

**IMPROVING STUDENTS' VOCABULARY MASTERY USING ROTATING
TRIO EXCHANGE MODEL AT THE TENTH GRADE OF VOCATIONAL
HIGH SCHOOL**

(Undergraduate Thesis)

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ABSTRACT

IMPROVING STUDENTS' VOCABULARY MASTERY USING ROTATING TRIO EXCHANGE MODEL AT THE TENTH GRADE OF VOCATIONAL HIGH SCHOOL

Tanti Aprelia Wulandari

The objectives of this research are to find out whether there was significant difference on students' vocabulary mastery after being taught using the Rotating Trio Exchange model, to find out what aspects of vocabulary improve the most after students are taught using the Rotating Trio Exchange (RTE) model, and to find out students' responses after being taught using this model. This research was designed as mixed method research and it was conducted at SMK Amal Bakti Jatimulyo. The subjects of the research were 30 students from the tenth grade of Accounting. The data were collected through vocabulary test and closed-ended questionnaire. After that, the researcher used mixed method analysis to analyze the data. The results showed that there is significant difference on students' vocabulary mastery after being taught using the Rotating Trio Exchange model. The students' mean score improved by 14.75 from pretest to posttest. Through hypothesis testing, it shown that the result of computation of the value of two tailed significance was $0.000 < 0.005$, it means that H1 is accepted and H0 is rejected. In addition, there was also an improvement in four vocabulary aspects on the posttest: nouns (2.21, 14.99%), verbs (4.06, 27.52%), adjectives (4.42, 29.97%), and adverbs (4.06, 27.52%) and adjectives became the most improved aspect. The results also showed that the majority of students give positive response to this model. There is 91% of positive responses and 9% of negative responses in using this model. This suggest that RTE model has a positive effect on students' vocabulary mastery.

Keywords: *model, vocabulary mastery, Rotating Trio Exchange*

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TRIO EXCHANGE MODEL AT THE TENTH GRADE OF VOCATIONAL
HIGH SCHOOL**

**By:
TANTI APRELIA WULANDARI**

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MASTERY USING ROTATING TRIO EXCHANGE
MODEL AT THE TENTH GRADE OF
VOCATIONAL HIGH SCHOOL**

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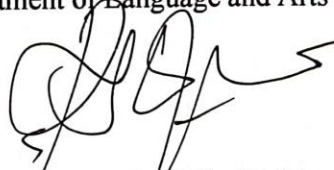
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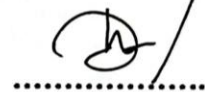
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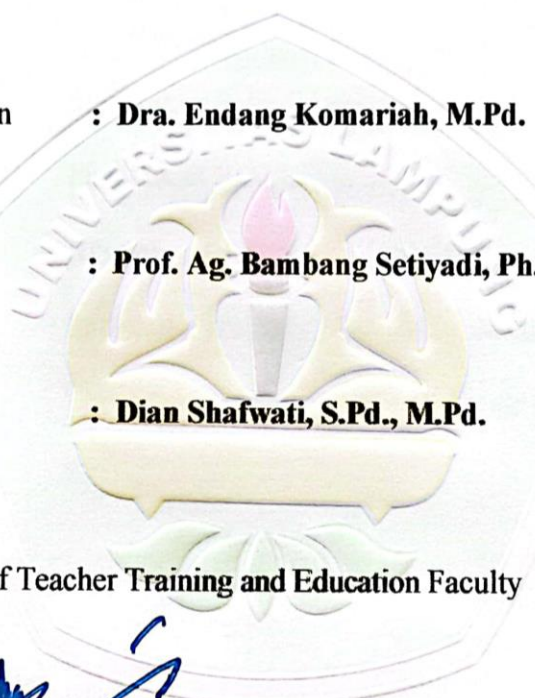


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Menyatakan bahwa skripsi ini adalah karya saya sendiri. Sepanjang pengetahuan saya, karya ini tidak berisi materi yang ditulis orang lain, kecuali bagian-bagian tertentu yang saya ambil sebagai acuan. Apabila ternyata terbukti bahwa pernyataan ini tidak benar, sepenuhnya menjadi tanggung jawab saya.

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Yang membuat pernyataan,



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CURRICULUM VITAE

Tanti Aprelia Wulandari was born in Rama Gunawan on April 9th, 2001. She is the second child of Sutanto and Sri Hastuti. She has one older brother whose name is Agus Gunawan.

She graduated from SDN 1 Karang Anyar, South Lampung in 2013. Then, she continued her study at SMPN 3 Jati Agung, South Lampung and she graduated in 2016. After graduating from junior high school, she continued her study at SMK Amal Bakti Jatimulyo, South Lampung and graduated in 2019.

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DEDICATION

This thesis is fully dedicated to:

My mother - Sri Hastuti

Myself

My older brother - Agus Gunawan

All lecturers of the English Education study program

My friends

My alma mater - University of Lampung.

MOTTO

“Your Lord knows best what is in your hearts. If you are righteous, then He is Most-Forgiving for those who turn to Him in repentance.”

(Q.S Al-Isra : 25)

“Those who have believed and whose hearts are assured by the remembrance of Allah. Unquestionably, by the remembrance of Allah hearts are assured.”

(Q.S Ar-Ra'd : 28)

“If the universe didn't need you, you wouldn't be here.”

“You can see everything clearly when your water is calm.”

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In the name of Allah SWT, the Most Beneficent and the Most Merciful, who has given the blessings, guidance, strengths, and opportunity so that the writer could finish this thesis. Sholawat for our Prophet Muhammad SAW., all of his family, and his friends.

This script, entitled "Improving Students' Vocabulary Mastery using Rotating Trio Exchange Model at the Tenth Grade Students of Vocational High School" is submitted to fulfill one of the requirements in accomplishing the S-1 Degree at the Language and Art Department of Teaching Training and Education Faculty, University of Lampung. The writer would like to acknowledge the gratitude to the people who had supported her throughout her life and especially in finishing this script. Thus, the writer would like to express the sincere respect and gratitude to:

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Finally, the writer realizes that this thesis is still far from being perfect and there are still errors or mistakes made. Therefore, the writer would really appreciate criticism, comments, and suggestions. In addition, I hope this research paper can provide benefits to readers and other researchers.

Bandar Lampung, August 08th, 2023
The Author,

Tanti Aprelia Wulandari

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CHAPTER I

INTRODUCTION

1.1 Background of the Research

English is the most crucial language to master for communicating internationally. There are a number of abilities that students need to acquire in order to learn English. The four skills of language acquisition are speaking, reading, and writing. To begin learning and perfect these four skills, students must start with the most fundamental element. The most fundamental element is learning vocabulary. Vocabulary, as a field of knowledge in language, plays a big role for learners in acquiring language. By knowing and mastering the vocabulary of a language we would be able to understand the meaning of these words. Therefore Learning vocabulary can assist us to express our thoughts, opinions, and ideas. Aside from that, we can deduce the meaning of interlocutors' words in communicating.

Vocabulary learning is still a challenge to be applied to students in several Indonesian schools, one of which is Amal Bakti Vocational School. This is due to the lack of proper preparation for the implementation of learning. Every lesson has a particular objective and prerequisites, for example learning vocabulary.

