

Students' Vocabulary Memorization is Enhanced via Fishbone Diagram

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ABSTRACT

Nowadays, high school students are facing tremendous difficulties in memorizing vocabulary. The aim of this research is to offer a deeper insight into one of the most immensely popular ways of learning and remembering English vocabulary for high school students, the Fishbone diagram method. The study focuses on the effectiveness of this method in vocabulary memorization. High school students have many difficulties in memorizing vocabulary, and some highlight obstacles they find demanding are pronunciation, tough spelling and especially word family and collocation. The fishbone diagram method helps students a lot in overcoming the problems. Hopefully, this method will be applied much and become a popular choice among students in learning English vocabulary.

Keywords: *memorize, Fishbone diagram, method, vocabulary*

1. INTRODUCTION

In the global integration era, English is being spoken by millions of people as their native language. It has been considered as the first international language used by most people around the world. According to Bang (2007) [1], he also noted that English was considered by the majority of the participants as crucial. Hence, each individual knows the importance of learning a second language or foreign languages, which help us communicate with other people all over the world, succeed in many different fields and catch up with the speed of the growth of the global society. Specifically, to acquire English, vocabulary learning is very crucial to English learners. Vocabulary decides over ninety percent of the purpose of the process of communication and the meaning of speakers. The more vocabulary they learn, the more successful they are in the process of acquiring English. In other words, the process of English learning is not only the study of basic grammar but also the learning of vocabulary in order to make basic meaningful sentences at the beginning and present logical arguments at an advanced level later.

It is undeniable that knowing a language inside out, especially its vocabulary, has been a long-running and challenging battle for Vietnamese people, including 11th graders, ever since they started studying English. Complicated as it is, there are still some possible causes that could explain this issue. The first main reason for this matter is vocabulary instruction. In fact, an overwhelming number of new words are delivered to the students in just 45-minute periods, and the size of vocabulary is so impractical for them that they can't understand deeply the nuance of English words, then apply them in real-life situations appropriately. Another concern for this problem that needs addressing is the passive learning of students. In class, students literally note down words, including the Vietnamese meanings, on the board provided by teachers without double-checking the English lexical definitions in the dictionary. This may lead to inflexibility in the word usage due to several possible conflicts between Vietnamese and foreign definitions.

The two main limitations in the vocabulary teaching and learning which have led to the restriction in students' memorizing process that we have discussed

earlier are the vocabulary instruction and passive learning.

We think that finding a teaching or studying method that could effectively tackle the two major concerns behind the pressure in students' memorizing process, which are the vocabulary instruction and passive learning, is an urgent action at this time. After considering all of the descriptions, reasons and some temporary solutions above, we have come to a decision about choosing the topic: "Students' vocabulary memorization is enhanced via fishbone diagram". We hope that this study could be applied to memorizing English vocabulary more proficiently with a view to helping our students use this foreign language as their mother tongue to communicate in their lives. To conduct this research, we will answer the three following questions:

1. What are the difficulties that 11th graders meet when learning vocabulary and how they overcome those ones?
2. How is the fishbone diagram implemented in vocabulary recollection for 11th graders?
3. Among the difficulties, which one that fishbone diagram can deal with?

2. LITERATURE REVIEW

Cambridge Advanced Learner's Dictionary [2] defines that vocabulary is all of the words that a particular person knows and uses. Many experts have defined vocabulary. Hatch and Brown (1995, p1) [3] states that vocabulary is a list of words for a particular language or a set of words that an individual might use. Moreover, according to Webster Dictionary (1985, p.1073) [4], vocabulary is a list or collection of words usually that are arranged alphabetically and explained or lexicon, the stock of words used by individual, etc.

In Advanced Learners Dictionary of Current English, Hornby (2006) [5] stated that vocabulary is all the words that a person knows or uses, all the words that exist in a particular language, a list of words with their meanings, especially in a book for learning a foreign language. From Nation (2001, p.66) [6], vocabulary is the main element of language. It's the center of the language. Language is a system of communication that is constructed by vocabulary. People use words to think, express ideas and feelings and to know about the world. Therefore,

vocabulary is a crucial component in language learning. It's related to all the four skills of speaking, listening, reading and writing.

