



Vocabulary Teaching by Words Association

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Article Info	Abstract
Article History Received: 2023-07-12 Revised: 2023-08-22 Published: 2023-09-02 Keywords: <i>Teaching Vocabulary; Vocabulary; Word Association; Strategy.</i>	<p>The research attempts to assist pupils in enhancing their English vocabulary. The study highlighted an approach for teaching vocabulary by boosting Words Association. It emphasized the importance of memorizing in enhancing pupils' English Vocabulary proficiency. In addition, the study examined the attitudes and behaviors of students towards the use of Words Association in vocabulary instruction. Since the goal of this study is to determine if Words Association is beneficial for Vocabulary Teaching, the study investigated the extent to which Words Association motivates students to participate in their vocabulary recall. The study also studied the impact of Words Association on students' performance on the Vocabulary mastery through Words Association examination. The literature review was centered on the teaching of vocabulary acquisition in an Indonesian context, which was then tied to the memorizing of words through word association. In addition, a qualitative approach was employed through class research. In addition, 32 students from the university's Vocabulary class were selected for the investigation. In addition, the study included a pre- and post-Vocabulary evaluation with the purpose of enhancing students' vocabulary abilities, which were then linked to their perceptions and emotions. This study revealed that Words Association is an effective approach for enhancing vocabulary. However, it firstly come to strengthening student's memorization through comprehending in context then giving positive result to students' vocabulary achievement.</p>
Artikel Info	Abstrak
Sejarah Artikel Diterima: 2023-07-12 Direvisi: 2023-08-22 Dipublikasi: 2023-09-02 Kata kunci: <i>Pengajaran Kosakata; Kosakata; Asosiasi kata; Strategi.</i>	<p>Penelitian ini bertujuan untuk menyelidiki strategi pengajaran kelas kosakata universitas. Penelitian ini berupaya membantu siswa dalam meningkatkan kosa kata bahasa Inggris mereka. Studi ini menyoroti pendekatan pengajaran kosakata dengan meningkatkan Asosiasi Kata. Hal ini menekankan pentingnya menghafal dalam meningkatkan kemahiran Kosakata Bahasa Inggris siswa. Selain itu, penelitian ini menguji sikap dan perilaku siswa terhadap penggunaan Asosiasi Kata dalam pengajaran kosakata. Karena tujuan dari penelitian ini adalah untuk menentukan apakah Asosiasi Kata bermanfaat untuk Pengajaran Kosakata, penelitian ini menyelidiki sejauh mana Asosiasi Kata memotivasi siswa untuk berpartisipasi dalam mengingat kosakata mereka. Penelitian ini juga mempelajari dampak Asosiasi Kata terhadap kinerja siswa dalam penguasaan Kosakata melalui ujian Asosiasi Kata. Tinjauan pustaka dipusatkan pada pengajaran pemerolehan kosakata dalam konteks bahasa Indonesia, yang kemudian diikatkan pada penghafalan kata melalui asosiasi kata. Selain itu, pendekatan kualitatif digunakan melalui penelitian kelas. Selain itu, 32 mahasiswa dari kelas Kosakata universitas dipilih untuk penyelidikan. Selain itu, penelitian ini mencakup evaluasi pra dan pasca kosakata dengan tujuan untuk meningkatkan kemampuan kosakata siswa, yang kemudian dikaitkan dengan persepsi dan emosi mereka. Studi ini mengungkapkan bahwa Words Association adalah pendekatan yang efektif untuk meningkatkan kosa kata. Namun, pertama-tama memperkuat hafalan siswa melalui pemahaman dalam konteks kemudian memberikan hasil positif terhadap pencapaian kosakata siswa.</p>
I. INTRODUCTION <p>"I don't know the word to say....." or "I can not find the word meaning for....". In fact, this phrase is commonly found in EFL Class. This sentence is frequently encountered in EFL classes, including Indonesian class. Students of the English as a Foreign Language (EFL) feel anxious when they</p>	<p>are unable to find the appropriate words to express themselves or to analyze a book for their studies. It is not easy to acquire the vocabulary unless it is gradually practiced.</p> <p>Vocabulary is now generally acknowledged as being a crucial component of all language programs by educators and material creators;</p>

