

THE EFFECTIVENESS OF FRAYER MODEL IN ENHANCING VOCABULARY

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ABSTRACT

Vocabulary is an essential subject which must be learned to communicate effectively particularly in areas of listening, speaking, reading and writing. Likewise, it was revealed from the learners encountered difficulties in acquiring vocabularies. Thus, this quasi-experimental research aimed to determine if Frayer model is an effective model to enhance vocabularies of Grade 5 pupils, particularly in learning vocabularies. The data were gathered through utilized researcher-made pre-test and post-test questionnaires, which were answered by grade 5 pupils of Taytayan Integrated School --15 for the control and also 15 for the experimental group who were enrolled in the academic year 2021-2022 as the respondents of the study. The information acquired for this study focused on target objectives within the given duration of the intervention. On the other hand, the results of this study disclosed that level of the pre-test scores of both groups did not meet expectation while the level of post-test scores for control did not also meet expectation yet posed improvement. For experimental group, it marked as satisfactory. It was also revealed that the pre-test and post-test scores between the two groups differ significantly, with a t-value of 1.014 and a p-value of 0.319 for the pre-test, and t-value of 4.751 and a p-value of 0.000 for post-test. Hence, the overall results implied that the higher scores from experimental group resulted after implemented Frayer model. Hence, it can be concluded that Frayer model is effective in enhancing vocabulary among grade five pupils. Furthermore, the crucial findings of the research proved relevant and beneficial outcomes for learners, teachers, administration and future researchers.

Keyword: *vocabulary, vocabulary skills, constructivism theory, frayer model*

1. INTRODUCTION

Vocabulary, according to Algahtani (2015), is the total quantity of words that could convey ideas and express the speaker's meaning. Likewise, a person's vocabulary is defined as the collection of all words that a person understands and can use to construct new sentences. In a similar vein Panjaitan (2016) stated that for effective communication, learners needed to master vocabulary that would help them develop and employ meaningful sentences. Similarly, vocabulary referred to understanding the meaning of words (McKeown & Curtis, 2014). Moreover, Alizadeh (2016) stated that vocabulary is more complicated than its current meaning and is seen to be a representation of a person's intelligence or degree of education.

Susanto (2021), on the other hand, revealed numerous challenges experienced by learners in vocabulary. These mostly involve issues pronouncing words, selecting acceptable word meanings, and the complexity of word knowledge regarding how to use/write/spell various grammatical forms. Similarly, the more individuals who learn vocabulary, the more freely they may speak, write, read, and listen (Rohmatillah, 2014). Furthermore, Afzal (2019) noted that vocabulary development was difficult for non-native English speakers who struggled with recognizing the meaning of new terms, spelling and pronunciation, acceptable word usage, and estimating meaning from context, among other things. Similarly, Leano et al. (2019) presented numerous challenges experienced by Filipino indigenous learners focused on language development. As a result, both indigenous and non-indigenous learners were strongly encouraged to acquire English vocabulary building skills to help them maximize their learned capabilities towards maintaining good academic performance not just through speaking but in all areas of language communication (Leano et al, 2019). Moreover, Leano et al. al (2019) clearly stated that Filipino teachers who were handling Filipino indigenous learners generate deficiencies in speaking, which could cause problems with comprehension, vocabulary acquisition, and interactions using English. Similarly, if these students continue to struggle with English, it may lead to academic issues and concerns in other areas such as mathematics and other disciplines. In response to these concerns, the Department of Education (2016) noted that as the educational curriculum evolved, the teaching approaches required were updated, requiring indigenous and non-indigenous students to master teachings as they progressed through ongoing educational levels. Aside from this, Cummings (2018) also added that it was therefore a need to increase on improved word knowledge to which teachers should utilize helpful strategies or methods towards increased learning.

The study utilized a Frayer model as an effective method in helping learners learn ideas, which is regarded an outstanding graphic organizer that can be used for writings, letting students to see what a concept is and is not (Hidaya, 2014). Similarly, the method mentioned above may be used to teach vocabulary, providing a great structure for learners. Students may use it to not only determine the meaning of words, but also to offer important qualities, examples and non-examples. As a result, the approach can help students improve their vocabulary knowledge (Talah, 2015). The model is illustrated through a graphical organizer format consisting of four (4) main categories namely; definition, characteristics, examples, and non-examples to which the teacher provided sources and guidelines upon using the model given that it had not yet been implemented in any schools within the locality, particularly in Taytayan. As a result of this representation, learners were highly encouraged to engage themselves by answering the table illustrated by the teacher with knowledgeable and meaningful experiences among them, as well as to assess whether the said intervention was effective in enhancing learners' vocabularies (Nahampun & Sibarani, 2014).

2. Review of Related Literature

2.1 Definition of Vocabulary

Vocabulary is derived from the Latin term stock, lexicon, and lexis) and refers to all the words in a language that are comprehended by a certain individual or group of people (Nordquist, 2013). Similarly, Alqahtani (2015) noted that vocabulary refers to the total quantity of words needed to explain information and hence assists a person in conveying its meaning. The author also stated that a person's word knowledge mostly consists of the set of words acquired by a person or words that are likely to be used in creating sentences (Alqahtani, 2015).

On the other hand, a person's understanding of words is highly valued as a vital component of both the process of learning language and developing language skills that should be attained. In this manner, students were taught new vocabulary in a specific subject, which promotes interesting motivation, engagement, and educational activity (Alqahtani, 2015). Napa (2013) also stated that vocabulary are words that we must learn to grasp in order to communicate successfully while taking consideration in four types of learning areas: hearing, speaking, reading, and writing. Furthermore, Alizadeh (2016) stated that acquiring vocabulary is the skill that a person possesses in order to study and express the meaning of words, which is the primary base for communication known to both oral and written areas. Acquiring vocabulary is also encouraged, therefore we must learn at this period so that we quickly understand English terms and speak with others (Alizadeh, 2016).

In English, there are four skills that should be mastered namely listening, speaking, reading and writing. In order to master English, we should also master the grammatical rule and vocabulary because the more and more we master vocabulary, then it will be easier for us in mastering English. In other words, vocabulary cannot be separated from other language skills which means that the more words the learners know, the better someone will understand what

they hear or read. In addition, the more words they have, they will be more accurate to express their ideas in spoken or written form. Thus, vocabulary also is a central part of a language and for this reason everyone who wants to be able to communicate in a certain language needs to master the vocabulary (Napa, 2013).

