

THE STUDENTS' ABILITY IN USING TREE DIAGRAMS AT THE THIRD SEMESTER OF ENGLISH STUDY PROGRAM ISLAMIC UNIVERSITY OF INDRAGIRI

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ABSTRACT

Syntax is a sub-discipline of linguistics that studies the relationship between words in speech, including phrase structure, clause structure, and sentence structure in a language. Tree diagrams are a great method of understanding syntax. The purpose of this study is to ascertain the third semester English Study Program students at Indragiri Islamic University proficiency in understanding tree diagrams. This kind of study is descriptive quantitative. Twenty-one students made up the study's total population and sample, which was drawn using the total sampling technique. To find out the ability of pupils in studying tree diagrams, the researcher presented a test as an instrument. To ascertain the test outcomes, the researcher employed statistical analysis for data analysis. With an average score of 78.19, the test results demonstrated that third semester students in the English Study Program at Indragiri Islamic University were enough in understanding tree diagrams. The researcher came to the conclusion that there is room for improvement in the third semester English Study Program students at Indragiri Islamic University proficiency with tree diagrams.

Keyword: *Ability, Tree Diagram*

INTRODUCTION

Language is one of the methods of communication. Language has its components that construct it, and there are many languages all over the world, whether local, national, or international languages.

English is one of the world's most widely spoken languages. In learning English, we need to learn about linguistics. Linguistics is a scientific study of language; that's, it's studied through regular investigations, which can be empirically proved in accordance with the general theory of language structure. It has several levels, namely: phonology, morphology, semantics, pragmatics, discourse analysis, and syntax.

Syntax is a sub-discipline of linguistics that studies the relationship between words in speech, including phrase structure, clause structure, and sentence structure in a language. Syntax refers to the set of rules that govern sentence structure in a language. It determines how words and phrases are arranged to form grammatically correct and meaningful sentences (Arifin, 2009). Tree diagrams are a great method of understanding syntax. They are used in generative grammar as a means of displaying the internal hierarchical structure of sentences. Its advantage lies in showing the syntactic relationships between sentence units; moreover, functional relations are obviously described by this technique.

Tree diagrams are still used in the English Study Program Islamic University of Indragiri, especially for the third semester students. However, learning syntax using a tree diagram is not easy for some students. They found it difficult in some cases.

Based on the researcher's pre-observation, most of the students admit that they have difficulty learning it, and they sometimes get confused in determining the tree diagrams. Therefore, the purpose of this study is to find out how students' ability to learn tree diagrams on noun phrases.

LITERATURE REVIEW

Syntax

In linguistics, the study of the sentences of languages is syntax. Syntax is the part of linguistics that studies the structure and formation of sentences. This is emphasized by Kusumawardhani (2017), who believes that syntax is also one of the linguistic elements that should be mastered to be able to write well. Syntax concerns sentence structure. It explains how words and phrases are arranged to form correct sentences. A sentence could make no sense and still be correct from the syntax point of view as long as words are in their appropriate spots and agree with each other. According to Wafi (2019), "English syntax is discussing the system of rules and categories that allows words to be combined to form sentences."

Phrase

A phrase is a group of two or more words and functions as a unit that gives meaning. A phrase will always be more than one word. According Aarts (2011) “A phrase is a group of words that functions as a constituent and forms a unit in the hierarchical structure of a sentence, centered around a head word that determines its syntactic properties.” Then the according Verhaar (2016) “A phrase is a group of words that is a functional part of a longer utterance and has no predicative element.”

There are eleven different kinds of English phrases that we can learn. These phrase kinds include the following: absolute, appositive, participle, gerund, infinitive, prepositional, conjunctive, interjectional, noun, adjective, adverbial, and prepositional phrases.

Noun Phrase

A noun phrase is a group of words that functions like a noun in a sentence and is part of syntax, the study of how words form phrases, clauses, sentences, and texts. It is a language construction consisting of a noun and other words such as adjectives, determiners, or prepositions that form a single unit that has a complete meaning. According to Matthew (2006) “The most common noun phrases in many languages contain a single word which is either a noun or a pronoun. In most if not all languages, pronouns generally occur alone in noun phrases without modifiers.” Then according to Ardianto (2023) “English noun phrases have a structural pattern that is formed from one noun head (H) with or no qualifier (s) called modifier (M). The head of the noun phrase lies in the core noun while the qualifier is only optional, which can be present or not.”

Types of noun phrases there are; Simple Noun Phrase, Extended Noun Phrase, Compound Noun Phrase, and Determiner Noun Phrase.