students themselves frequently recognize this and say that acquiring vocabulary is the most challenging part of learning English. Moreover, Vocabulary acquisition is one of the key components of mastering the four language skills in English language learning, especially at the tertiary level. The need for comprehending the book they read, paper they write lead them to be more active in their learning. However, it can not be fulfilled by insufficient knowledge of vocabulary. Students should acquire a sufficient vocabulary either in understanding any text in their study or verbal communication to voice their ideas. How can students convey their thoughts without sufficient word banks in their memory? Without sufficient words, nothing can be conveyed and without sufficient words, communication is impossible (Mediha & Enisa, 2014). It can be imagined "How frustrating it is when you want to say something and are stymied because you do not know the word for a simple noun!" (Folse and Briggs, 2004) Students should learn a lot of words because doing so will make it easier for them to improve their performance in the four language skills. However, there are some obstacles that found in the class:

First, reading interest already exists among higher-level students. However, this is not a daily habit for them. Smartphone use is more prevalent than book use. However, they have not employed the technologically sophisticated smartphone reading sources such as digital books or e-books. Instead of reading, students choose to use their smartphones for chatting, online gaming, and social networking. According to Hootsuite (2020), the majority of Indonesians, particularly students, utilized their smartphones for more than nine hours every day. It indicates that Indonesian students have not taken advantage of this chance to expand their knowledge, especially their vocabulary, by reading.

Second, it is possible to obtain new words or memorize existing ones through any media, including social media, chatting, online games, and audiovisual materials. However, Students have not taken advantage of this option. For instance, when they learn a new word, they do not immediately apply it or utilize it in daily communication. As a result, the word can no longer be remembered.

Third, current strategy for acquiring vocabulary in my class is the drilling or repetition method. In some previous research, this method was proven to have a significant effect in vocabulary. However, it has not demonstrated a

significant impact on student vocabulary mastery in my class. The issue is, what is the best method for memorizing words?. There is presently no strategy that can be established claiming as the most efficient way to memorize words. Each class possesses unique characteristics that cannot be compared to those of other classes. Similarly, each person has unique characteristics in achieving their learning objectives, thus they have the right to choose which strategy will increase their vocabulary mastery. Therefore, it is clear that a new technique and approach are required for increasing vocabulary skills mastering in the class, so that it may be a choice for students as an attempt to enhance their capabilities in vocabulary.

In regards to the needs of a new approach of vocabulary teaching in my class, this investigation tried to apply Words Association methods as teaching strategy in vocabulary. This approach had been employed in many previous researches. One of them has been conducted in EFL low-level proficiency teenagers in public school in Colombian (Perez & Alvira², 2017). That study applied word organization through word cards, pictures and topics in fables. The action research was applied in exploring the implication of these three vocabulary strategies. The results showed that the three word association methods were proven to enhance students' vocabulary mastery. However the level of improvement was different between the three of them. Word association by picture and word card were higher than by topic. In contrast, research in Indonesian context for Secondary level (Ruslan, 2017) found that word association method by topic or theme provided significant improvement in students vocabulary mastery. A similar study has already been conducted by Maspupah (2017) for the secondary level students. She also found that the word association improved the motivation of the students in learning vocabulary, and it affected their improvement in vocabulary acquisition. Both of these studies done in Indonesia involved the secondary school students, and proved almost similar results. Furthermore, study in Japan's context (Wharton, 2017) discovered that direct treatment by Word Association Test by topic or theme does boost the amount of significant linkages made by L2 learners over a series of WATs. This study was conducted on 20 college students by giving direct instruction on the changing word association to improve the learners' vocabulary. Five weeks of vocabulary instruction were given to 20

students, while another 10 students had no instruction. The result showed that gradual process made their vocabulary improve.