Aspects of Vocabulary. As stated by Napa (2013), vocabulary is a component of language and no language exists without words, which was also confirmed by Wakidah (2013), who claimed that vocabulary is the entire quantity of words in a language. Furthermore, the author noted that vocabulary refers to words in a language that can improve language abilities given that mastering a language is difficult without vocabulary and vocabulary mastery is an essential skill in learning English. In this regard, in order to comprehend language, we must always be aware of its varied aspects. Kucan (2012) proposed four components for learning language in this regard, which comprised usage, spelling, meaning, and pronunciation. The first is application or use of words. This indicated that studying a word alone is never adequate, and that if you want to acquire and develop your word knowledge, you should utilize words efficiently and productively in areas like as speaking and writing. Similarly, understanding about prepositions related with nouns or verb forms that may follow the word (such as ready to do, unwilling to do, thinking about doing) is required. Moreover, writing information in notes can help with vocabulary development in two ways. For starters, taking notes may assist students in connecting what they have learned. Also, the spoken forms of words are heard, while the written forms of words are written. This method of encoding information in notes has been shown to aid learning (Jin, 2021). Second, pertained to spelling as an important skill to master that may be used primarily for writing reasons since spelling is more difficult to learn than how a word sounds. This involves learning about homonyms (words that sound the same but are spelled differently) and phonemes (units of sound) that have more than one way to spell them, as spelling mistakes occur regularly even among native speakers, such as misunderstandings between them and there. In connection, vocabulary can be defined as a language's words, including "single items and phrases or chunks of several words that convey a particular meaning the way individual words do" (Clouston, 2013). In relation to this claim, the English language is difficult to master since it might be difficult to spell a word correctly and apply it in a sentence appropriately and so if a child or a learner can spell, identify, and utilize a word in the right written and verbal manner, the child has mastered that term (Jin, 2021). The third also includes meaning, in which a word has various definitions which must be studied in context in obtaining good vocabulary (Jin, 2021). Thus, by studying its meaning as used in context, we focused on one meaning rather than all possible meanings. According to McKeown, (2017) third point of view on word knowledge and word learning refers to vocabulary learning as "the word-learning issue" Lastly, pronunciation is also regarded as one of the most crucial things to acquire, especially if you want to make use of it in speaking or understanding while listening. Pronunciation, like spelling, can be a challenging issue, with some words typed the same way but pronounced differently. Similarly, the position of emphasis in words with one extra syllable may change across various tenses, an occurrence known as changing stress, which makes pronunciation more difficult. Thus, learners will be examined one by one without being told what is incorrect or right, so that the other students can practice correctly pronouncing words (Kucan, 2012).

Factors in learning Vocabulary. On the other hand, Yuefang (2019) mentioned factors that affects acquiring vocabulary among learners or second language acquisition. In connection, first one pertained to attitude as also considered as another element influencing vocabulary, or SLA. This means that most ideas describe attitude as a reaction to something or a type of thing. In SLA or second language acquisition, attitude is divided into three parts: cognitive (belief in something), emotional (degree of likes and dislikes of something), and conation (intention and action to do something). Similarly, the author stated that attitudes may be both positive and negative. In this regard, a student had been engaging with persons speaking the target language with a positive attitude, which would strengthen the SLA. When a learner has a negative attitude, he or she is more likely to refuse or be afraid to approach others who speak the target language, which impedes the development of SLA and the improvement of communicative ability (Yuefang, 2019). In the same line, Eagly (2013), who supports Yuefang's (2019) assertion, noted that attitude is defined as a psychological propensity that may be accomplished by appraising a certain thing with varying degrees of favor or dislike. The author also noted that attitude is about what someone thinks or feels from doing things independently, and so it may be a cause or reason that affects them on acquiring words or language acquisition. Kassa et al. (2022) also said that an individual's attitude determines how he or she reacts to challenges from having the ability to learn and grow and perhaps overcome learning obstacles with certain ideas or things. The second was about personality. According to Yuefang (2019), personality can be a significant point affecting vocabulary and acquisition. This consisted of self-esteem anxiety, depression, and spirit of adventure, extraversion and introversion which can affect on language or word learning among learners which also made such difference towards learning efficiency. This indicates that when acquiring words or language, the personality comes

with both positive and negative traits. In a psychological sense, personality could be divided into two, the introverted and extraverted one, however, effective learning can be obtained towards communication manifested from extravert people or learners having the optimism, strong desire to communicate with others providing various opportunities leading to language learning and development. In the same manner, according to research, introverts have a tendency to employ and learn language, whereas extroverts have a tendency to be ambiguous. Likewise, several studies have highlighted the relationship between personality and language on a variety of levels. However, typical research focuses on the content of what various personalities choose to discuss.

Kormos & Csizer (2014) also documented how self-regulated learning strategies mediated the effect of motivational on autonomous learning behavior – specifically, that strong motivation was a prerequisite for the adoption of self-regulated learning strategies, which in turn predicted students' autonomous learning. In line with this, motivation according to Fang-Fang & Quing (2013) affirmed that it is an internal process that stimulated individuals activity which helps students maintained the effort to realize their expected goal/s. The author also claimed that motivation could be a driving force towards promoting and inspiring learners to learn something (Fang-Fang & Quing (2013). Moreover, motivation played an essential role in second language learning because learners with strong motivation, they also tend to be active always in participating which often results into high learning efficiency. However, the author also stated that weak motivation may take a negative impact in the learning process to which they tend to spend less time and energy in second language learning which might lead to an effect of having low learning efficiency and low academic performance. Aside from this, integrative motivation of learners featured strong desire to have mingled with peers or other people particularly to those speaking the target language as well as people with culture-related learners whom considered SLA or second language acquisition as goal of their interests to become active learners (Fang-Fang & Quing (2013). It was also claimed that motivation was one of the influential factors in language learning and so previous studies claimed that motivation is a key towards attaining language achievement (Sadeghi, 2013).

