the metalanguage instruction was. They became aware of the rules and understood their concepts. Hence, the results substantiate the noticing hypothesis of Schmidt (as cited in Vakili, 2022) which claims that learners develop metalinguistic knowledge when they look into the surface of elements of the content that leads to understanding of the language.

CONCLUSIONS

Although there were many studies already done on metalanguage, only few focused on the effectiveness of metalanguage as a method in improving the language proficiency. The result of the present study indicates that the use of metalanguage has improved the performance of the participants. Another positive note that this paper shed light on is the participants' view that metalanguage instructions helped them understand the intricacies of English grammar better and deeper. Therefore, it can be concluded that the intervention is effective. As to their perceptions on the use of metalanguage as a language teaching method, they have expressed their positive attitude towards it and how it become beneficial to them that lead to the improvement of their linguistic competence. Finally, the findings of this study have established the significance of applying the metalanguage instruction in language learning as it proved its effectiveness in understanding the grammar.

The findings of this study is deemed beneficial to all stakeholders that includes the learners, the language teachers, language curricularists and the future language researchers. First, learners and teachers can both excel and gain mastery on the structures of English and acquire metalinguistic knowledge. Moreover, learners' higher order thinking skills would also improve because metalanguage necessitates a leaner to analyze a text in the surface and deep structure and be able to explain how these structures facilitate in arriving at the meaning of the text. Language curricularists would be updated and keep abreast of the new proposed language instruction, thus, making the necessary inclusion of metalinguistic activities in the instructional materials (e.g. textbooks, modules and other language materials) and in the syllabi or lesson plans for the language teachers. Future researchers may begin to explore other dimensions of metalanguage as an area of research not only for teaching but also in language acquisition and learning.

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