From the four previous studies, it shows that this word association has a positive effect in developing students' vocabularies. However, no study on Words Association has been undertaken at the tertiary level in the English department or in EFL classes. The writer believes that Word Association can promote Students' Vocabulary improvement. Thus, the objective of this study was to determine whether or not the word association technique is possible to apply in English major students at Universitas Pamulang in Vocabulary course.

II. METHOD

This study was a qualitative study using Classroom action research design. CAR is designed to bring the change of social practice and provide the improvement in conducting some practices especially in the classroom (Burns, 1999). The similar notion is also agreed by Cresswell (2008) mentioning that this is a systematic step done by teachers to develop the information in educational settings to reach teaching improvement and student learning. Furthermore, Richard and Farrel (2005) found that Classroom Action Research provides language teachers a more effective method to investigate their own practice. It can be implied that teachers have more authority to carry out a systemic or formal inquiry to discover, analyze, examine and solve the problem in their own class. In conducting CAR, there are four stages implemented; namely planning, action, observation and reflection (Kemmis and Mc Taggart, 1988 cited in Cohen, Manion, & Marrison, 2005)). Planning is the first stage applied by the teacher before conducting the class. It includes designing lesson plans and also preparing the materials. The stage of action is conducted in class to implement the lesson plan. The next stage is observing the teaching and learning process in class. Finally it is closed by giving the reflection on what has been done and the outcome.

The last stage determined whether the next cycle will be done or not. It is in line with France (2000) in Lin et al (2013) stated that Class Action research needs cycles to confirm teachers' diagnosis towards the fact that happen in their class. Derived from many findings that vocabulary problems are mostly common in EFL class, the data of this study was taken from 29 English major students who are taking a vocabulary course in Universitas Pamulang in the

first semester. In collecting the data some instruments were used including observation checklist and also the measurement test (given after the teaching process using word association). This class is chosen because most students got low scores in the midterm. During the treatment, Students performed two kinds of word association (WA) based on Meaning and Form as line as the study that conducted by Yuningsih (2012) as followed:

1. WA Based Meaning:

Students were instructed to form groups. Each group will get 10 stimulation words in semantic fields, sense of relation, and collocates. Each stimulus word is written on a separate card. The group leader will select a card carrying a stimulus word, which will then be announced aloud to the group members. Then, each member of the group must respond by immediately mentioning the word that comes to mind and has a connection meaning to the stimulus word on the card. Each member of the group will be courteous and repeat it aloud in turn.

2. WA Based Form

Students was treated in the same way. However the word association will focus on Form in terms of morphology and phonology. Both kinds of Words Association will be conducted at least in two cycles. The third cycle were considered after analyzing the second cycle whether it is required or not.

III. RESULT AND DISCUSSION

To address the research issue, three cycles of inquiry were done. Each cycle has the identical phase. However, the process of Words Association has a distinct construction. The first cycles' words association was mix form in the initial cycle (synonime, diction, context). The second and third cycle focus on "diction and context." To get description in details in terms of Words Association, the phase are followed:

1. Preparation

Pre-Test: This phase marks the initiating of Words Association implementation in Vocabulary Provision. This level serves to assess the student's vocabulary-related prior knowledge or schemata. Students were given a keyword that must be associated with four of the eight possible words. These four terms are associated with keywords based on their context, synonyms, and related words. Example: The keyword is "Bright". In the box are the words "clever, famous, happy, shining,

hand, color, poetry, and poem”.. The appropriate responses are Clever (synonym), Color (context), Happy, and Shining (related word). The allocation time for answering is 40 second/question. The focus on cycle 1 is word only without implementing into sentence. However, in Cycle 2 and cycle 3 the focus is not only word to word. Students should directly implement the stimulus word and its relation word into sentence.