2.2 Importance of Vocabulary

Vocabulary is an important ability to acquire, according to Termez State University and Ruzimuratova (2021), since it is regarded the cornerstone for learning English and, more specifically, the groundwork for building the four key abilities that must be studied and cultivated. The author also acknowledged that the first stage is to learn new terms in this regard. Similarly, having a good vocabulary allows us to explain our thoughts, feelings, and experiences, making communication easier for ourselves. Vocabulary study is essential considering that it is a key component in acquiring sentence structure and other language skills. It is simpler for someone to read, write, listen, and communicate since we are able to acquire a new language by learning to speak our native language. Thus, greater language skills could improve confidence in learning a new language because it allows us to feel more than the majority of people, and our excitement grows as a result of our courage in immediately practicing the language about learning and mastering it (Termez State University and Ruzimuratova 2021).

According to the Victoria State Government's Education and Training (2021), vocabulary was an important focus of literacy teaching, which primarily concerned word knowledge, including their structure (morphology), use (grammar/s), meanings (semantics), and links to other words (word/semantic relationships). In addition, the author argued that readers would be impossible to grasp the text if they did not understand much of the vocabulary. It was where learners should have gained knowledge about the meanings of most words indirectly, via everyday interaction with spoken and written language, with some information and instruction obtained through purposeful teachings.

Further, Seifert (2016) enumerated reasons why learned vocabulary was highly essential. One reason was that , vocabulary enhances reading comprehension in which according to the said research , explained that children needed to understand 98% of the words they read to understand what they were reading and that would enable them to improve their vocabulary skills suchlike reading textbooks , novels and etc. Aside from this, learning and enhancing vocabulary was essential to language development knowing they tend to develop rich vocabulary to become deep critical thinkers as well as expressed themselves being better particularly in becoming successful and effective learner inferred that vocabulary was an important focus of literacy teaching which mainly pertained to

word knowledge including their structure (morphology), use (grammar/s), meanings (semantics) and links to other words (word/semantic relationships) academically and communicatively.

Another point to think about is language as a means of building ideas for communicating. In this case, good communication or "saying what you mean" relies on your vocabulary, and therefore using appropriate vocabulary makes you better at conveying information in every way. In the same way, acquiring vocabulary does not only help you enhance a particular expertise, but it also helps you express yourself in writing (Seifert, 2016). This means that when you had a good vocabulary, you could have written more effectively, which might be useful in non-conversational language, and so on. Hence, the acquired vocabulary would help someone achieve career success, such as in business, which primarily challenged their communication skills and knowledge. (Seifert, 2016). It was also emphasized that even if a technique like direct instruction is used, kids still need to be exposed to new vocabulary terms on a regular and numerous basis, hence learning vocabulary can be best obtained through teaching (Cummings et.al, 2018). Given this understanding, future educators must not only be taught how to choose an effective teaching technique, but they must also be prepared to consider students' prior knowledge of language. Teachers can select which words to use in their classes by being familiar with their pupils' past word knowledge. When choose appropriate words to teach, a great deal of focus must be given." Likewise, the author added that teaching demonstrates the importance of instructors knowing what terms to impart and when to teach them.

In the same vein, the effect of knowing words on comprehension skills further demonstrates the necessity of word knowledge. This means that the more kids learn about words, the better their comprehension abilities become. However, if students do not pay focus to their vocabulary development, they will not be able to improve their capacity to grasp the essential elements of a book, which can lead to problems in understanding (Cummings, et. al, 2018). A study of Alqahtani (2015) remarked that even if a person can compose sentences appropriate to the grammar, there is little value if the person fails to understand the vocabulary needed to express the desired meaning. This means that learning vocabulary initially makes it simpler to learn grammar afterwards because the wider the vocabulary someone learns, the more words one can speak. Many people misunderstand vocabulary because they believe it is unnecessary whereas vocabulary serves as a basis for acquiring the English language. Aside from this word knowledge does not just aim at developing comprehension skills but also focuses on enhancing literacy skills. In doing so, the teachers are highly encouraged to teach basic literacy skills suchlike reading and writing to create significant effects on their vocabulary competence. Thus, these has to do also with psychological aspects of language acquisition which should be mainly addressed by teachers (Cummings et.al, 2018). On the other hand, Keshta and Al-Faleet (2013) strongly thought, as did (Kusrini, 2012), that having a diverse vocabulary helped learners understand the meaning of new terms and assess a set of concepts that may be encountered. Darfidal (2015) described vocabulary as the most important part, but also the most difficult skill in language learned, implying that vocabulary was required to be considered in second language acquisition to develop proficiency, express oneself, and comprehend the meaning of ideas, as also implied in the study of (Kavvadia, 2016).

According to Akdogan (2017), long-term recall of words is vital, therefore innovative vocabulary learning strategies can help learners remember new terms. With this, it might be viewed as one of the greatest approaches to assist kids learn the language in which they may encounter numerous taught environments without feeling pressured. Cummings (2018) also stated that word knowledge is essential in learning a language, thus if there is any confusion about how to improve and extend word knowledge and vocabulary. As a result, the first thing everyone ought to understand is that this strategy has the potential to be one of the most successful means of increasing student vocabulary skills (Ashley, 2018). As with Teng (2014) believed that vocabulary was important in second language acquisition since students needed to know the terms before they could grasp what they had heard or read. The author also stated that without a significant vocabulary, the learner would be unable to easily understand what they were reading, recognize words, or comprehend a speech in order to generate an expression. Thus, vocabulary knowledge was extremely essential for learners since it served as the foundation for being able to communicate through verbal and written engagement.

Rahmadani (2018) supported the above-mentioned writers' assertions about the importance of vocabulary, saying that vocabulary plays an important role in foreign language acquisition and competency, influencing how effectively learners speak, listen, read, and write. In this sense, he stressed the importance of vocabulary in communication by claiming that survival level communication may occur relatively effectively when individuals merely link words together--without using any grammatical rules at all. In this way, vocabulary is regarded as one of the most

important aspects influencing people's communication. Thus, vocabulary should be ideally placed as important aspect of language learning that should be given much attention in practice to improve students' vocabulary mastery.

He also highlighted several reasons why studying language is quite important, particularly for students. The aforementioned included the following: vocabulary is essential as a communication tool, vocabulary is a basic skill to communicate because people will not be able to communicate easily without understanding it, which means that vocabulary is the basic skill in communication that must be learned, and vocabulary can help students master four language skills in areas of listening, speaking, reading, and writing (Rahmadani, 2018). Furthermore, Asyiah (2017) said that vocabulary is important since it allows learners to convey their thoughts and feelings to others. In a similar manner it assists students in acquiring and accessing new knowledge in order to extend their perspectives on numerous circumstances.