Based on the pre-research interviews that the researcher conducted with one of the

English teachers at SMK Amal Bakti, Researcher could observe that Amal Bakti students also had trouble learning vocabulary. This can be seen from the scores of most students who are still low and have to do remedial. This put students under pressure before class even started. As a result of these issues also have an impact on student achievement, some students must do remedial work in order for their final grades to reach the target.

The teacher at this school used the rote memorization technique to teach English, which was considered effective for learning English vocabulary. This technique emphasized individual learning, in contrast to the Rotating Trio Exchange, which prioritized group discussions. Additionally, many people primarily learned by reading printed books obtained from educational organizations. During English lessons, students often only completed questions from the book. Because they were not given direction to practice speaking or writing in English, students could not gain confidence or improve their skills. This was due to the teacher's difficulty in identifying the best teaching approach. As a result, when students did the exercises, they found it challenging to construct phrases they should have been able to explain successfully. Consequently, students became more focused on memorization rather than understanding the meaning of each phrase, which negatively impacted their academic achievement. In this traditional, one-way learning model, when the teacher was more involved in the application of learning, students also became less engaged. Students continued to struggle with reading questions and comprehending materials written in English due to their inadequate vocabulary knowledge. The teacher needed to devise a teaching model that would

effectively convey the material to the students. The solution involved assessing the learning process and considering potential solutions to these issues. One of the key factors that contributes to the success of learning is the teaching model chosen. Selecting the appropriate model is a deliberate effort that has a significant impact on learning outcomes. One model that can be employed is the Rotating Trio Exchange.

The Rotating Trio Exchange, which is one of the cooperative learning models, involves students being placed in small groups of three individuals to engage in discussions. Through this activity, students can communicate with each other and share ideas to address the question at hand. This teaching model has proven to be not only effective in helping students comprehend complex ideas but also highly beneficial for developing critical thinking skills and fostering cooperation among students. Additionally, students have the opportunity to enhance their vocabulary acquisition skills through the implementation of this learning model.

According to Amin, S., & Sumendap, L. (2022), the RTE learning model has the following benefits: 1) Allowing students to express their thoughts and opinions; 2) Teaching students to think critically and to articulate their thoughts 3) Having a high level of motivation, etc. As a result, this type of learning helps students to obtain the best learning outcomes. Through the use of the RTE model in the learning process, students can interact with both their own group and other groups in a course. Making learning activities more pleasurable is believed to increase students' motivation to learn (Hasanah et al., 2019).

There are previous studies that related to this research, such as Duan, Y. (2018) in the dissertations "*Cooperative Learning in Seventh Graders' Vocabulary Learning in China*". The researcher conducted this study in China to see the effects of Cooperative Learning on seventh graders' vocabulary learning. The results of this study suggested that Cooperative Learning may be helpful in improving students' vocabulary learning outcomes. The other article was from Hidayat, N., & Sari, E. P. (2019) that is "*Does Cooperative Learning Bring Positive Effect on Students' Vocabulary Achievement?*". The results of this study showed that cooperative learning and conventional method both considerably improve students' vocabulary achievement. The third was by Maharida, M. (2015) in the article "*Improving the students' speaking ability through Rotating Trio Exchange model*". The researcher conducted his study by using Rotating Trio Exchange. The results of this study showed that using the Rotating Trio Exchange Model to improve students' speaking skills in terms of accuracy and fluency was successful and significant.

Based on these previous studies, cooperative learning has been used in research to determine students' vocabulary achievement either in China or in East Java, then using. While others used the Rotating Trio Exchange model to explore the development of speaking skills. Therefore, researchers conducted the research to find differences on students' vocabulary before and after being taught using the Rotating Trio Exchange model in Jatimulyo, South Lampung. This research was important to inspire future research into the Rotating Trio Exchange learning model to provide a fresh and innovative learning environment in the classroom while promoting student

participation and creativity.

The Rotating Trio Exchange (RTE) learning model was chosen by the researcher because it emphasized the chances for students to share their opinions and the learning that occurred when they worked together. As a result, the researcher was interested whether group learning using the Rotating Trio Exchange (RTE) model could improve students' vocabulary mastery. The researcher wanted to study whether this model had a significant effect on the standard of student learning in an effort to improve vocabulary mastery. Students were expected to increase their vocabulary during learning. It was also intended that student learning results would be improved or increased by using this Rotating Trio Exchange (RTE) learning model.

1.2 Research Questions

The researcher formulated the research questions of this research as follows:

- a) Is there any significant difference on students' vocabulary mastery after being taught through Rotating Trio Exchange (RTE) model?
- b) What aspects of vocabulary improved the most after students are taught using the Rotating Trio Exchange (RTE) model?
- c) What is the students' response on students' vocabulary mastery after being taught through Rotating Trio Exchange (RTE) model?

1.3 Objectives of the Research

The objectives of this research are:

- a) To find out whether there is significant difference on students' vocabulary mastery after being taught through the Rotating Trio Exchange (RTE) model.
- b) To find out what aspects of vocabulary improve the most after students are taught using the Rotating Trio Exchange (RTE) model.
- c) To find out the students' response on vocabulary mastery after being taught through the Rotating Trio Exchange (RTE) model.

1.4 Uses of the Research

This research was expected to be valuable for various parties, both theoretically and practically.

1. Theoretical Benefit

The results of this research were expected to contribute to a better understanding of how the Rotating Trio Exchange model was used in English language learning and education in terms of vocabulary mastery.

2. Practical Benefit

a) Student

Students were expected to have the opportunity to express their thoughts and opinions, could learn easier and faster when students were working in groups than they were working alone, and got a different perspective from their group of friends.

b) Teacher

The results of this research were expected to be beneficial information for teachers in selecting appropriate models and strategies.

c) Other Researcher

The results of this research could be used as reference material for future research.

1.5 Scope of the Research

This research was conducted about 2 weeks at SMK Amal Bakti, Jatimulyo South Lampung. This research was conducted on the tenth grade students' that consisted of 30 students in the class. This research was a quantitative research that focused on improving tenth grade students' vocabulary mastery by using the Rotating Trio Exchange Model. Based on the English curriculum 2013 and vocational high school syllabus, this research focused on linguistic elements (simple past tense: verb and vocabulary: noun, adjective, and adverb) in recount text material that included in the basic competencies. The researcher concentrated on content word (noun, adjective, verb, and adverb) that was included in productive vocabulary.

1.6 Definition of Terms

The researcher defined certain terms related to this research in order to provide foundational understanding. The definitions of the terms are as follows:

1. Vocabulary

The type of vocabulary used in this research was productive vocabulary, especially content words. Productive vocabulary is an active word process because students may create words to describe ideas and emotions that other people can understand (Webb, 2005).

2. Rotating Trio Exchange

The Rotating Trio Exchange (RTE) cooperative learning model is a learning model

in which students learn by discussing topics with some of their classmates, and students collaborate and support one another in order to solve tasks set by the teacher (Silberman, 2016).

3. Response

Response is an answer and a set of reactions to the communicant after receiving the message (Effendy, O. U., 1984). In this research, responses were students' answers to the statements in the questionnaire.