2. Implementing Words Association

This phase consists of two sub phases:

a) Discussion:

This sub-phase allowed the instructor to give students opportunity to explore the topic in terms of Word Association, including the Pre-Test question. During this step, the instructor began to present students' responses to the question. The teacher originally posed a question of a generic kind. The objective of the general questions is to encourage students' abilities to think, beginning with simple, moderate, and difficult questions. In this level, the teacher began to pose questions to the students based on target words to dig their prior knowledge (Reynold, 2011).

b) Words Association (WA):

In first cycle, the lecturer puts down the stimulus word, and then each student writes down the words that occur to mind in relation to the stimulus word. After gathering several words, each term is subsequently categorized or related. In this cycle, WA focus to relate word to word without implementing it into sentence. A different form was conducted in Cycle 2 and 3. In the following two cycles, students were offered stimulus word and they must construct sentences from these stimulus words and related words. For instance:

The stimulus word is "dilemma;" based on the outcomes of one student's work, he ties "dilemma" to "choice" by creating the sentence "I got dilemma to decide whether accepting or leaving my job. It pays well, but it is too distant from home".

c) Synthesizing:

In this phase, the lecturer began to stimulate the students' vocabulary strengthening by Word Association to lead them relate the target words to other things in wide context.

d) Posttest:

Words Association's ultimate step involved evidence. In this last phase, final test was conducted. This last step was designed to aid students in assessing their answer were correct or incorrect. In addition, the goal of this phase is to establish whether or not improvement was achieved between the usage of Words Association before and after by a comparison of pre and post-test results.

3. Observation

To prevent inaccurate data, this study triangulated data through observation and interview. Everything that occurred throughout the research was watched and examined, including the replies of students during the learning process.

Post-test results from cycle 1 revealed that all respondents' pre-test scores increased. However, their growing scores are not noteworthy. In Cycle 1, students had 50 seconds to respond each question (40 questions). The appropriate number of correct words was intended to be 160. 1 respondent had score 101 on the pre-test, while the others scored below 70. It indicates that 96% of respondents could only provide 44 percent of the right responses. In addition, just 8 respondents completed the inquiry, whilst twenty-two respondents did not. Moreover, it was determined that, despite the fact that they were informed at the beginning of the pre-test that each question has four potential valid answers from a list of eight, the majority of students selected just two answers. In the word association session, the researcher formed a circle on the board and put the stimulus word "FOOD", then asked each student to write a word that relates to the stimulus word and comes to mind first. When the circle was complete, the next students responded with their friend's "Food" response.

The outcome was the appearance of synonym, context, and semantic connection. Surprisingly, 1 student responds with an unrelated term ("Throw up" in response to "Diets) She maintained that her response was influenced by her experience. People might think that "throw up" is absurd respond for "diet" due to semantics connection. However, it confirmed the principle of word association that word association can be performed by presenting a single stimulus word and having

the subject respond with the first word that comes to mind as a result of a memory connection resulting from prior knowledge or experience that makes it easier to recall and maintain the meanings of such words. (Meira, 2009; Bozayli, E, 2017)

Students were permitted to look up the pre-test stimulus words in a dictionary before post-test. In Posttest, 2 students were able to answer > 70% of questions correctly, ten students answered > 60% of questions correctly, eleven students answered >50% of questions correctly, and seven students answered 50% of questions correctly. Due to time restrictions, three respondents were unable to finish the question during this round. When comparing the results of the pre- and post-tests, it is feasible to conclude that, while progress is evident, it is not statistically significant. Observations made during the first cycle demonstrated that students did not completely comprehend the significance of words association.

In this step, some question through interview were used to triangulate the data in terms of the participants' perceptions towards the pre-posttest and word association process. Some of them asserted that they are unfamiliar with many of the stimulus words. There was no additional term that might serve as a hint for the stimulus words, which makes it difficult to select the proper response. In addition, the majority of students reported that guessing new stimulus word required more time, while the allocated time was insufficient. Despite having access to the Dictionary, the researcher re-confirms their post-test finding that the increase was not statistically significant. Some students argued that each word had its own meaning, despite three of them arguing that they only verify the first meaning. In other words, the majority of students believed that a word stands alone. Other aspects of the dictionary, such as examples of the stimulus words in other contexts, were disregarded. Two other respondents concurred that a dictionary with so many meanings for a single word requires more time to check. In addition, three students said that they had not yet encountered the test.