2.3 Problems in Vocabulary

Veira (2016) stated that vocabulary was essential in second and foreign language acquisition because without its appropriate and sufficient knowledge, learners could not understand others or expressed their own feelings. Likewise, grammatical competence should have been developed over time based on language instructors who put realization on how essential vocabulary learning were. Rohmatillah (2014) asserted that without sufficient vocabulary, people could not communicate and expressed their feelings both in spoken and written effectively. Also, the author claimed that the more people master vocabulary the more they could spoke, wrote, read and listened as they wanted.

Susanto (2021) stated that vocabulary was important in terms of language process acquisition, which primarily encompassed the abilities to read, communicate, create, and hear. However, he stated that some of the issues learners failure to communicate well in both written and oral forms. In the same way, he said that people and unique learners who ascertained English frequently admitted challenges in acquiring vocabulary. Thus, the researcher sought to investigate the students' challenges and issues causing difficulties in acquiring language throughout this investigation. Similarly, the language wouldn't be possible without vocabulary, which was noted by Akdogan, (2017) as one of the most significant components, and also the basis in learning English as a second language, as supported by (Nie & Zhou, 2017). The author also posited that majority of pupils opted to use their native tongue rather than English, with the Philippines being a bilingual country and. According to Akdogan (2017), Sumalinog (2019) thought that vocabulary was an issue for a second language student to grasp, a view that was also backed by Nie & Zhou (2017). According to Mofareh (2015) research, vocabulary knowledge is typically seen as an essential ability for second language learners since restricted vocabulary in a second language impedes communication. These phenomena shown that learners have difficulties when learning English, one is about comprehending the text, in which they are unable to get information from the text because they do not grasp the words based on provided situations. In a similar way, the vocabulary problem was effectively adapted to non-native language users who frequently find themselves looking for words to express themselves in speech and writing. They also experience demotivation when reading and listening due to a restricted vocabulary load, and language professionals and researchers recognize the importance of vocabulary.

According to the findings of the PISA 2018 National Report Philippines, Filipino students scored on average, and one out of every five Filipino students obtained the least proficiency level in total reading literacy. The findings suggested that children's language abilities are deficient (PISA, 2018). The results also suggested that children lacked language skills (PISA, 2018).

Mukhlif (2021) identified vocabulary growth as one of the major aspects that led to academic performance. Unfortunately, he also mentioned an emerging issue: in an EFL setting in Iraq, students' lack of direct and indirect exposure to English language vocabularies resulted from constant use of their mother tongue inside and outside the classroom, and insufficient language exposure outside the classroom resulted in weak English students. Because it was assumed that Filipino students were bilingual--i.e. e., speaking both Filipino (the native tongue) and English as a second language (ESL), competency in the language remained a challenge and source of worry, particularly among public school students. To substantiate this claim, grade 11 pupils at Taytay Senior High School (a public senior high school) were observed to have particular levels of difficulty in reading, writing, speaking, and listening.

Hugo (2020) also offered a number of studies that had been conducted to determine the factors that impact English competency, namely the language learned by non-native English users. Language anxiety, according to the research, was one of the biggest indicators of language learning success and had incapacitating consequences on the language learner; although facilitating anxiety creates beneficial impacts on the learners' performance, too much anxiety causes poor performance. Rohmatillah (2014) also cited a variety of obstacles encountered by pupils, including the following. First, almost all of the students had difficulty pronouncing the words, writing and spelling them, and one of the causes of students' challenges in learning vocabulary was the varied grammatical forms of a word known as inflections. Furthermore, the students had difficulty selecting the right meaning of the phrase and were still unsure how to apply the word based on the situation. Some other learners got confused when they came across idiomatic phrases or expressions.

2.4 Terms and Concepts in Vocabulary

Weisleder and Fernald (2013) emphasized the importance of allowing children or learners to interact and expose them to a high quantity and quality of language or vocabulary being learned, and research has echoed this importance of adult interacting for children's vocabulary and general oral language development. With this, the author stated that having more sophisticated vocabularies in primary school in the early and middle years can lead to higher educational attainment.

Students' motivation is a key aspect in language acquisition. Sadeghi (2013) asserted in this respect that earlier research on second language acquisition has repeatedly indicated that certain learners do better than others in a second or foreign language environment. People's individual differences were highlighted as one of the possible causes of variable behavior among learners in a language learning environment. Furthermore, motivation is a state of excitement that determines individuals' wishes and desires, as it can affect the process of learning negatively or positively. As a result, the author also stated that motivation is regarded as one of the influential aspects of language learning, and it is the key to success in language achievement (Sadeghi, 2013). It was also said that motivation may both adversely and beneficially affect the learning process and is thus seen as a vital aspect of foreign language vocabulary learning that can also assist learners in achieving academic goals (Albodakh, 2017).

Another factor influencing pupils' vocabulary development, according to Madrinan (2014), is first language competency or mother tongue. Educators may find it helpful to teach the new language using the mother tongue as an aid throughout the second language acquisition process in order to build not only the target language but also the cognitive growth required for academic and professional success. It is also an important component of education since second language teachers in bilingual schools must ensure that their students reach a level of proficiency that allows them to cope with academic content throughout the school year. In a similar vein, employing the first language in the second-language classroom has been demonstrated to assist pupils create relationships with their prior knowledge of the mother tongue, which aids in recognition. According to studies, the first language shouldn't be prohibited in the second-language classroom, but it should also not be encouraged incessantly, since this would allow the mother tongue to take over the target language rather than assist it (Madrinan, 2014).

2.5 Utilizing Frayer Model in Enhancing Vocabulary

According to Cummings (2018), the Frayer model might be used to improve learners' vocabulary by providing active participation in analyzing a term or going beyond the boundaries of its meaning. In regard to constructivism theory, it was strongly integrated and was put into practice for improved inquiry and learning or words and beyond, according to a claim discovered in the research of (Halliwel, 2018). According to Kartalmis (2017), the methodology sought to build comprehension towards targeted vocabulary by making learning simpler and creating personal connections with the visuals. According to Wanjiru (2015), this model was a visual organizer that students used to arrange their ideas about a phrase in four ways: definition, qualities, and instances. A model created by Dorothy Frayer and his university colleagues established a model that could be specified as a teaching technique that was extensively used in most classrooms (Wanjiru, 2015). Initially, this technique may have been provided to instructors using explicit teaching methods such as modeling and think-aloud exercises based on the four primary characteristics of it (Estacio, 2017).