4. Mastery

Mastery is when someone has passed through the three stages of intuitive intelligence, reality connection, and the innate power we all possess that applied to a particular area of knowledge (Greene, R., 2012). In this research, vocabulary mastery was competence in applying learned word mastery to the language used.

CHAPTER II

LITERATURE REVIEW

Rotating Trio Exchange is a learning model that prioritizes group discussions. According to Silberman, M. L. (2011), it is a mechanism for students to discuss issues with some (but usually not all) of their fellow students. Additionally, exchanges are easily adaptable to the learning topic.

Silberman, M. L. (2011) also stated that in implementing this model, students are expected to concentrate on the material in order to develop interest, arouse curiosity, and stimulate critical thinking. The exchange of opinions in groups of three is believed to be able to increase student activity in learning, because students are invited to think actively in solving questions from the teacher (Amin, S., & Linda Yurike Susan Sumendap, M., 2022). In addition, active student participation is a place for students to develop skills and give perspectives among students to obtain certainty of answers from group members (Mertini et al., 2013).

The Rotating Trio Exchange learning model also provides many benefits for students. Students are asked to discuss in trios various questions that help them get to know each other; learn about attitudes, knowledge, and experiences, and start to discuss about the course content (Silberman, M. L., & Biech, E., 2015).

2.1 Previous Studies

There were several previous studies related to this research, the first previous study was the study by Duan, Y. (2018) in the dissertations “*Cooperative Learning in Seventh Graders’ Vocabulary Learning in China*”. This study investigated the effects of Cooperative Learning on vocabulary learning of seventh grade students in China. This study was carried out because rote memorization is the typical method used by Chinese students to learn language. This study aimed to determine whether Chinese secondary school students might benefit from cooperative learning in terms of vocabulary, whether cooperative learning could aid students in applying new words, and whether cooperative learning could help students retain new words longer. A control group and an experimental group were used in this study's quasi-experimental approach. Data were collected in a secondary school in Beijing, China. Three tests were given to the participants: a pretest, a posttest, and a delayed posttest. The data were examined using a one-way repeated ANOVA in SPSS (25.0). The results suggest that Cooperative Learning may be helpful in improving students’ vocabulary learning outcomes.

The second previous study conducted by Hidayat, N., & Sari, E. P. (2019) in “*Does Cooperative Learning Bring Positive Effect on Students’ Vocabulary Achievement?*”. The purpose of this study was to see into how students' vocabulary achievement was affected by cooperative learning. The subject of this study is 54 students of grade seven in one of public junior high schools in East Java Indonesia. The researcher divided the subjects into two groups, each with 27 students: the experimental group and the control

group. Tests and observation were used as the instruments. Pretest and posttests were administered during the first and last meetings as part of the tests. In this study, the researcher used SPSS 24 to analyze the data. The results of this study showed that cooperative learning and conventional method both considerably increase students' vocabulary achievement. Additionally, it had beneficial benefits on the students' motivation, cooperation, and level of nervousness.

The third was an article by Maharida, M. (2015) in the article "*Improving the students' speaking ability through rotating trio exchange model*". The researcher conducted their study by using Rotating Trio Exchange. This study used Class Room Action Research (CAR) which is divided into two cycles, each with four meetings. The techniques for collecting data were speaking test and observation. The samples are one of classes which included a total of 33 students. The results of this study showed that using the Rotating Trio Exchange Model to improve students' speaking skills in terms of accuracy and fluency was successful and significant.

Based on these previous studies, the previous researchers used cooperative learning to find out students' vocabulary achievement, while the other employed the Rotating Trio Exchange model to explore the development of speaking abilities. Therefore, the researcher conducted this research to find differences on students' vocabulary before and after being taught using the Rotating Trio Exchange model. The researcher used recount text material which focused on linguistic elements (simple past tense: verb and vocabulary: noun, adjective, and adverb). It was included in the English curriculum 2013 and vocational high school syllabus. This research was important for inspiring

future research into the Rotating Trio Exchange learning model to provide a fresh and innovative learning environment in the classroom.

2.2 Vocabulary

2.2.1 Definition of Vocabulary

Vocabulary refers to the several sorts of words, such as nouns, adjectives, and verbs that are used in language. Learning vocabulary is one of the important things in learning a language.

Richards, J. C., & Renandya, W. A. (2002), Vocabulary is an important part of language proficiency since it determines how well students talk, listen, read, and write. That means vocabulary is the basis for learning a language. Meanwhile, according to Hatch and Brown (1995:1), vocabulary is a set of terms appropriate for a certain language or a list of phrases that particular language speakers may employ. Vocabulary learning is the foundation of both learning a language and using it as stated by Laufer (1997:54).

According to Edward (1997:149), Vocabulary is one of the important components in learning any language, students need to learn vocabulary while they are studying sentence structure and practicing on word pronunciation. Furthermore, another definition of vocabulary is from Hornby (2006), which are all words or terms in a specific language that is known or can be used by someone.

The essence of foreign language acquisition, as Cameron (2001) stated at the primary level, is to build useful words for students. This is due to the fact that the useful words

that students learn can aid in communicating. Vocabulary can help individuals in expressing their thoughts, ideas, and feelings.

From the explanation above, the researcher can conclude that Vocabulary is all the words known and used by a particular person, which serves as the foundation for learning language and expressing thoughts.

Nation (2001) has its own explanation regarding the topic "What does it mean to know a word?" He asserts that knowing a word entails three general levels: form, meaning, and use, each of which is further broken down into separate elements made up of receptive and productive knowledge. Meanwhile, according to Harmer (1991: 158), knowing words (vocabulary) includes knowledge of word meanings, word use, word formation, and word grammar.

1. Word meaning

Word meaning is the suitability between a word and the thing it describes. The meaning of words is also intuitively considered as something that is in the mind (Bechtel, W., & Graham, G., 1999). In other words, the meaning of words is people's understanding representation about language they speak. Additionally, this implies that when a person comprehends the meaning of a word, they also comprehend all the forms and characteristics that relate to that word.

2. Word use

The ability to use words effectively requires understanding of their grammatical meanings, collocations, metaphors, and idioms and being aware of constraints on usage

due to many factors, such as register (the appropriate level of formality) and cultural differences.

3. Word formation

Word formation includes knowing how to pronounce and spell words correctly and understanding what derivatives are (acceptable prefixes and suffixes). In addition, word formation can also create word meanings by considering the grammatical context.

Understanding a form of word encompasses its spoken form, written form, and word parts. Students' understanding of word meaning and ability to utilize words effectively in various settings is based on their understanding of phonics, word restructuring, and spelling. Understanding a word in its spoken form means being able to hear it, utter it clearly, and use it in conversation to communicate with others. Regarding word parts, it means understanding how to employ prefixes, suffixes, and word stems, and word family.

4. Word grammar

Word grammar, it is specifically understanding how to apply it in the proper grammatical form. Word usage is differentiated by the employment of specific grammatical patterns, such as nouns, verbs, adjectives, and adverbs, among others.

One of the most significant linguistic considerations when selecting a word is its grammatical function, which pertains to word classes and grammatical patterns.