The majority of students respond that they abruptly forgot the dictionary definition of a word because when they saw a choice with eight-word alternatives, their concentration

was broken, they were confused about which option corresponded to the correct answer, and they forgot what they looked up in the dictionary regarding the stimulus word. Moreover, two students believed that Instructors' explanation of word association is sufficiently apparent. However, when they encountered so many new terms on the post-test, they lost the words' meanings. and led them exclusively to synonymy, then produced confusion when the stimulus word was recalled in the Post-Test,

From data finding and students' respond, it can see insight that:

1. Individual Differences should be in consideration. Students have diverse backgrounds, learning methods, and interests. Some students might be unable to establish links between words or to think creatively, which might hinder their capacity to utilize word associations for effective vocabulary growth. On the other hand, some students might be able to fast and effective respond due to their background and learning.
2. There is a risk that language learners would depend too heavily on memorizing as opposed to actually grasping the meaning of words. If students just link stimulus words with other words without comprehending their meanings, they may fail to utilize the vocabulary properly in a variety of contexts. Dictionary might be a bridge to grasp the meaning. However, checking dictionary for meaning only without looking the meaning in various context made the students got difficulties to associate word, then resulted to be fail recalling. It is in line with vocabulary principle in terms of memorizing process as Nation and Gu (2007) in Kersten (2010: 6) stated; encountering new words; acquiring the word's form and meaning; associate the word's form and meaning in memory; and employing the word. No matter how learner access the meaning of new words, if missing the stage of consolidating memory of word's form-meaning pair, will lead to fail in employing the word.

Several adjustments were made to cycles 2 and 3 as a result of analysis of cycle 1. In both cycles, words association process lead students construct sentences of stimulus words and related respond word. The lecturer discussed the word association explicitly as an example of sentence implementation after linking the target

word to the related word. Both the pre-test and post-test and the Word Association (WA) process consisted of identical procedures. The test consists of 10 questions by providing 5 of less frequently stimulus words and 5 of high frequently used. 10% student were able to finish 7 questions correctly. 13% for >5 question. 77% for <5 questions. In this cycle, dictionary rechecks was still performed with form and context meaning consideration after pre-test. The post test result stated that 70% finished 8-9 of questions correctly and 30% finished >5 question correctly. After completing the post-test, students were questioned again about words association process. Surprisingly, they responded favorably to the implemented improvements. 3 students who finished 7 question correctly in pre-test were asked in terms of their familiarity into the stimulus words. Three of them argued that some of words are not familiar to them.

Then the following question were addressed towards their solving problem to tackle the obstacles. One of them said *"I don't know 'custody', however I ever read in one of Indonesian News Article about the Foreign Actress fights over her daughter with her former husband, the headline picture is like in court with subtitle 'custody...hmmm I forgot. But I am sure there is stated custody in picture subtitle', So, the word of 'child or son or daughter might be a solution for being related respond towards the stimulus word 'custody' for Our family has custody right for her children.* The student respond refers to recalling prior knowledge of his first language to support the new word in L2. It is in line to Priebe, S. J., Keenan, J. M., & Miller, A. C. (2012) findings that prior knowledge facilitate comprehension. In terms of this, learner with relevant prior knowledge are better able to extract and integrate information from the stimulus word. Fitzpatrick, T., & Thwaites, P. (2020) added that the process is used to class L2 to determine the extent to which words of the second language may be stored in memory despite the fact that words of the first language have already been saved, and recalled to grasp the new word meaning in L2. In term of student's respond, prior knowledge of Indonesian news aids the learner in understanding and extracting the stimulus word's context, then making it easier for him to discern its association.