Hatch and Brown (1995, p.1) [3] defined that vocabulary is a catalogue of target language words in a particular language or a list of words that an individual might use. vocabulary is a list of words with their meanings, especially in a book for learning a foreign language, which is used to communicate by an individual or a group of people.

From the academic viewpoint of language experts above, we can generally define that vocabulary is a list of words with meanings that are used to communicate between one person to another. the more vocabulary you absolutely know, the more knowledge you can build up for yourself. the more learners try to look up the meaning of vocabulary. they need to focus on how important vocabulary affects on learning, memorizing these new words and especially using them clearly and fluently in communication in real life.

Vocabulary has three main aspects. There are:

2.1 Meaning

The students try to make a guess at the meaning of new words from the instructions and clues of teachers. This is not preferable on the ground that clues may or may not provide the meaning of the word accurately. It is advocated as it enables the class to go without grasping the meaning of a word that they learned to pronounce rather than to depend upon the translation. Hence, students can memorize not only the meaning but also the form of these new words easily and fast.

2.2 Spelling

According to Nation (2001) [6], a word has pronunciation (spoken form), spelling (written form) and any other parts that create the particular item (such as a prefix, root, and suffix). Hence, the students should learn to spell the word and differentiate it from a similarly pronounced word.

Thus, they can memorize and realize these letters that form the words and especially can know how to spell precisely.

2.3 Pronouncing

The method of pronouncing the vocabulary helps students to memorize the words longer and identify them more readily when they hear or see them. we should implement it in teaching and memorizing new vocabulary.

DeCarrico (2001, p.58) [7] stated that vocabulary learning is central in language acquisition whether the language is first, second, or foreign, etc. Indeed, vocabulary is a dominant element in language absorption as it helps learners improve the percentage of English apprehension considerably, especially in Reading comprehension. In addition, Professor Paul Meara also shows the agreement to this point through what he states in his research “The learners are not likely to know the important meanings words in most reading texts. The vocabulary of a learner is usually limited to 500 words or so. He or she will meet a lot of unfamiliar words in most of the common context that can prevent most learners from understanding much at this level. (Meara, 1995, p.16) [8]. All in all, having a wide range of vocabulary is a must for every English learner.

The very first important point needed putting into consideration is teaching word families. That is to say, teachers can teach word families to maximize students' vocabulary considerably. a list of words that have a base word with its inflections and/or derivations is called word families. to help students recognize words, it make more sense to present a set such as say, saying, says and said as members of a “family” not as four single words. gathering many words that are built around a particular root helps learners see the associations among them.

Another significant point that needs to be mentioned is teaching meaning associations. DeCarrico [7] has shown several pieces of evidence about this view in his thesis that meaning associations links to words is crucial. in mind, words appear to be grouped into semantically related sets, and the connections associated with a word will influence how it is stored in the brain. according to some psychological studies, these linkages can be discovered by giving individuals a term and asking them to think of additional words that it conjures up. the psychologists, for example, give a word table and ask what other words come to mind first. the most prevalent association for a table is a chair; for a boy, it is a girl, and so on.

In order to offer students with a deeper knowledge of a word's meaning and enhance vocabulary development, explicit learning should be taught in conjunction with activities that provide relevant contexts.

Teachers should insist on vocabulary exercises because, no matter how hard they try, students forget the words they learn. according to jeremy harmer [9], there are two basic causes of forgetting: interference from subsequent learning and insufficient recycling. Most teachers are aware that teaching a new vocabulary might lead to forgetting an older one. This is especially common when the words being taught are quite close to the ones that have just been learned.

Furthermore, memorizing vocabulary aids students in their language creation. According to Hubbard (1983) [10], the more words a learner knows, the more precisely he or she may express the exact message he or she desires. According to this viewpoint, pupils must be familiar with a great range of word meanings in order to communicate successfully. Similarly, according to Cardenas (2001) [11], vocabulary is utilized to measure a student's oral proficiency. This is to suggest that a student's vocabulary is a critical factor in determining how well he or she can communicate. In order to communicate successfully, learners must overcome their lack of language knowledge.

To summarize the foregoing academic viewpoints, it is assumed that memorizing vocabulary is critical for learners learning a foreign language and conversing with one another. Most importantly, learners can easily understand what the foreigners talk about and the teacher's instruction about the lecture by the number of vocabulary they acquire.