Furthermore, according to Ann and Thomas et al. (2019), the Frayer model could be a simple and interactive way of promoting interactive learning in the classroom, which helped maintain a healthy debate between learners and teachers while requiring the development of critical thinking skills and resulting in an open and honest exchange of ideas. The author also asserted that as it relies on learners' past knowledge and visual learning, powerful critical thinking abilities may be released in individual, small group, or even whole group settings. It was also suggested in Talah's (2015) study that the taught model method assisted students not only in determining the meaning of words but also in providing their important qualities, instances, and non-examples, which is consequently seen as beneficial.

According to Estacio (2017), the study's findings highlighted the model's useful and relevant benefits in building and expanding students' vocabulary. This technique also gave significant information on how this approach aids in the development of the teaching-learning process as it was integrated in teaching as instructional material and a formative assessment tool, which might contribute to vocabulary growth and strong academic performance among learners. Furthermore, the model is intended for students to support concept mastery, promote critical thinking, and assist students in determining and acquiring unfamiliar vocabulary terms in content areas where they may be able to do more with that word to help them truly understand the term rather than simply memorize words and their definitions. The aforementioned method is good for teaching vocabulary topics since it helps students understand the defining notion thoroughly (Rahmadani, 2018). Furthermore, the author claimed that the model may be used for formative evaluation and conceptual comprehension, which promotes students' thinking (Rahmadani, 2018). Several research were revealed that Frayer model proved its efficiency. According to the findings of this study, there was an important increase in students' vocabulary from pre-test to post-test in the experimental group compared to the controlled group based on attested results (Riksadianti, 2021). This means that both groups performed just averagely on the pre-test, there was a significant difference in the actual mean, particularly with experimental groups, due to the treatment of the said model strategy, particularly in learning vocabulary. Although the use of this model improves vocabularies among learners, it is still significant that it required more time of application both in teaching-learning process towards various disciplines or subject areas (Riksadiante, 2018).

3. METHODOLOGY

3.1 Research Locale and Duration

This study was conducted at Taytayan Integrated School at Taytayan, Cateel Davao oriental. The conduct of study was held at the grade five respective classroom, a one-storey building situated at the back side near canteen area with one section in grade five. The researcher conducted pre-post intervention with span of two (2) weeks within a month having total of four (4) sessions to come up with clear results.



Figure 1. Map of the Taytayan Integrated School

3.2 Research Design

The researcher of this study utilized a quasi-experimental research as one of quantitative type of research. Thomas (2020) compared quasi-experimental research to experimental research in which an independent variable is manipulated. It differs from experimental research in that there is no control group, no random selection, no random assignment, and/or no active manipulation." Furthermore, quasi-experimental research design employs non-experimental (or non-researcher induced) variation in the main independent variable of interest, essentially mimicking experimental conditions in which some subjects are randomly exposed to treatment while others are not (Gopalan et al, 2020).

3.3 Research Instrument

The progressed result of learners' enhanced vocabulary was determined through comparison between pre-test and post test scores. The instrument utilized in the said study was adapted questionnaire for both pre-test and post-test administered to both groups. The content of the questionnaires were derived from the topic aligned for the 3rd quarter Grade V Curriculum Guide in English focused about inferring meanings of unfamiliar words, unfamiliar words based on given context clues (synonyms, antonyms, word parts) and etc issued by the Department of Education.

3.4 Respondent of the Study

The respondents of this study were the grade 5 learners of Taytayan, Integrated School who were enrolled in S.Y 2021-2022. The learners were categorized into two groups, one is control and the other one is experimental group and ranges from 10-11 years old. Set A was classified as experimental while set B as the control group through a tossed coin for fair result performed by the researcher and the adviser. Both groups underwent pre-post-test, however the experimental group received the intervention and the control group were taught conventionally. Set A has 15 grade five learners and set B has also 15 learners gathering a total of 30 respondents. Moreover, the response of respondents were analysed through preceding chapter of the paper.

3.5 Data Treatment

Mean. This statistical tool was used in this paper to determine the (1) the level of pre-test scores (2) post-test scores of the respondents for both groups (Control & Experimental). Likewise, this tool also aimed towards answered questions manifested from the statement of the problems one (1) and two (2). Hence, the result was interpreted based on the tallied scores of respondents.

Table.1 K to 12 grading scale and interpretation

Grading Scale	Descriptions	Remarks
90-100	Outstanding	Passed
85-89	Very Satisfactory	Passed
80-84	Satisfactory	Passed
75-79	Fairly Satisfactory	Passed
75 below	Did not meet Expectation	Failed

T-test. This tool utilized in determining (3) the significant difference of Pre-test between controlled and experimental group, (4) the significant difference of Post-test between controlled and experimental group and lastly, and (5) determined the significant difference on the results between pre-test and post-test scores of the control and experimental group. Furthermore, this measured the problem statement three (3), four (4) and five (5).

3.6 Data Gathering Procedures

The following were the process on how the researchers gathered data from the respondents:

1. Secured a letter of permission to the conducted study from the office of the Principal in Taytayan Integrated School as well as with the teacher and thesis adviser for accountability and ethical conduct to help avoid psychological and social danger while on conduct.
2. Sought a letter of permission towards the parents of respondents of the study which guaranteed that the research was carried out in a responsible manner to ensure the safety of their child during the conducted research.
3. Asked permission to the principal of the school where the administering of pre-test and post-test, as well as the intervention, conducted. The principal approved the researchers to conduct the tests and interventions, the researchers submitted a letter of request to the Grade 5 class advisers to conduct the research;
4. Performed a toss coin together with the research adviser to determine which group to receive intervention to observed fairness in utilizing the intervention particularly the Frayer model and to group who were taught conventionally.
5. Administered the pre-test.
6. Conducted the intervention.
 - Control- conventional teaching method.
 - Conducted short reading activity.
 - Experimental- utilized Frayer model.
7. Introduced the Frayer model to the group with provided examples using its four main categories namely; definition , characteristics , examples and non-examples guided by its learning competencies focused on inferring meaning of words , synonyms/antonyms etc.
8. The implementation of the intervention in the group took step in filling in the model through the ff:
 - Write/Select the word.
 - Write the characteristics of the selected word.
 - Write examples of the selected word.
 - Write the non-examples, scaffold as needed.
 - Write a definition for the selected word based in own ideas.
 - Administered the post-test.
 - Retrieved post-test score results.