In terms of students rising score in posttest, some of the students remarked that they enjoyed recalling the new and old word that they looked

up in the dictionary and applied directly to sentences to make the context was clear. They added that they might be forgot the meaning word when finding the same words in posttest, however, applying stimulate word and its related word into context sentence in pre-test lead them easier to recall the word in posttest.

Cycle 3 were conducted identically with cycle 2. Two words that students were frequently failed to recall in pretest and succeed recalling in posttest of cycle 2 were employed in cycle 3. The result, these words were successfully recalled either in pre or post test of cycling 3. Some Questionnaire addressed to confirm observation result in terms of their perception towards cycle 1, 2, and 3. Some students stated that the simultaneous action of consulting a dictionary, associating stimulus words with other connected words in various contexts or associations, and then directly implementing these words into sentences that pertain to our knowledge background enables our brains to effectively remember these words and their relationships. The respond revealed that when memory strengthening and prior information is utilized concurrently, word association will be developed. In the case of the student, using the dictionary by considering form and context meaning aids his recall. However, the memory will be more strengthen when prior knowledge is used as a clue to decide the respond word in order to generate a context sentence incorporating stimulus word and its associations. The context sentence is ultimately responsible for unintentionally storing the word stimulus and its association in the long-term memory. So that when they see the same word again, even when the learner has forgot its meaning, they may quickly recall it. It is in line to Bozayli (2017). He argued that when a learner identifies stimulus words with known or related terms, associations are generated in their minds that make it easier to recall, maintain the meanings of such words and enhance retention of word.

IV. CONCLUSION AND SUGGESTION

A. Conclusion

Several inferences may be formed from the data results:

1. Words Association has been demonstrated improving students' vocabularies. However, before leading to a correct answer on the Vocabulary Provision, the method must first involve students in a period of memorizing strengthening.

2. Dictionary might be a bridge to grasp the meaning word memorizing. However, checking dictionary for meaning by neglected the context made the possibility that language learners might rely too heavily on memorization rather than comprehending the meaning of words. If students just connect stimulus words without understanding their meanings and context, they may not use the terminology appropriately in a range of circumstances.
3. WA can success strengthening words memorization process to expand students' vocabulary provision when the process stimulates students' brains to make connections between the target word and other concepts in a broad context.
4. The act of associating word targets with anything in a broad context can be success stimulate the student's memory when learning resources, relevant instructional materials, clear explanations and examples are provided. Without these assistances, Word Association only recalls and then forgets words.
5. Calling the target word and connecting it to more complex context can be effective for enhancing word memory when it is done at least more than once. This proses familiarizes students with the word so that it sticks in their brains, and when the word is recalled, they are prepared with the target words and its relationship between other words in various contexts.
6. It is more effective to improve pupils' word recall by incorporating target words and their relationships in diverse contexts into context-appropriate sentences than by linking the target word to other words in other contexts.
7. Improving vocabulary abilities involves discovering new words and their meanings in a variety of settings and memorizing them, as well as retaining existing word, so that they are readily available for use. Obviously, this is inextricable from reading habits. Because reading allows us to discover new words and their numerous context-specific meanings. In this sense, the reading habits of students must be enhanced in line to their vocabulary enhancement.

B. Suggestion

Discussion regarding this research is still very limited and requires a lot of input.

Suggestions for future authors are to study more deeply and comprehensively about Vocabulary Teaching by Words Association.