A fishbone diagram, also known as a cause-and-effect diagram or an Ishikawa diagram, is a visualization method for categorizing the various sources of an issue in order to discover its root causes in some academic texts and materials. However, cause and effect diagrams can be used to help with teaching because they are easy to visualize and organize. For visual learners, the diagram-based strategy is quite helpful in promoting learning. A cause-and-effect graphic is quite helpful when it comes to remembering new words.

It can be used in combination with brainstorming to assist students in developing creative thinking

skills and learning a large number of words, particularly word families, antonyms, synonyms, and collocations. the fishbone diagram is regarded as a creative approach to memorizing vocabulary. and most of the authors encourage using this method frequently because of its positive influences on the vocabulary memorization process.

In research named “Fishbone strategy in teaching English in Indonesia: A tool organizer for learning EFL reading”, according to Nair [12], the fishbone strategy benefits visual tools by highlighting significant ideas with visual aids; providing an oral and written presentation to comprehend the structure of organization; and unable to recollect their memories. Simmonds (2013, p.22) [13] discovered that fishbone analysis separates the program and category of causes, allowing health services to focus on the content of the problem and so increase safety and quality. Furthermore, Martin (2006, p.38) [14] discovered that using the fishbone technique to teach reading gave learners a lot of opportunities to memorize vocabulary while reading. in "improving students' reading comprehension using fishbone diagram, " which was brought about by doctor widyahening [15], demonstrated that fishbone diagram was the best technique to memorize vocabulary and enhance the ability of reading comprehension in both active and innovative ways; moreover; students are also suggested to apply this technique to make it easier to widen their vocabulary and understand the materials. besides, the fishbone diagram is also applied in real life in the reality television program named "học sao cho tốt - tiếng anh! tự tin lên nào!" [16], which was recorded by vtv7 – a national education channel, has indicated that some shortcomings of learning english vocabulary by traditional methods, such as english - vietnamese translation by google, disordered list of words and especially the introduction of fishbone diagram method. the teacher instructs the learner how to use this method to memorize countless words such as word family, synonyms, antonyms, and so on in various fields fast. from the result of the application of this method from the learner, the fishbone is considered a useful and effective way to memorize the vocabulary besides the traditional methods.

As shown above, it is eminent to bear in mind that fishbone strategy not only sets a new conception on an inventive word teaching technique but also raises a curtain to a whole new and innovative approach to memorizing vocabulary for English learners. This method will be mainly analyzed and clarified in later

sections of this research, especially in memorizing vocabulary for 11th-grade students.

3. METHOD

The study utilizes a variety of tools and methods, including secondary data analysis and questionnaire surveys. However, the questionnaire plays a vital role in the research as it is used mainly to collect the data. Fieldwork will be conducted in high schools in Ho Chi Minh City.

There are two kinds of approaches usually used in a study, namely action research and survey. in this study, the researcher chooses surveying as the main approach of the thesis because it can provide generalized results and a lot of data quickly.

Documentary research is used in this study, which includes articles, official papers, reputable reports, books, research works, and online journals that are more specifically focused on language learning, especially vocabulary memorization aspect to give the assistance the students in grade 11 remember vocabulary as much as possible.

The purpose of the questionnaire survey was to acquire a better understanding of high school students' difficulty in recalling vocabularies, the ways of learning new words and the application of the fishbone diagram in the vocabulary memorizing process. after that, we can find out an understandable way for to students to apply the fishbone diagram to their learning process and which shortcomings of students that the diagram works out effectively. in this study, the research includes a questionnaire survey.

The data are collected solely from nearly 300 students in ho chi minh city, especially those who are in grade 11th of some high schools in many districts.