2.2.2 The Aspects Progression of Vocabulary Acquisition Ability

This is the progression of vocabulary acquisition ability (Harmer, 2001). The first thing to learn is knowing the meaning of a word, learning how the word is spelled, then practicing how to pronounce it, and lastly understanding how to use the word.

1. Meaning

Lexical meaning, morphological meaning, and syntactic meaning are the three categories into which meaning can be subdivided. A word's lexical meaning is its associated meaning. A morpheme's morphological meaning is its associated meaning. The smallest units that can convey meaning or function are called morphemes. The syntactic meaning is the meaning of the arrangement of words in a sentence. Other factors may also have an impact on meaning. Therefore, understanding the context of the sentence is necessary to fully understand a sentence.

2. Spelling

Spelling is the writing of one or more words, along with the necessary letters, and the arrangement of the letters that form a word or part of a word, in the standard order that applies; the process of forming words by arranging letters.

3. Pronunciation

Hewings (2004:3) claims that the primary constituents of speech are sounds, which are merged into one. These elements include both the distinct speech sounds and pitch patterns (rising and falling sounds used to communicate meaning). Phonetic symbols and pronunciation are related to each other. Sounds, syllables, and words make up the majority of pronunciation.

4. Use

Nation (2001) asserts that there are a number of strategies to pique interest in the use of a term, including mentioning certain collocations and quickly demonstrating the grammatical pattern that relates to the word (countable/uncountable, transitive/intransitive, etc.). Provide well-known antonyms or well-known words that characterize the relevant vocabulary group or set. In a similar vein, specify word usage limitations (formal, informal, rude, children only, etc.).

2.2.3 Types of Vocabulary

Some eminent researchers already consented to share their understanding of well-known vocabulary within the context of its use in speaking, listening, writing, and other abilities. There are two types of vocabulary as stated by Nation (1990), Aeborsold and Field (1997). These two types of vocabulary are active or productive and passive or receptive.

1. Receptive vocabulary

Knowledge of receptive vocabulary is familiar and understandable to students when they are reading or listening to texts. According to Nation (1990), this receptive vocabulary refers to words that students can create from listening and are supposed to be able to tell apart words that sound similar. It could be a word you have never heard of or one you hear practically daily. Receptive vocabulary is sometimes referred to as passive vocabulary because students simply take in what they read and hear from other people.

2. Productive vocabulary

The term active vocabulary or productive vocabulary refers to words that students may utilize effectively when speaking or writing (Aeborsold and Field, 1977:139). This has to do with the grammatical usage of words. By speaking and writing clearly, learners may communicate their ideas with these terms. Productive vocabulary is referred to as an active word process because students may create words to describe ideas and emotions that other people can understand (Webb, 2005).

According to Corver et al. (2001), there are two significant categories in the categorization of syntactic categories: content words (also known as lexical or substantive categories) and function words (also known as functional categories).

1. Content words

Content words are lexical terms with relative semantic content, such as "particular or detailed," and they convey the sentence's main idea. It is not unexpected that content words frequently take the form of nouns (N), verbs (V), adjectives (Adj), and adverbs (Adv) because these are the words that best express the message to be conveyed in a sentence.

In other words, content words offer the most important information. During a conversation, the speaker would pay close attention to these substantive words. This is done in order for the listener to properly understand the speaker's intention and purpose through understanding the content words that are used in communication.

The following are some of the kinds of things of content words:

a. Nouns

Nouns are commonly defined as people, places, or things (Macfadyen, 2007). Things include a quality a material, a collection, a state and an action. The following are types of nouns:

1. Proper Nouns are words that identify a particular person, place, or thing are known as proper nouns. Therefore, it starts with an upper case letter.
2. Common nouns are terms that identify people, places, things, or concepts; yet, they do not serve as names for specific individuals or objects. Except when it comes at the start of a sentence, a common word always starts with a lower case letter.
3. Concrete nouns often known as "sense" words. The words that can be experienced with the five senses: sight, sound, smell, taste, and touch. For example, people, bells, voices, flowers, scents, food, etc.
4. Concrete nouns have the opposite meaning as abstract nouns. These terms describe concepts, ideas, opinions, or situations
5. Countable nouns are nouns that can be counted. For example, a computer, two cameras, etc. There are singular and plural forms for countable nouns.
6. Uncountable nouns are nouns that cannot be counted. These nouns include ideas, information, emotions, etc.
7. Collective nouns describe a collection of entities or people. When referring to a collection of individuals or objects, a collective noun might use the single form. For example, audience, family, staff, team, etc.

b. Verbs

A verb is typically defined as a word class or part of speech that denotes a state of being or describes an action or occurrence (Betti, 2021). In general, it is more logical to define a verb in terms of what it does rather than what it is. There are some kinds of verbs, including the following:

1. Action Verbs are verbs that describe an action/activity that the subject takes.
2. Transitive verb is a verb which has an object to complete its meaning.
3. Intransitive verb is a verb which does not need an object to complete its meaning.
4. A regular verb (sometimes referred to as a weak verb) creates its past tense and past participle by adding -d or -ed (or, in some situations, -t) to the basic form (Stageberg, 1981)
5. An irregular verb (also known as a strong verb) is not formed by adding -d or -ed:

c. Adjectives

According to Quirk et al. (1985), adjectives are predicative when they serve as the subject complement or object complement and they are attributive when they pre-modify the head of a noun phrase. Adjectives in particular are subject complements to sentences as well as noun phrases which may comprise finite or non-finite clauses. The following are eleven different categories in English (Khamying, 2007, p. 174 - 179).

1. A descriptive adjective describes properties of a thing by using the characteristics of people, animals, objects, or locations.
2. Proper adjective has a function to modify nouns related to nationality.
3. Adjective Quantitative has a function to modify a noun to reflect specific information for quantifying.

4. Demonstrative adjectives (this, that, these, and those) are used to indicate the singularity or plurality of the noun they modify as well as their proximity to the speaker or writer.
5. Interrogative adjective is modifying a noun into a question form.
6. Possessive adjective is indicating that someone or something has possession of a noun.
7. Distributive adjective can divide or separate a noun into different sections to modify it.
8. Emphasizing Adjective has a function to modify nouns by showing or emphasizing texts.
9. Exclamatory adjectives can modify nouns by utilizing interjectional words.
10. Relative adjective has a function to change a noun and join sentences that are connected to the first and second sentences.

d. Adverbs

Adverbs are also known as lexical words which can be used to modify words other than nouns (Schachter et al., 2007). As a result, an adverb can describe or modify a verb, an adjective, another adverb, or the whole sentence. Adverbs can also be used to indicate manner, degree, place, and time. There are other elements to take into account, such as the fact that the adverb is an optional modifier and it is necessary to pay attention to the base word to be changed.

1. An adverb of manner indicates the way something occurs or is done. It is employed to describe how a work is carried out. Adverbs of manner typically come after the

main verb. For example carefully, badly, easily, etc.