4. Results and Discussions

This chapter presented the results and discussion of the study. The results was discussed thoroughly and the order was based from the study's statement of the problem: the level of pre-test score between the controlled and experimental groups ; the comparison between pre-test scores of controlled and experimental groups; the level of post-test scores between the controlled and experimental groups; the comparison between pre-test and post-test score.

4.1 Level of Pre-Test Scores.

The results were obtained from the administered questionnaire. This was to determine the level of pre-test scores between the control and experimental group.

Table 2. Level of pre-test scores between the control and experimental groups

Group	Total Score	Standard Deviation	Mean	Grade Percentage	Remarks

Control	25	4.00	8.80	67.60	Did Not Meet Expectation
Experimental	25	3.54	7.40	64.80	Did Not Meet Expectation

The results for both groups had shown in Table 1 wherein control group got a mean score of 8.80 having obtained a percentage of 67.60 and experimental group with a mean score of 7.40 and a grade percentage of 64.8, which was interpreted that both groups did not meet expectations based on their pre-test scores. The result implied that learners in both groups possessed almost the same level of understanding which had poor prior knowledge about vocabulary, particularly on inferring meanings of words, antonyms/synonyms etc. based on inferred scores of the learners. In relation to this, the finding of this study revealed that two groups means scores on the pre-test was poor which clearly showed that word knowledge among students were lacking.

This study's findings which were supported by Rohmatillah's (2014) research, claimed that certain students had trouble pronouncing words, understanding the right meaning of terms, writing and spelling, and employing words in grammatical forms, causing children to learn vocabulary. He likewise believed that without a sufficient vocabulary, people could not effectively communicate and express their feelings, both vocally and in writing, since the more people master vocabulary, the more they can speak, write, read, and listen as they like (Rohmatillah, 2014). According to the findings of the PISA 2018 National Report Philippines, Filipino students performed well on average, with one in every five achieving the minimal competency level in total reading literacy (PISA, 2018). The findings indicated that children have inadequate language skills, which was reflected in the above-mentioned findings, which revealed that the mean scores on the pre-test for two groups were poor, indicating that the students had poor prior knowledge in recognizing the meaning of words (synonyms/antonyms and context clues) based on the given test.

Mofareh (2015) also noted that limited vocabularies impede communication and learning, as word knowledge can be frequently seen as a critical skill for second language learners. With these difficulties faced, learners had difficulty learning words as well as the language, and they were concerned about comprehending texts in which they could not properly gain information because they did not master the words in the text. Afzal (2022) added that there were some difficulties in learning vocabularies and attributes experienced by learners at various levels of language, which was especially difficult for non-native English speakers who struggled with knowing the meaning of words, spelling, pronunciation, and appropriate use of words, as well as guessing the meaning through context. Also, the findings of Susanto's (2021) study revealed variety of difficulties encountered by students in vocabularies, including difficulties in pronouncing words, selecting the appropriate meaning of words, and the complexity of word knowledge involving how to use/write and spelled various grammatical forms. Similarly, according to Rohmatillah (2014)'s research, the more individuals who learn language, the more they can speak, write, read, and listen as they like.

4.2 Difference on the Pre-Test Scores

The pre-test scores between the controlled and experimental group was significantly compared through utilized treatment tool which had obtained a mean comparison.

Table 3. Mean comparison between pre-test scores of control and experimental group

Group	Mean	Standard Deviation	t-value	p-value	Interpretation
Control	8.80	4.00	1.014	0.319	Pre-test scores between the two groups do not differ significantly.
Experimental	7.40	3.54			

The pre-test scores between the control and experimental group was analyzed and compared through utilized treatment tool to get their mean score. The control group had obtained a mean score of 8.80 with an equivalent standard deviation of 4.00 while experimental group had a mean score of 7.40 with a standard deviation of 3.54.

The findings indicated that there was no significant difference between two groups of pre-tests scores with a t-value of 1.014 and a p-value of 0.319.

The results of the study revealed that there was no significant difference between pre-test scores of the experimental and controlled groups. This means that the pre-test scores of the respondents in both groups showed almost the same level of understanding in terms of vocabulary. In connection, the results showed that students' vocabulary in both groups obtained a low score in terms of learned vocabulary which means that both groups got low pre-test (Riksadiante, 2018). Likewise, their poor score results were determined based on their level of understanding and little prior knowledge of the content.

Yuefang (2019) identified variables that influence students' vocabulary acquisition. One major factor is a lack of desire, which can have a negative influence on the learning process since they tend to devote less time and energy to second language acquisition, which can result in low learning efficiency and academic achievement. Gardner and Nation (2013) stated that the vocabulary problem is particularly relevant for non-native language users, who frequently struggle to find words to express themselves while speaking and writing. They also report feeling unmotivated when reading and listening due to a lack of vocabulary. Language professionals and scholars, too, recognize the importance of vocabulary knowledge (Gardner & Nation, 2013). Yuefang (2019) also includes attitude as a component that influences vocabulary development, which is about what someone thinks or feels when doing activities on their own. Amelia (2018) also stated that someone's attitude determines how he or she reacts to adversity as a result of having the ability to learn and grow and maybe overcome learning obstacles with certain ideas or things.

Another component that affected language or word acquisition among learners was self-esteem anxiety, sadness, spirit of adventure, extraversion, and introversion, all of which made a difference in learning efficiency (Yuefang, 2019). London (2013) elaborated on the relationship between personality and language acquisition on a variety of levels in regard to this. In this way, he asserted that a person's personality determines how they communicate, and that introverts are more likely to use and learn language, whilst extroverts are more likely to be ambiguous. Although some teachers may believe that acquiring new vocabulary items is simple, it has always been difficult for students. The educational implications for EFL learners with limited vocabulary are profound, as students who lack sufficient vocabularies or word-learning strategies struggle throughout their educational careers, leading to a cycle of frustration and continued failure (Khany & Khosravian, 2014).