4. RESULTS

There are 12 questions put in the questionnaire and illustrated in the charts. However, the results will only be presented in five major sections. The first section presents the number of students having difficulties in memorizing vocabulary. The second section presents the common difficulty that 11th graders meet when memorizing vocabulary. The third section presents the way students use to overcome the difficulty in remembering vocabulary. The fourth section gives information about the introduction and

implementation of the fishbone diagram in memorizing vocabulary. Finally, the last section indicates the effectiveness of using the fishbone diagram in remembering vocabulary. We have the following important findings:



Figure 4.1: Students' goal in learning English

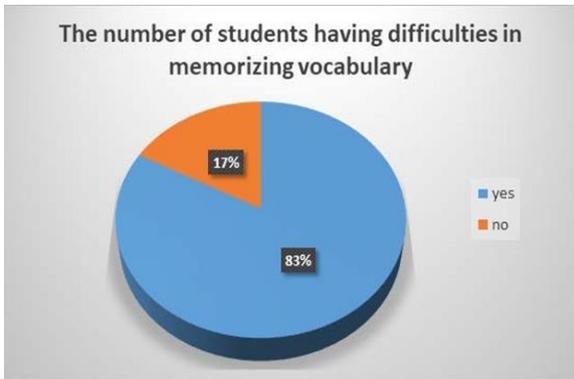


Figure 4.2: The number of students having difficulties in remembering vocabulary

The two charts above give information about the objective of students when learning English and the size of students daunted by vocabulary memorization in high schools.

Overall, most of the students from both schools needed English for an ideal job in the future while the figure for students having other goals (the ones which are not listed) made the lowest contribution. In addition, there was a considerable number of students admitting that learning vocabulary is complicated.

In the first chart, more than half of the students coming from the 2 different schools aimed to use English to look for a good job after graduating, and one-third of them wanted to improve communicative skills. Additionally, the fraction for students whose goal is to pass the entrance exam was in third place, making up 14% of the whole chart. There was just a minority of students having other goals, accounting

for 4%. In the second pie chart, only 17% of the students of the 2 high schools did not encounter any obstacles in remembering English vocabulary. In contrast, an overwhelming number of students had difficulties in memorizing new words (83%).

With the figure shown in the charts, we can conclude that there are still many students struggling in bearing new vocabulary in their minds and a vast number of them learn English with the hope of being offered a high-ranked job in the future.

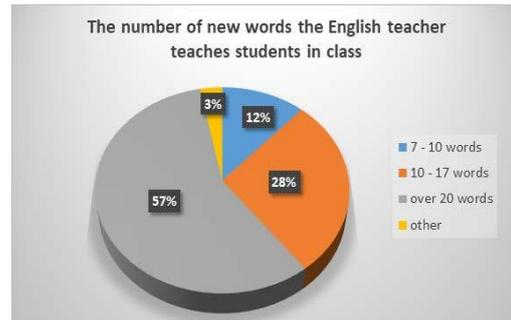


Figure 4.3: The number of new words taught in class

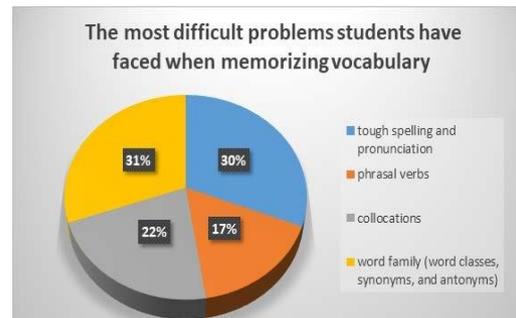


Figure 4.4: The most difficult problems students have faced in memorizing vocabulary

The two charts above indicate the number of new vocabulary that was taught in school by the English teachers and the most challenging issue of memorizing new words existing among the students of Tran Khai Nguyen and Tan Phong high schools.

Overall, more than 20 words were taught to most of the students in English classes, and the number of who find word-family (word classes, synonyms and antonyms) and tough spelling and pronunciation the most difficult aspects when learning English made up the largest fraction in the second chart.

As shown in the first chart, more than half of the students were introduced to more than 20 new words in their English classes (57%), followed by the percentage of 10 – 17 words (28%). Moreover, the

figure for 7 – 10 new vocabulary and other was 12% and 3%, respectively. In the second chart, the proportion of word family together with tough spelling and pronunciation accounted for approximately 30%, while that of collocations and phrasal verbs were smaller, contributing about 21% of the whole pie chart.

With the figures above, it is conceivable that there are a considerable number of students overwhelmed with English learning in general and vocabulary learning in specific. Based on our analysis, it is clear that students not only struggle with such an inappropriate vocabulary size taught in schools but several specific aspects of vocabulary learning whose the most part of are word family and pronunciation and spelling.