2. An adverb of place describes the setting in which an activity took place. Adverb of places frequently follows the primary verb in a phrase. It shows how an object is situated when an event is occurring. For example above, sown, behind, here, etc.
3. Adverbs of time are used to describe when something occurs. It shows the duration and timing of an action. They are frequently used at the end of a statement. For example yesterday, today, tomorrow, etc.
4. Adverbs of frequency are used to describe how frequently something occurs. Depending on how specific they are, they fall into two groups. They are adverbs of indefinite frequency that suggest how frequently something occurs without providing a precise period (one, twice, daily, weekly, etc.). The second is adverbs of indefinite that are typically positioned before the primary verb (always, never, sometimes, etc.)
5. Adverbs of degree define the extent to which a lexical item expresses a property or relation. An adverb can be used to indicate a limit or level. For example, extremely, exactly, very, almost, etc.

2. Function words

Function words perform a crucial "grammatical" function while having a more "non-conceptual" meaning. Function words are used to link the content words together to generate a text that is coherent and simple to understand. Sentences can be made accurate and grammatically correct by using function words. The speaker may be viewed as a poor English speaker if the function words are not used correctly or are

omitted. However, the speaker's main point may still be able to be understood by the listener because, unlike content words, function words do not provide the listener with the essential information. Because of this, the speaker could occasionally speak without paying much attention to the function words when communicating.

2.2.4 The Problem of Learning Vocabulary

Vocabulary is needed to improve four language skills that are listening, speaking, reading, and writing. When students had a limited vocabulary, they were constrained in what they could say.

According to Nation, P. (1994), there are several compelling reasons why the vocabulary component of language training should be meticulously designed. This means that before students start the learning, they must first devise a model. Because passages and questions involve a much wider range of words than everyday conversation, many students struggle with comprehension if they lack a large vocabulary. As a result, acquiring vocabulary must begin with everyday terms and progress to new words that are rarely encountered.

Furthermore, the procedure must be appropriate. For some students, memorizing vocabulary is tedious. As a result, students' motivation to learn English is poor. This is not an easy task for teachers. Making education effective and efficient is difficult since numerous factors must be considered. However, it is a challenge for teachers to implement creative teaching and learning activities that are beneficial to students.

2.2.5 Vocabulary Mastery

In forming phrases in a language, a series of words must be arranged first. It is equally crucial to comprehend the meaning of each word in order to create meaningful phrases. Through acquiring vocabulary, one can get familiar with a wide range of word meanings in various contexts.

Mastery, according to Greene, R. (2012), is when someone has passed through the three stages of intuitive intelligence, reality connection, and the innate power we all possess that applied to a particular area of knowledge.

Vocabulary is essential for being able to communicate exactly and effectively through language. According to Burton (1982), it is impossible to communicate effectively in English without a big vocabulary. As a result, a person's ability to use language is highly reliant on his or her command of the language.

If students have mastered vocabulary, it means that students can comprehensively understand vocabulary which includes meaning, spoken form, written form, grammatical behavior, word derivation, word collocation, list of words - spoken and written, connotation or word association, and frequency word (Thornbury, 2002). It can be concluded that vocabulary mastery is competence in applying learned word mastery to the language used.

2.3 Rotating Trio Exchange

Silberman (2015) said that active and comprehensive learning serves to make students learn actively from beginning to end in group work. There are many types of models,

one of which is cooperative learning. The cooperative learning model involves having students work in small groups to complete learning objectives. Cooperative learning, as defined by Isjoni (2014), consists of student learning activities carried out in collaborative groups with heterogeneous group structures.

The Rotating Trio Exchange (RTE) is included in a category of cooperative learning models. The Rotating Trio Exchange (RTE) is a learning model in which students learn by discussing topics with some of their classmates, and students collaborate and support one another in order to solve tasks set by the teacher (Silberman, 2016). It is beneficial for them to exercise their cooperative abilities with a variety of people.

According to Palmer (2014), Rotating Trio Exchange (RTE) is a classroom exercise in which students are divided into groups of three and rotated. Students are rotated so that they are not reliant on their circle of groups and can work on problems with other students. Students can discuss a particular subject based on the questions of the teacher by using the Rotating Trio Exchange model (Wolfe, 2010: 5).

2.3.1 Teaching Vocabulary using Rotating Trio Exchange Model

Vocabulary is the foundation of language, therefore teaching vocabulary is an important component of language learning. Without studying words, it is incredibly difficult to acquire a language since they are used in many aspects of daily life. As a result, vocabulary learning is seen by both teachers and students as a key component of language instruction (Walters, 2004). The teacher has a crucial role in delivering material using the appropriate model to get satisfactory outcomes. In order for the

material being taught to fulfill the objectives of English learning, the teacher must take into account the qualities of each student. The teachers also must consider a number of factors when choosing learning strategies, including content, time availability, and value for the students (Taka & Singleton, 2008).

If there is an improvement in language teaching, then it is because of the efforts of teachers and students who can work together in learning. In addition, this can occur when educators, individually or collectively, investigate concepts and try new models. The right model can provide better teaching for students. And if students have more vocabulary, it would be easier for them to learn other aspects of English. Additionally, students would find it simpler to learn other aspects of English if they have a larger vocabulary.

According to Gazali & Hirzi (2019), this learning model has three persons in one group, who are numbered 0, 1 and 2. Number 1 rotates clockwise, number 2 counterclockwise, while number 0 remains stationary. After the rotation, the new groups would be given new questions. The rotation of the three is repeated as many times as the teacher has questions. Trio exchanges, according to Mel (1996), take turns compiling questions to enable students launch discussions about course content.

2.3.2 Procedures of Teaching using Rotating Trio Exchange Model

The Rotating Trio Exchange model would be used by the researcher to teach vocabulary in recount text material. This was an attempt to use this model to increase vocabulary mastery. The intention was for students to see that a more laid-back learning

environment could still be effective. The following was the learning procedures for the Rotating Trio Exchange model from Silberman, M. L. (2011) and Arden Simeru, M. et al., (2023).

1. Arranging questions that help students to start a discussion about the content of the material
2. Students are divided into several groups, each consisting of 3 students represented by numbers 0, 1, and 2.
3. Students work in groups to answer the questions that have been provided as opening questions.
4. Members with the number 0 present their work and jointly evaluate it with the teacher's help.
5. Groups are rotated, with member number 1 moving clockwise to another group and member number 2 moving counterclockwise to form a new group
6. The second new group then works on the next questions.

(Every new exchange would also begin with fresh questions. The teacher may switch the trio as many times as necessary to suit the number of questions and time allocation.)

2.3.3 The Advantages of Rotating Trio Exchange

According to Amin, S., & Sumendap, L. (2022), Rotating Trio Exchange (RTE) model has the several advantages that are:

1. Allowing students to express their thoughts and opinions. This would provide freedom for students to explore their mindset and willingness to express opinions.
2. Teaching students to think critically and to articulate their thoughts.

3. Having a high level of motivation since learning is more interactive and less monotonous because each topic is rotated so that they get new discussion friends. Students who are highly motivated may become passionate when they are learning. Additionally, it might affect the information that children absorb and their success in learning.
4. Improving students' thinking skills with the addition of new members to each group when the conversation is finished.
5. Students never feel bored during class discussions, because they are constantly switched around to find fresh conversation partners.