REFERENCES

- Alizadeh, I. (2016). Vocabulary teaching techniques: A review of common practices. *An International Journal of Research in English Education*, 1(1), p22-30
- Asgari, A., & Mustapha, G. B. (2011). The type of vocabulary learning strategies used by ESL students in University Putra Malaysia. *English language teaching*, 4(2), 84.
- Ayuningsih, A. (2012). Asosiasi kata pada mahasiswa semester II angkatan 2011 Sastra Inggris Universits Pdjaran: Kajian Psikolinguistics. *Students e-Journal*, 1(1), 5.
- Burns, A (1999). *Collaborative Action Research for English Language Teachers*. Cambridge: Cambridge University Press.
- Bozavli, E. (2017). Effect of phonetic association on learning vocabulary in foreign language. *Available at SSRN 2901637*.
- Creswell, J. W. (2008). *Educational Research*. Pearson Education International
- Cohen, L., Manion, L., & Morrison, K. (2005). *Research Method in Education*. New York: Taylor & Francis e-Library
- Fitzpatrick, T., & Thwaites, P. (2020). Word association research and the L2 lexicon. *Language Teaching*, 53(3), 237-274.
- Folse, K. S., & Briggs, S. J. (2004). *Vocabulary myths: Applying second language research to classroom teaching* (No. Sirsi) i9780472030293). Ann arbor: University of michigan press.
- <https://andi.link/download/hootsuite-we-are-social-indonesian-digital-report-2020/>
- Hiebert, E. H., & Kamil, M. L. (Eds.). (2005). *Teaching and learning vocabulary: Bringing research to practice*. Routledge.
- Kersten, S. (2010). *The mental lexicon and vocabulary learning: Implications for the foreign language classroom* (Vol. 43). BoD-Books on Demand.

- Kurt, M., & Bensen, H. (2017). Six seconds to visualize the word: improving EFL learners' vocabulary through VVVs. *Journal of Computer Assisted Learning*, 33(4), 334-346
- Ilin, G., Kutlu, Ö., & Kutluay, A. (2013). An action research: Using videos for teaching grammar in an ESP class. *Procedia-Social and Behavioral Sciences*, 70, 272-281.
- Maspupah (2017). Fostering student vocabulary knowledge through word association games. *Unpublished Undergraduate Paper*. UIN Syarif Hidayatullah
- Mediha, N., & Enisa, M. (2014). A comparative study on the effectiveness of using traditional and contextualized methods for enhancing learners' vocabulary knowledge in an EFL classroom. *Procedia-Social and Behavioral Sciences*, 116, 3443-3448.
- Neuman, S. B., & Dwyer, J. (2011). Developing vocabulary and conceptual knowledge for low-income preschoolers: A design experiment. *Journal of Literacy Research*, 43(2), 103-129.
- Nation, I. S. P. (2006). Teaching and explaining vocabulary. *Readings in Methodology*, 144.
- Pérez, L. M., & Alvira, R. (2017). The acquisition of vocabulary through three memory strategies. *Colombian Applied Linguistics Journal*, 19(1), 103-116.
- Priebe, S. J., Keenan, J. M., & Miller, A. C. (2012). How prior knowledge affects word identification and comprehension. *Reading and writing*, 25, 131-149.
- Richards, J. C., Richards, J. C., & Renandya, W. A. (Eds.). (2002). *Methodology in language teaching: An anthology of current practice*. Cambridge University Press.
- Ruslan, R. (2017). Developing vocabulary mastery through word association by the second year students of SMP Muhammadiyah Al Amin Sorong. *Qalam: Jurnal Ilmu Kependidikan*, 6(2), 1-5.
- Richards, J. C., & Farrell, T. S. (2005). *Professional development for language teachers: Strategies for teacher learning*. Cambridge University Press
- Susanto, A. (2017). The teaching of vocabulary: A perspective. *Jurnal Kata: Penelitian Tentang Ilmu Bahasa Dan Sastra*, 1(2), 182-191.
- Pérez, L. M., & Alvira, R. (2017). The acquisition of vocabulary through three memory strategies. *Colombian Applied Linguistics Journal*, 19(1), 103-116.
- Prihatini, A. (2020). Word Association and Its Function at the Constituent Understanding on the Language Learning.
- Wharton, C. P. (2010). *Changing associations: The effect of direct vocabulary instruction on the word associations of Japanese college students* (Doctoral dissertation, Doctoral dissertation, University of Birmingham).