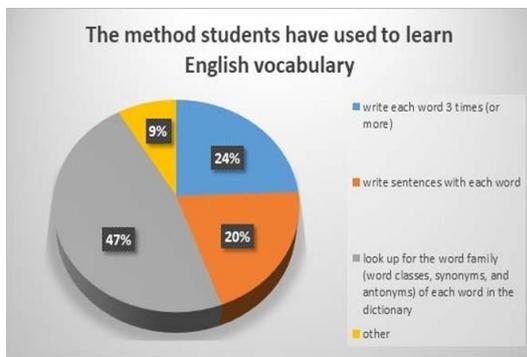


Figure 4.5: The method students have used to learn English vocabulary

The chart above demonstrates the percentage of the methods high school students have ever used to learn English vocabulary.

Overall, the majority of students used the method - looking up the word family (word classes, synonym, and antonym) of each word in the dictionary, while the percentage of students used the other methods like speaking out loud the new words or writing a note is the lowest.

As can be seen in this chart, the number of students who learn new words by writing each word 3 times or more and writing sentences with each word accounted for the high rate, with 24% and 20%, respectively. Furthermore, looking up the word family (word classes, synonym, ...) of each word in the dictionary was the method students apply with the highest proportion, 47%. Additionally, the proportion of students who learns English words by writing each word 3 times (or more) was approximately half that of students looking up the word family (word classes,

synonym, ...) of each word in the dictionary with 24% and 47%, respectively. At the same time, the other methods like speaking out loudly or note-writing made up the lowest percentage with 9%.

With the figure is presented in the chart, we can see that high school students in general and 11th graders in particular, they have applied many different methods to enhance their range of English vocabulary and address the problems they have in doing the test at schools.

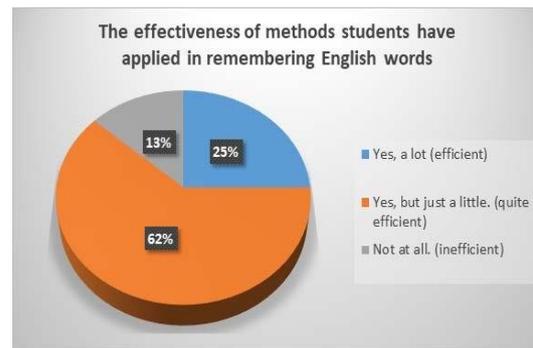


Figure 4.6: The effectiveness of method students have ever used in remembering English words

The pie chart above illustrates the percentage of effectiveness of methods students have applied to remember English vocabulary. Overall, the majority of students find it quite efficient to memorize English words by using their own methods.

As can be seen in this chart, the proportion of students who finds it efficient to learn new words by their own methods accounted for a quarter of all students asked to conduct the survey, with 25%. Additionally, the percentage of students considering it quite efficient to learn vocabulary by using their own methods was the highest, with 62%. In the meantime, the inefficiency of methods that students use to learn English words accounted for the lowest percentage, with only 13%.

With the figure presented in the chart, it is conceivable that students in both schools apply these methods to bring efficiencies in learning and memorizing some aspects of English vocabulary. However, it is not the most effective way for students to learn and enhance their range of vocabulary.

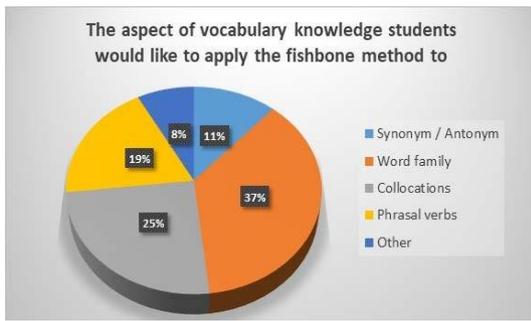


Figure 4.7: The aspect of vocabulary knowledge students would like to apply the fishbone method to

The chart above presents the percentage of the aspect of vocabulary knowledge high school students want to apply the fishbone method to memorize new words. Overall, the percentage of students using this method to learn word family was the highest, while with synonym, antonym and other aspects, the proportion of students applying this method to learn was the lowest.