2.3.4 The Disadvantages of Rotating Trio Exchange

Amin, S., & Sumendap, L. (2022) also stated that this learning model has a number of disadvantages, including the following:

1. Taking a lot of time to implement since students have to exchange positions with others in order to form a new group. Therefore, the form of the student seats is formed in a semi-circle like the letter U to facilitate the process of exchanging positions while clarifying the flow of rotation.
2. Classroom management and student organization are more difficult. This is because students have to rotate at the end of each session. The teacher can arrange the students' chairs into a semicircle to minimize it.
3. Creating dominance in the group since certain students would be leaders and more active than others. To overcome this, the teacher must emphasize the role of each member during discussions and ensure that students have the opportunity and

perform their respective role.

2.4 Theoretical Assumption

The most crucial language to learn in order to communicate worldwide in a variety of fields is English. While the most fundamental part of learning a language is vocabulary. To achieve the best results learning the language, the appropriate and effective models are required. It is because a poor model of material delivery would make students bored and unable to comprehend the lessons. The Rotating Trio Exchange Model was one of the models that can be used. A teaching model called Rotating Trio Exchange divided the students into small groups of 3 students to discuss the questions given by the teacher and then the group members would be rotated with other groups. Students would study in groups in this way so they might interact with one another and exchanged ideas. Students' social skills would also improve as a result of group rotation since they would adjust to each student in turn and stop focusing on a single student.

Learning vocabulary through recount text material using the Rotating Trio Exchange model would improve student learning results. This was due to the fact that students would have a great opportunity to demonstrate their vocabulary mastery when discussing in groups. This would help students to learn as effectively as possible.

2.5 Research Hypothesis

According to Setiyadi (2020), a hypothesis is a statement regarding the distribution of a variable or the relationship between two (or more) variables that will be researched. Concerning on the theoretical assumption above, the researcher formulated the

hypothesis as follows:

H1: There is significant difference on students' vocabulary mastery after the implementation of Rotating Trio Exchange

CHAPTER III

RESEARCH METHOD

The researcher divided the research methods chapter into twelve subchapters, which were setting of the research, research design, variable, population and samples, research instruments, research procedures, data collecting techniques, data analysis, validity, and reliability, level of difficulty, discrimination power, and hypothesis testing. These sub-chapters were interrelated to explain the process of researcher in completing research.

3.1 Setting of the Research

a. Time

This research was conducted in the second semester of the tenth grade students in accounting class of SMK Amal Bakti Jatimulyo from May 13rd to May 27th 2023 that followed the English Curriculum 2013 for the tenth grade of senior high school level.

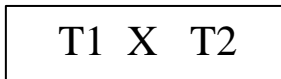
b. Place

This research was conducted at SMK Amal Bakti Jatimulyo which located on Jl. Pangeran Senopati, Jatimulyo, Jati Agung, Lampung Selatan.

3.2 Research Design

Research design is a set of actions or steps created to gather data for a study (Setiyadi,

2020). This research was mixed method to find out the improvement on students' vocabulary mastery and what aspects improved the most if students were taught using the Rotating Trio Exchange Model. This research was classified as pre-experimental research with a one-group pretest-posttest design. Students in this research did pretest before receiving treatment, and they also took posttest at the end of the program. Furthermore, the results of this research would be presented descriptively in the form of numbers. The design for the research was as follows:



- T1** : Pretest (pretest was given before the researcher taught using Rotating Trio Exchange model in order to measure the students' vocabulary mastery before they were given the treatment).
- X** : Treatment (treatment was given for three times through teaching by using Rotating Trio Exchange model to improve students' vocabulary mastery).
- T2** : Posttest (posttest was given after implementing Rotating Trio Exchange model in teaching in order to measure how far the students' vocabulary mastery after they got the treatment).

3.3 Variable

This research consisted of two variables that are independent variable and dependent variable. The independent variable was the Rotating Trio Exchange (variable X) and the dependent variable was the students' vocabulary mastery (variable Y).

3.4 Population and Samples

The population of this research was the tenth grade students of SMK Amal Bakti in the second semester. In addition, the researcher took Accounting class of the tenth grade that contains 30 students as the research sample. According to Turner, D.P. (2020), there are two types of sampling procedures are probability sampling and non-probability sampling. Probability sampling is a sampling method in which elements are chosen at random from the sampling with known possibilities that they will be chosen. While in non-probability sampling, the population elements do not have a known or equal selection probability. The researcher used non-probability sampling that was purposive sampling. This was due to the fact that, out of all the tenth grade classes at SMK Amal Bakti, only the accounting class had a student population that was a multiple of 3(30) to implement this Rotating Trio Exchange model.

3.5 Research Instruments

In this research, the writer used tests and questionnaires as instruments to collect the data. The test was divided into 2 namely pretest and posttest. The pretest was used to determine students' vocabulary mastery before being taught by using the Trio Exchange model and the posttest was used to determine the significant difference of students' vocabulary mastery after being taught by using the Rotating Trio Exchange model. Before giving the pretest, the researcher conducted a try out first to test the test items to be used.

Tabel 3. 1 Specifications of the Test Instrument

No.	Word Classes	Distribution (item number)	Percentage
1	Noun	2,8,9,17,18,21,26,33,34,36,37,44	24%
2	Verb	5,7,12,13,15,19,20,30,31,39,41,45,47	26%
3	Adjective	1,6,14,23,24,27,28,29,35,40,43,48,50	26%
4	Adverb	3,4,10,11,16,22,25,32,38,42,46,49	24%
Total		40 items	100%

The questionnaire was used to find out students' responses to students' vocabulary mastery after being taught through the Rotating Trio Exchange (RTE) model. The researcher used a closed-ended questionnaire adopted by Robinson (2001), with 5 indicators that were: difficulty level, degree of stress, self-confidence, interest, and motivation. It was by giving 5 item statements with two "Yes" or "No" answers.

Tabel 3. 2 Specifications of the Questionnaire Instruments

No.	Statements Categories	Number of Items
1.	Difficulty level	1
2.	Self-confidence	2
3.	Motivation	3
4.	Interest	4
5.	Degree of stress	5

3.6 Research Procedures

Research procedures were as follows:

1. Selecting and determining the population and sample

The population of this research was all tenth grade students of SMK Amal Bakti

Jatimulyo while the sample was tenth grade students of accounting class.

2. Selecting the materials

The material was about recount text that focused on linguistic elements (simple past tense: verb and vocabulary: noun, adjective, and adverb).

3. Administering the try out test

The tryout was given to the experiment class that was the tenth grade students of TKJ class before conducting the pretest to assess the validity and reliability of the measuring instrument used for research.

4. Administering pretest

The pretest was conducted before the treatment. The pretest was used to determine students' vocabulary mastery before learning vocabulary in recount text material through Rotating Trio Exchange model. The test was administered once.

5. Conducting the treatment

Three meetings were required to complete the treatment in this research. Each meeting lasts for 40 minutes. Rotating Trio Exchange was used to discuss materials and questions that focused on vocabulary in small groups of three persons who eventually rotated between the groups.

6. Administering posttest

The posttest was conducted after the treatment. Posttest was used to determine the significant difference of students' vocabulary mastery after learning vocabulary in recount text material through Rotating Trio Exchange model. The test was administered once.