Tree Diagram

A tree diagram is a two-dimensional diagram used in generative grammar as a convenient means of displaying the internal hierarchical structure of sentences as generated by a set of rules. In linguistics, tree diagrams are the notation that most syntacticians use to describe how sentences are organized in the mental grammar. Based on Heryono (2018), stated that:

A tree diagram is very common when learners analyze sentence structure in order to get a precision model of one whole sentence structure with its parts. Yet, the tree diagram gives some symbols as its representations dealing with labeling the parts of the tree in that hierarchical organization of sentences. There are det, N, NP, VP, etc. This tree diagram has definitely worked well to analyze sentences into breakdown pieces, which led to exact separation in obtaining the meaning or context.

A tree diagram enables learners to identify a sentence's structure and evaluate it according to both its deep and superficial levels. Thus, a student's capacity to evaluate phrases and sentence structures can be gauged by their ability to generate syntactic tree diagrams. They demonstrate a deep comprehension of every component, from the word level to phrases, if they are able to depict every component of a sentence in a tree diagram. There are some formulas in forming Noun Phrase; Noun, Determiner + Noun, Adjective Phrase + Noun, Determiner + Adjective Phrase + Noun, Determiner + Noun + Prepositional Phrase, and Determiner + Adjective Phrase + Noun + Prepositional Phrase.

RESEARCH METHOD

This research was conducted using a descriptive-quantitative design. It is because the researcher only wanted to find the students' ability in learning tree diagrams on noun phrases. According to Creswell and Creswell (2018) "Descriptive quantitative research is a type of research that aims to systematically describe the characteristics, features, or facts about a given population, situation, or area of interest in a factual and accurate manner using numerical data and statistical analysis."

The location of this research was at Islamic University of Indragiri, which is located on Soebrantas Street, Tembilahan City, in Indragiri Hilir Regency. This research had been conducted on January 2025.

The population in this research were the third semester students in the 2024/2025 academic years of English Study Program Islamic University of Indragiri, and researchers used total sampling. Based on Sugiyono (2019):

Total sampling is a sampling technique when all members of the population are used as samples. This is often done when the population is relatively small, less than 30 people, or research wants to make generalizations with very small errors.

The reason researchers use this sample technique is because the number of samples are less than 30 people; the number of samples are only 21 people.

In this research, researchers used tests as instruments. A test is a method to measure the students' knowledge, especially in syntax. According to Suryani (2020), a test is a sequence of questions or practices that was used for surveying the skill, intelligence, knowledge, or ability to trail that is owned and used for surveying by an individual or group.

Techniques for gathering data are a component of the tools used to gather data that show whether research is successful or unsuccessful. Because the goal of this research is to determine how well students can learn tree diagrams, the researcher employed some tests to gather correct data for the study.

The data analysis technique in this research used several formulas that were:

1. Percentage of the students' ability

$$P = \frac{f}{N} \times 100$$

P : Individual scoring f : Correct answer N : Number of items

Sudijono (2010)

2. Mean

$$\bar{x} : \sum x / n$$

$\bar{x}$: Mean score $\sum$: Sum of x : Score of student n : Number of student

Ananda (2018)

3. Classification of the students' ability

Table 1. Classification of the students' ability

No	Mastery Level	Standard Score	Information
1.	90-100	A	Very Good
2.	80-89	B	Good
3.	66-79	C	Enough
4.	55-64	D	Less
5.	0-54	E	Very Less

Wahyuni and Ibrahim (2012)

FINDINGS AND DISCUSSION

In this section the researcher explained the data presentation about the students' ability in using tree diagrams on noun phrases at the third semester of English Study Program of Islamic University of Indragiri. Before going the results, the questions given to the sample have been validated by experts and this question uses an objective test. The study was carried out on January 14, 2025, at the Islamic University of Indragiri, and the researcher assessed the students' comprehension of tree diagrams using an exam.

Twenty-one students from the Islamic University of Indragiri of English Study Program took the test, and the results were gathered. Students were then asked to respond. There were 15 questions.