As can be seen in the chart, the word family was the aspect students apply this method to study most, with 37%. Moreover, collocations were also the aspect students applied the fishbone diagram to learn, with 25%. In addition, the percentage of students applying this method to learn collocations was much higher than that of students who used fishbone diagrams to study phrasal verbs and synonyms, antonym, with 25%, 19% and 11%, respectively. Especially, the figure of students applying the fishbone diagram to learn word family was nearly double that of students who used this method to study phrasal verbs, with 37% and 19% respectively.

With these figures, we can see that the fishbone diagram is applied variously in many aspects of learning English. Despite having many different methods in remembering English words, when this fishbone method is introduced, many high school students apply this method to learning some difficult aspects of English like word family and collocations immediately.

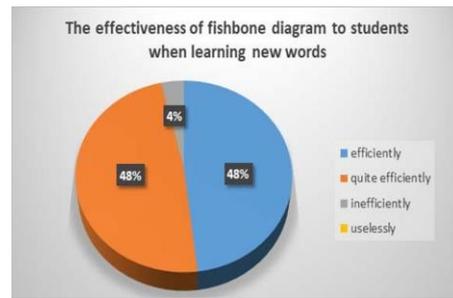


Figure 4.8: The effectiveness of the fishbone diagram method in learning new words

The pie chart above illustrates the percentage of the effectiveness of the fishbone diagram to students in both Tran Khai Nguyen and Tan Phong high schools when learning new words. Overall, the majority of students found it efficient to learn English vocabulary by using this fishbone diagram, with 48%. Meanwhile, the proportion of students who considered this method inefficient is very low, just by one-twelfth that of students find it efficient, with 4%.

In learning English, especially remembering vocabulary, there are countless methods for students to learn. However, the application of the method to achieve success or improve the range of vocabulary is not simple. The result shows that when high school students apply the fishbone diagram method in remembering vocabulary, it will help them memorize a large amount of vocabulary and enhance or broaden their range of vocabulary. Moreover, this method will assist students in learning word family especially synonym, antonyms, and collocations, addressing the difficulties that students face while learning English vocabulary.

The primary goal of this project is to introduce a helpful method to high school students, particularly 11th graders, for learning English in general and memorizing vocabulary in particular. The survey was carried out at 2 separated high schools in Ho Chi Minh City, and a sample of nearly 200 respondents was used. In this study, all items being used were adopted from previous research. The following information in this chapter refers to: first, the main findings from the survey; second, the explanations for the results we have; third, the limitations we have not conducted in this research and fourth, giving some suggestions for other researchers to carry out other studies related to different aspects of learning English as well as ways in teaching English.

The initial reason this method should be applied in learning vocabulary, especially word family, is the

visual structure of a fishbone graphic (picture). Specifically, the root word is written at the head of fish, and the variants of that word are written at the rib bones. When students use this framework, they can address their issues in the word family. In addition, the fishbone is very systematic, clear and simple to use in remembering vocabulary. To clarify, the systematicity, clearness and simplicity in using this method are presented in the structure of this fishbone (the head fish with the main word and the rib bones with the variants). In the process of learning English, particularly vocabulary, using visuals is the most appropriate and fastest way for students to memorize the new words instead of making a list of many words and then remembering. Most importantly, as we can see, this method may gradually become a popular one in acknowledging English vocabulary instead of traditional methods. Hence, with these advantages, the fishbone diagram brings a lot of effectiveness for students in memorizing new words, word family and boosting their lexical range.

5. CONCLUSION

The conducted study showed the massive number of students having difficulties in learning English vocabulary and the introduction and effectiveness of the fishbone diagram method in memorizing vocabulary knowledge especially word family to the 11th graders in two specific high schools. We hope that this method will be applied popularly and gradually become a useful method for students to learn English vocabulary in the future.

In the process of carrying out this research, the researchers dealt with many difficulties. These drawbacks should be taken into consideration when further research is conducted. These are some of our recommendations. Firstly, the samples of the study should be chosen widely in many high schools in Ho Chi Minh City or in many cities around Viet Nam. Secondly, the fishbone diagram ought to be applied in some other aspects of English instead of just as the vocabulary knowledge in our study.

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