In contrast, integrative motivation of learners included a strong desire to interact with peers or other people, particularly those speaking the target language, as well as people with culture-related learners who saw SLA or second language acquisition as a goal of their interests in becoming active learners (Fang-Fang & Quing, 2013). Language professionals and scholars, on the other hand, recognize the importance of vocabulary knowledge (Gardner & Nation, 2013). According to Sadeghi (2013), motivation is one of the crucial aspects in language acquisition, and earlier research has suggested that motivation is a major component in learners achieving linguistic successes. According to Akdogan (2017), language would not exist without vocabulary because it was one of the most significant components cited by and also the basis in learning English as a second language, as Nie & Zhou (2017) supported. With this, most pupils opted to use their mother tongue rather than English, with the Philippines being a bilingual country. According to Sumalinog (2019), vocabulary is likewise a difficult concept for a second language student to grasp. This implies that kids should study their first language since it helps them develop their comprehension of words and communicate successfully in a variety of situations. Acquiring vocabulary includes not only conveying the meaning of words but also being able to correctly pronounce terms, spell and employ words in grammatical characteristics, connotations, and semantics (Kayi-Aydar, 2018). This entails being able to aid learners as they effectively develop vocabulary (Kayi-Aydar, 2018). Teachers, on the other hand, should expose students to new words and their meanings in order for them to retrieve, recall, and use target vocabulary items in a variety of communication settings and contexts, and thus vocabulary development can occur (Cook, 2013). Thus, teachers are strongly encouraged to establish a method for vocabulary growth by aiding students in managing time while learning words both within and outside the classroom.

4.3 Level of Post-Test Scores

The scores obtained in this research had undergone statistical analysis which was manifested from the conducted post-test.

Table 3 showed the results of level of post-test scores between controlled and experimental groups.

Table 4. Level of post-test scores between the control and experimental groups.

Group	Total Score	Standard Deviation	Mean	Grade Percentage	Remarks
Control	25	3.29	9.13	68.26	Did Not Meet Expectation
Experimental	25	3.23	17.13	84.26	Satisfactory

Based on the shown result from table 3, the controlled group had obtained a mean score of 9.13 which resulted having a grade percentage of 64.26 and a total standard deviation of 3.29. On the other hand, the experimental group obtained a mean score of 17.13 with a grade percentage of 84.26 with an equivalent standard deviation of 3.23. This implied that the scores for both groups differs since controlled group didn't met expected level which manifested that the learners had poor prior knowledge about vocabulary while the experimental group had obtained a satisfactory remark which implied that they have acquired learning on how to recognize words, infer meanings, antonym/synonyms as group with the utilized Frayer model.

Rahmadani (2018) found that using the Frayer model increased vocabulary acquisition and learning. According to Riksadiante (2018), there was a substantial improvement in experimental post-test mean scores of learners when compared to the mean post-test mean scores of learners in the control group, despite the fact that it did not meet the minimal criterion. Furthermore, the data from the pre-post test demonstrated that learners who were taught with the Frayer model scored higher than those who were taught using the standard technique of teaching (Rahmadani, 2018). Baskin et al. (2017) also shown that the control group, which received conventional kind of instruction, had less favorable results than the experimental group, which received the mentioned intervention, which helped develop greater vocabulary knowledge but requires more time to implement.

Holmes (2019) asserted, through the lens of Bruner's constructive learning theory, that the theory aids learners in developing understanding of words or concepts through existing mental patterns, allowing them to construct information and ideas on their own rather than passively listening to and acquiring knowledge from teachers. To back up this claim, Plankers (2022) said that the model encourages students to primarily offer representation of vocabulary items by writing their meanings, synonyms/antonyms, and adding images and illustrations such as photo representations, which can be found in the four squares. Similarly, Hu (2018) asserted that since constructivism theory of learning referred to mental file cabinets that allowed students to process, encode, organize, and retrieve information, this may also be expressed in the aforementioned model to input their knowledge.

Rahmadani (2018) found that the Frayer model, when viewed through the lens of Bruner's constructive learning theory, had a significant impact on students' vocabulary learning, with students' scores improving after treatment with the model compared to learners who only used a conventional teaching method. The author also proposed that instructors use the mentioned paradigm in teaching vocabulary in order to develop effective word knowledge in which students may be engaged and involved in the vocabulary learning process (Rahmadani, 2018). It was also stated that the school curriculum is based on a structure to which acquired knowledge were determined helping learners gain, expressed and communicate in the form of task analyses (Lin, 2015). Thus, the effects of Frayer model on learning vocabularies among learners according to the study of Estacio et.al (2017) proved that said model helps develop teaching-learning process towards good academic performance.

4.3 Level of Post-Test Scores

Difference Between Control and Experimental Group in the Post Test Scores

The post test scores of the control and experimental groups were compared and analysed accordingly through the utilized data treatment tool which aims to get the mean comparison.

Table 4 presents the mean comparison between the post- test scores of the control and experimental groups.
Table 5. Mean comparison between post-test scores of control and experimental group

Group	Mean	Standard Deviation	t-value	p-value	Interpretation
Control	9.13	3.29	-6.722	0.000	Post test scores between the two groups differs significantly.
Experimental	17.13	3.23			

Based on the showed results in table 4, the controlled groups obtained a mean score of 9.13 with an equivalent standard deviation of 3.29. On the other hand, the experimental groups had a mean score of 17.23 with a standard deviation of 3.23. Hence, the finding of the results indicated that there was a significant difference between two groups' post-tests' scores having obtained a t-value of -6.722 and a p-value of 0.000. This means that the results implied in both groups obtained learning about vocabulary however the experimental groups posed significant learning improvement particularly with utilized Frayer model strategy than in control group taught with conventional method. This indicates that the score result manifested in the controlled groups highly differ than in than post test scores in the experimental group with implemented intervention.

The results showed that the respondents in the study, particularly the experimental group, had a better learning outcome using the Frayer model method than the control groups (Riksadiante, 2018). It suggested that the taught model technique helped students not only determine the meaning of words but also offered important characteristics, examples and non-examples, which is useful in developing students' vocabularies (Talah, 2015). According to Urganhat and Frazee (2013), the Frayer model was a successful way of teaching and learning vocabulary since the intervention provided to the students allowed them to understand the meaning of words and ideas. These assisted students in identifying, understanding, organizing, and conceptualizing words by activating prior knowledge and linking it to new concepts, which stimulates critical thinking. Similarly, Journal of Research in Curriculum (2018) said that this technique assisted students in making connections between new concepts, allowing them to progress beyond vocabulary exercises regarding words and their meanings.