7. Administering questionnaire

The questionnaire was given after the students did the posttest. The questionnaire aimed to find out students' responses to the students' vocabulary mastery after being taught using the Trio Exchange model.

8. Analyzing the test result of pretest and posttest

After the students conducted the pretest and posttest, the researcher compared the results between the pretest and posttest to examine whether there was a significant difference in the students' scores on vocabulary aspects.

3.7 Data Collecting Techniques

The vocabulary test and questionnaire were the research instruments that used to collecting the data for this research. A vocabulary test was employed to determine the level of students' vocabulary mastery. Meanwhile, the researcher used questionnaire to find out the student's response after receiving treatment.

a. Pretest

The researcher gave a pretest to the class regarding vocabulary to determine the basic knowledge of students' vocabulary mastery. The vocabulary pretest consisted of 40 multiple choice questions and four possible answers (A, B, C, and D).

b. Treatment

The researcher conducted the treatment for approximately 2 weeks. At the first meeting the researcher explained the material first then gave the treatment in the form of recount text material that focused on linguistic elements (simple past tense: verb and vocabulary: noun, adjective, and adverb) using the Rotating Trio Exchange Model. The students were divided into several groups, each consisting of 3 students. The numbers

0, 1, and 2. The numbers 0, 1, and 2 were used to identify each member. After that, the researcher gave questions related to content words (noun, verb, adjective, and adverb) which the students discussed with their groups. The members with 0 number then presented his work. The results of their work after were evaluated together. Then, group members would be rotated. The member number 1 moved to another group in a clockwise direction and member number 2 moved to another group in an opposite direction. Then a new group was formed to discuss the next instruction. At the second meeting, the researcher reviewed the materials, questions, and discussions from the previous meeting before moving on to the next topic. For a group discussion, the students were separated into trios as before. At the third meeting the researcher gave any unanswered questions from the previous week while giving students a chance to ask anything they did not understand.

c. Posttest

The posttest was used to compare the students' vocabulary mastery before and after being given treatment. The researcher could find out which elements of the test were the easiest and most difficult for students to understand based on the results of the post test.

d. Questionnaire

A questionnaire is a type of data collection procedure that provides a list of written questions to obtain data in the form of answers from respondents. According to Kabir, S. M. (2016), the questionnaire is divided into two that are the open-ended questionnaire method and the closed-ended questionnaire method. Open-ended questionnaires are more flexible because the answers are not limited, while closed-

ended questionnaires are more rigid because the answers are already provided. The researcher used a closed questionnaire to find out the student's response after receiving treatment, whether according to the respondent the treatment provided significant differences to the results of vocabulary mastery or not. According to Saris, W. E., & Gallhofer, I. N. (2007), the item structure of the closed questionnaire, solely consists of answer requests with explicitly stated answer categories. The closed questionnaire used in this research was developed based on Robinson (2001), which consisted of five categories: difficulty level, stress level, self-confidence, interest, and motivation. Therefore, this questionnaire consisted of 5 statements about vocabulary learning activities using the Rotating Trio Exchange model by adopting the five categories with 2 answer choices that were: agree and disagree. The statements included: "You are very interested in learning English especially vocabulary using the Rotating Trio Exchange model" and "The Rotating Trio Exchange model is very good to be applied in teaching English especially vocabulary regularly in future lessons". The results of the closed questionnaire could be categorized as ordinal data.

Questionnaire data was then arranged systematically and analyzed based on the question categories, which each category consisted of 1 question. The data was interpreted with a code that if the student's answer was "Yes", it would have code 1 and if the student's answer was "No" then it would be coded 0. Student answers were then counted and calculated as a percentage to see the mean result of the total student answers on the questionnaire.

3.8 Data Analysis

Mixed method analysis was used to analyze the data. It was conducted by interpreting the data from the pretest and posttest. But before that, the researcher administered the try out test to evaluate the reliability and validity of the test items. The researcher then administered the pretest and posttest to collect the data. Vocabulary tests were administered to measure the improvement on students' vocabulary mastery after being taught using the Rotating Trio Exchange model. After the student test results have been obtained, the data was processed using Microsoft Excel and SPSS for the normality, reliability, and hypothesis testing tests.

Furthermore, for the questionnaire, the data that was collected was then arranged systematically and analyzed based on each category of questions. Each category yesterday had 1 question, namely difficulty level (number 1), self-confidence (number 2), motivation (number 3), interest (number 4), and stress level (number 5). Students' answers to each of the questions were interpreted with a code, which was 1 for the answer "Yes" and 0 for the answer "No". The data was counted and calculated in percentages to see the mean result of the total student answers to the questionnaire. The answer "Yes" from the students was interpreted as a positive response and the answer "No" was interpreted as a negative response. Therefore, the number of answers for each affected the results of the responses. The application of the Rotating Trio Exchange Model was said to be effective if the mean percentage of positive responses was greater than negative responses.

3.9 Validity and Reliability

3.9.1 Validity

Validity is a measure of how well an instrument assesses the specific qualities it is intended to measure (Setiyadi, 2018). As Blomquist (2002) stated, it assesses how accurately a test measures its intended construct. If a test effectively measures what it claims to measure, it is considered valid. Conducting a validity test helps determine whether the variables used in the research are suitable.

a. Content Validity

The researcher needs to evaluate all the indicators in the form of item questions and determine whether the measuring instrument as a whole accurately represents the substance to be measured to achieve validity. The measuring instrument fulfills the criteria for content validity when it encompasses all the content relevant to the subject matter being measured. The researcher used the basic competencies below as material content.

<p>3.7 Distinguishing social functions, text structures, and linguistic elements of several spoken and written recount texts by giving and asking for information related to historical events according to the context of their use.</p>	<p>3.7.1 Distinguish the linguistic elements of the simple past tense (verb) in the recount texts according to the context of their use.</p> <p>3.7.2 Determine the linguistic elements of the vocabulary (noun, adjective, and adverb) in the recount texts according to the context of their use.</p>
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b. Construct Validity

Construct validity is necessary for measuring instruments that employ multiple indicators to measure a single aspect or construct (Setiyadi, 2018). Construct validity primarily concerns the extent to which valid conclusions can be drawn about the theoretical concept or construct based on its operationalization. It refers to the degree to which the researcher measures what is intended to be measured. In this test, the aspects that the researcher measured were linguistic elements in the recount text, specifically simple past tense (verbs) and vocabulary (nouns, adjectives, and adverbs).

The test items that were used have been validated by two teachers from SMK Amal Bakti Jatimulyo. These items were then assessed using Aiken's V validity index, resulting in an average score of 0.69. This score indicates that the test is moderately valid for assessment, (Aiken, 1980)

Table 3.3 Construct Validity of the Test

No.	Word Classes	Distribution (item number)
1	Noun	2,8,9,17,18,21,26,33,34,36,37,44
2	Verb	5,7,12,13,15,19,20,30,31,39,41,45,47
3	Adjective	1,6,14,23,24,27,28,29,35,40,43,48,50
4	Adverb	3,4,10,11,16,22,25,32,38,42,46,49
Total		50 items

The specification table above shown that the test items were in accordance with the concept used in this study, namely 4 aspects of vocabulary in the type of content word. It was shown that the noun aspect consisted of 12 questions, the verb aspect consisted of 13 questions, the adjective aspect consisted of 13 questions, and the adverb aspect consisted of 12 questions with a total of 50 questions. These questions were given to students as try out tests.