Table 2. Recapitulation of The Students' Ability in Using The Diagrams

No.	Names of The Students	Classification	
		Score	Level
1.	Student 1	56	Less
2.	Student 2	74	Enough
3.	Student 3	100	Very Good
4.	Student 4	86	Good
5.	Student 5	86	Good
6.	Student 6	100	Very Good
7.	Student 7	86	Good
8.	Student 8	56	Less
9.	Student 9	68	Enough
10.	Student 10	100	Very Good
11.	Student 11	100	Very Good
12.	Student 12	62	Less
13.	Student 13	82	Good
14.	Student 14	42	Very Less
15.	Student 15	58	Less

No.	Names of The Students	Classification	
		Score	Level
16.	Student 16	38	Very Less
17.	Student 17	78	Enough
18.	Student 18	92	Very Good
19.	Student 19	86	Good
20.	Student 20	92	Very Good
21.	Student 21	100	Very Good
Mean Score		78, 19	Enough

The table above shows that 5 students scored 100, 2 students scored 92, 4 students scored 86, 1 student scored 82, 1 student scored 78, 1 student scored 74, 1 student scored 68, 1 student scored 62, 1 student scored 58, 2 students scored 56, 1 student scored 42, and 1 student scored 38. This means that 7 students got very good, 5 students got good, 3 students got enough, 4 students got less, and 2 students got very less. Summarize, their total mean score was 78,19 with an enough classification.

Table 3. Classification of The Students' Ability in Using Tree Diagrams

Mastery Level	Number of Students	Information	Percentage
90-100	7	Very Good	33%
80-89	5	Good	24%
66-79	3	Enough	14%
55-64	4	Less	19%
0-54	2	Very Less	10%
Total	21	100%	

The table above, shows that there 7 students got very good (33%), 5 students got good (24%), 3 students got enough (14%), 4 students got less (19%), and 2 students got very less (10%).

In line with the data analysis presented above, the students' ability in using tree diagrams at the third semester of English study program Islamic university of Indragiri could respond to the inquiry "How are the students' ability in using tree diagrams on noun phrases at the third semester of English Study Program of Islamic University of Indragiri?"

Based on the previously mentioned results, the tables above demonstrated that students' proficiency with tree diagrams fell into the enough range. This is evident

from the cumulative amount of all test scores that have been given out, which displays the number 78,19, which is located between 66-79.

In this study, the researcher can present the differences from previous studies that discuss overall syntax, such as noun phrases and verb phrases. in the study the final result was 59, 2.

CONCLUSION

This study was conducted to determine "How are the students' ability in using tree diagrams on noun phrases at the third semester of English Study Program of Islamic University of Indragiri?" Twenty-one learners took the test, and the results indicated that they had very good abilities. This was evident from the final result, which displayed the number 78,19, which falls between 66-79. The mean score was 78,19, is in the enough range, which means that these students' skills need to be improved, especially in noun phrases.

REFERENCES

- Aarts, B. (2011). *Modern English Grammar*. Oxford University Press
- Ananda, R., Fadhli, M. (2018). *Statistic Pendidikan Teori dan Praktik dalam Pendidikan*. Medan: CV. Widya Puspita
- Ardianto, Ardik. (2023). *English Noun Phrases of Narrative Text and News Article: A Contrastive Analysis*. *Leksema, Jurnal Bahasa dan Sastra, Universitas Terbuka*. Volume. 8. (1) DOI: <https://doi.org/10.22515/ljbs.v8i1>
- Arifin. (2009). *What is syntax?*. *Jurusan Bahasa Inggris UIN Alauddin Makassar*.
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 5th Edition. SAGE Publications.
- Heryono, Heri. (2018). *Comparing Rule-Based Translation to Syntax Tree Diagram Translation*. *Journal of Informatics, Information System, Software Engineering and Applications*. Volume 1. (1), 27-39
- Kusumawardhani, Paramita. (2017). *The Analysis of Conjunctions In Writing An English Narrative Composition: A Syntax Perspective*. *Wanastra*. Volume 9, (1).
- Ratih, Suryani. (2020). *An Analysis of Students' Ability in Writing Recount Text*. *Skripsi thesis. Universitas Pancasakti Tegal*.
- Sudijono, Anas. (2010). *Pengantar Statistic Pendidikan*. Jakarta: PT. Raja Grafindo Persada.

- Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: PT. Alfabet.
- S. Dryer, Matthew. (2006). *Language Typology and Syntactic Description. Complex Constructions*. Cambridge University Press. Volume 2.
- Verhaar, J.W.M. (2016). *Asas-asas Linguistik Umum*. Yogyakarta: Gadjah Mada University Press
- Wafi, Abdul. (2019). *Using Games to Improve Students' Active Involvement in The Learning of English Syntax at Iain Madura: An Autonomous Learning*. *OKARA: Jurnal Bahasa dan Sastra*. Volume 13. (1).
- Wahyuni, Sri., Ibrahim, Syukur. (2012). *Assesmen Pembelajaran Bahasa*. Bandung: PT. Refika Aditama.