However, the justification for utilizing the Frayer Model to teach vocabulary arises from its capacity to give an effective structure for students, as it helps students to not only discover the meaning of words but also provides them with important qualities, instances, and non-examples. As a result, the model is seen to be advantageous for learners in developing their vocabulary knowledge (Talah, 2015). It was also said that if learners have had enough experience with the Frayer Model, they would be able to finish parts in class without instructor assistance (i.e., individually, in pairs, or in small groups). When doing so, they should still be asked to explain why they picked the qualities, examples, and non-examples they did. As a result, it is beneficial to request that students demonstrate how they utilised knowledge. Based on the findings, the used model, together with Bruner's constructive learning theory, definitely had a substantial impact on learners' vocabulary development. In this sense, it allowed learners to play an active role in their learning by allowing them to create mental representations based on their personal experiences and incorporating new knowledge into their schemas, which promotes deeper learning (Macleod, 2022). According to Firestone (2021), constructivism theory emphasized that students should be active participants in the learning process, processing discovered information and abilities. According to Hu (2018), the theory demonstrated learners' active role in constructing meaning, particularly in connecting new words to synonyms, antonyms, and more, as well as in analyzing feature of words, concept maps, graphic organizers, and applying prior ideas to obtain word meaning and information.

4.4 Difference between Pre-Test and Post-Test scores

The pre-test and post-test scores of the experimental and control groups were compared through utilized data treatment tool, to get their mean comparison result. Shown in the table 5 are the mean pre-test and post-test scores of two groups.

Table 6. Mean comparison between pre-test and post-test scores of control and experimental group.

Group	Mean		t-value	p-value	Interpretation
	Pre-Test	Post Test			
Control	8.80	9.13	4.571	0.000	Pre-test and post test scores different significantly.
Experimental	7.40	17.13			

The table above showed the mean comparison between pre-test and post-test scores. The results were manifested from the combined mean pre-test scores of both groups which obtained a mean of 8.80 for control group and 7.40 for experimental group which indicated that there was a significant difference between two groups. On the other hand, the post-test scores obtained from the control groups got a mean score of 9.13 and 17.13 for the experimental groups. Based on the results, it can be shown that there was a significant difference between the two groups' pre-test and post-test results in terms of learning vocabularies.

Based on the overall results, the respondents got the mean post test score of 9.13 indicated in the table. This means that the combined mean post-test scores with t-value of 4.571 and a p-value of 0.000 that the utilized Frayer model strategy as intervention posed a high significant difference as experimental group who obtained high scores results than control groups specifically in the post-tests. In this regard, the study's findings revealed a high significant difference in both groups, with the experimental group scoring higher than the control group, which used a Frayer model technique (Riksadiante, 2018).

Similarly, Rahmadani (2018) said that learners demonstrated progress using the used Frayer model as a result of pre-test and post-test. This suggests that learners who were taught using the Frayer model surpassed than those who were not (Rahmadani, 2018). The results indicated a considerable change between the pre-test and the post-test, as seen by the actual mean. This suggests that the experimental group outperformed the control groups in terms of learning progress from pre-test to post-test (Riksadiante, 2018). Similarly, the findings obtained from both groups of respondents exhibited poor performance scores on the pre-test compared to the post-test scores, which suggested a significant difference based on the actual mean.

In response to the study's findings, Cummings (2018) stated that the Frayer model might be used to improve learners' vocabulary by providing active participation in analyzing a term or going beyond the bounds of its definition. In the research of (Halliwel, 2018), the idea of constructivism was highly integrated and put into practice for improved inquiry and learning or words and beyond. As a result, teaching vocabulary using the Frayer model has a greater impact than teaching vocabulary using the traditional teaching technique (Rahmadani, 2018).

4.6 Implication to Education

Implications were drawn out for research findings. Thus, this studied aimed to determine the vocabulary development particularly among grade five (5) learners through utilized intervention for the Frayer model strategy.

Essentially, this research article found there was significant difference in students' vocabulary between learners who were simply taught conventionally and those who were taught using the Frayer approach. Similarly, based on the data presented above, it suggested that the model adopted was capable of boosting students' vocabulary toward vocabulary skills, as supported by (Rahmadani, 2018). Furthermore, the results indicated that the model technique was beneficial in improving students' vocabulary improvement as a consequence of the supplied intervention.

Starke (2020) revealed that the aforementioned intervention approach may be used at any grade level or subject matter instruction, although it is most successful at the higher elementary and

secondary levels. Further, the result indicated in the current study together with utilized Frayer model obtained positive implications for enhancing effective vocabulary among learners.

1. It was clear, especially for English instructors, that using the communicative Frayer model in teaching vocabulary context would help students improve and increase their communication abilities, particularly in reading, listening, writing, and speaking.

2. Through Frayer model, which is primarily based on communicative learning, would enable students to gain a better understanding and broaden their word knowledge in all contexts, especially in four areas of language learning, communication, and literacy for both teachers and learners. As a result, this helps learners to polish their knowledge of words by challenging their conceptual grasp of words by inferring meanings, organizing, and critically thinking using the Frayer model.

5. Conclusions

Based on the indicated findings, this research paper includes the following.

1. The pre-test scores between two groups did not meet expectations which was marked as failed. This implied that both groups posed different levels of understanding as well as poor prior knowledge about vocabulary.
2. The post-test scores between the control and experimental groups differ considering that respondents from the control groups post-test scores did not meet the expected level while the experimental group showed progress in terms of learning vocabulary through utilized intervention which is the Frayer model as compare to the control groups who were taught conventionally.
3. The pre-test scores between the two groups did not differ significantly which was implied that both groups had almost the same level of understanding and knowledge in terms of vocabulary.
4. The post-test scores between two groups differ significantly which was manifested that both groups had showed improvement in line with learned vocabularies through the used of Frayer model in the experimental group and conventional teaching in the controlled groups.
5. The results obtained from pre-test and post-test scores differ significantly which implies that the mean post-test scores scored higher than the mean pre-test. Hence, the score differ significantly based on given results.

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