3.9.2 Reliability

Reliability is the consistency of a measuring instrument, or the extent to which the measuring instrument can measure the same subject at different times but produce relatively the same results (Setiyadi, 2018). That means a test is considered to be reliable if the research instrument has consistent results and can be used by a number of different researchers under stable conditions. The more measurement errors there are, the less reliable the test becomes. Furthermore, it is also to determine if the results of a test are consistent when test is repeated. As a result, it is critical to conduct statistical tests to discover whether the measurement variables used are accurate or not. Maree and Fraser (2004) argued the extent to which the same test can produce the same results if given to the same students under the same conditions. It makes it easier for researchers and educators to establish accurate comparisons. The researcher employed the Split-Half method to determine the reliability of the data in this research. Odd-numbered questions and even-numbered questions were separated into two categories of questions. The formula for the Split-Haft method was as follows:

$$r_{xy} = \frac{\sqrt{n\sum xy - (\sum x)(\sum y)}}{\dots}$$

$$\sqrt{\{n\sum x^2 - (\sum x)^2\}\{n\sum y^2 - (\sum y)^2\}}$$

Notes:

r_{xy} : coefficient of reliability between odd and even numbered items

n : number of students who took the test

$\sum x^2$: total score of odd number items

$\sum y^2$: total score of even number items

$\sum xy$: total score of odd and even number items

The criteria:

According to Arikunto (2006), reliability criteria are divided into the following:

0.8 – 1.0 : very high reliability

0.6 – 0.79 : high reliability

0.4 – 0.59 : medium reliability

0.2 – 0.39 : low reliability

0 – 0.19 : very low reliability

3.10 Level of difficulty

This stage is used to divide test questions into easy and difficult categories. Students cannot get questions that are too easy or too difficult. The following formula should be used to determine each question's level of difficulty:

$$LD = \frac{U+L}{N}$$

Then the formula would be developed as follows:

- LD : level of difficulty
- R : the number of upper students who answered correctly
- L : the number of lower students who answered correctly
- N : the number of students who took the test

The criteria are:

- <0.30 : difficult
- 0.30-0.70 : average
- > 0.70 : easy

Shohamy (1985:79)

3.11 Discrimination Power

Discriminating power (DP) measures the degree of distinctions between high- and low-level students in the test. The formula that can be used to determine the discrimination power is as follows:

$$DP = \frac{U - L}{\frac{1}{2} N}$$

Notes:

- DP : Discrimination Power
- U : The number of correct answers from the higher group
- L : The number of correct answers from the lower group
- N : The total number of students

The criteria are:

- DP : 0.00-0.19 = Poor

DP	: 0.20-0.39	= Satisfactory
DP	: 0.40-0.69	= Good
DP	: 0.70-1.00	= Excellent
DP	: - (Negative)	= Bad items (should be eliminated)

The criteria are:

- a) If the score is positive discrimination, a greater number or more high-level students than low-level students get the right answer. There is no discrimination if the value is 0.
- b) If the value is negative, there are more low-level students who receive the right answer than the high-level students.
- c) In general, the discrimination index should be higher in a classroom setting.

Heaton (1975)

3.12 Hypothesis Testing

The hypothesis testing was to demonstrate that the proposed hypothesis of the researcher was true. The researcher used the Paired Sample T-Test to test the hypothesis. The purpose of the T-Test was to see the effect of each independent variable on the dependent variable.

H₀ : There is no significant difference means that there is no significant difference on students' vocabulary mastery after being taught through Rotating Trio Exchange (RTE) model.

H₁ : There is significant difference on students' vocabulary mastery after being taught through Rotating Trio Exchange (RTE) model.

The researcher used the observation of significant t values at level α (0.05). The analysis was based on the comparison between the significant t and the significant 0.05.

The criteria are:

- a. If significant $t < 0.05$, then H1 hypothesis is accepted.
- b. If significant $t > 0.05$, then H1 hypothesis is rejected.

In addition, the t test can also be used to conduct this test that is by comparing the t value and t table. The following conditions are used when conducting this test.

H0 : Tvalue $<$ Ttable

H1 : Tvalue $>$ Ttable

CHAPTER V

CONCLUSION AND SUGGESTION

This last chapter presents the conclusions of the research results and suggestions for English teachers who want to use Rotating Trio Exchange model in teaching vocabulary and for those who want to conduct similar research.

5.1 Conclusions

This research was related to the use of the Rotating Trio Exchange model to improve the vocabulary mastery of tenth grade accounting students at SMK Amal Bakti Jatimulyo. Based on the results of the research and discussion, the researcher would like to state several conclusions as follows:

1. There is an improvement on students' vocabulary mastery after being taught using the Rotating Trio Exchange model in the tenth grade accounting students at SMK Amal Bakti Jatimulyo. This can be seen from the increase in the mean score from pretest to posttest. The mean pretest score is 38.66 and the posttest mean score is 53.41.

The calculation result on the two tailed significance value is 0.000. This means that H1 is accepted and H0 is rejected because $0.000 < 0.005$. This proves that there is a significant difference on students' vocabulary mastery after being taught through the Rotating Trio Exchange model.

2. The aspects that improved the most after students being taught using the Rotating Trio Exchange model is adjectives (29.97%), followed by verbs (27.52%) and adverbs (27.52%) and nouns (14.99%) as the least improved aspect. Adjectives are the most improved aspect because students recognize this type of word more easily than others.
3. Student responses are more positive towards the Rotating Trio Exchange as a learning model. This is based on the results of student responses, which are 91% positive responses and 9% negative responses from students.

5.2 Suggestions

Considering the results of this research, the researcher would like to recommend the following suggestions:

5.2.1 Suggestions for English Teachers

- a. In applying the Rotating Trio Exchange model, the researcher advises the teacher to record any deficiencies that occur during the treatment as evaluation material at the end of class activities.
- b. Noun is the aspect that has the lowest improvement among other aspects of vocabulary. Based on these results, the teacher can next provide some noun words along with their synonyms, antonyms, or other words that have related meanings.
- c. Using the Rotating Trio Exchange model to teach vocabulary takes a lot of time. As a result, the teacher should manage their time well.

5.2.2 Suggestions for Further Researchers

- a. This research was conducted in the first accounting class at the Vocational High School level. Therefore, future researchers can try to examine the use of the Rotating Trio Exchange model at other school levels.
- b. The mean score of the noun aspects of the vocabulary is still relatively low. Therefore, future researchers are advised to look for other strategies to balance the improvement in each aspect of vocabulary.
- c. Future researchers are advised to calculate further vocabulary increases in each aspect (Noun, Verb, Adjective, and Adverb) using a method that contains more detailed levels of significance.

Student answers were limited to the questionnaire, the future researchers may be able to use open-ended questionnaire to obtain more detailed responses from students.

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