Student's Cognitive Engagement in Teaching Vocabulary through Mnemonic Strategy

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ABSTRACT

This research aims to explore students' cognitive engagement and find out students' perception towards learning vocabulary through mnemonic strategy. This research used a qualitative approach with a descriptive design. The data of this research was gathered from four meetings by using observation, interview, and documentation. The data of observation were analyzed by interactive analysis supported by quadrant and tally analysis. The researcher took five participants from 10th grade from one of Islamic senior high schools in Kuningan. The findings showed that students have a positive cognitive engagement where all of the participants get in the 4th quadrant except for one. Students' Cognition level improved throughout the time until they had high cognition and high participation. Students also showed positive perceptions where they felt happy and fun during learning because they considered the mnemonic strategy to be like a game. Students also stated that their thinking skill is improved by the learning. Mnemonic strategy is suggested to be implemented as a method of learning vocabulary in schools because it is effective.

Keywords: *cognitive engagement; mnemonic strategy; teaching vocabulary; Total Participation Technique (TPT); vocabulary.*

INTRODUCTION

Teaching vocabulary in Indonesia, like in many other countries, indeed comes with its own set of challenges and issues (Rohmatillah, 2018). English has a huge number of vocabularies that reaches thousand of words required. English vocabulary is also different from Indonesian vocabulary in which English vocabulary has different linguistic for several knowledge branches such as phonology, morphology, and syntax. Thus, the word form, including pronunciation, spelling, meaning, and word use is very different. That is why many English learners find it hard to remember a word and they complain that they easily forget the words after memorizing the word list of vocabulary (Hayes, 2009).

The teachers' role also influences the vocabulary learning process. It is shown that there are still many lack of dedicated teachers who are passionate in their subject discipline and some of them are seemingly poor at teaching and lack experience in teaching. As Juhana (2018) stated most of the students have a lack of confidence because they feel less motivation when they see the way their teachers teach in ELT. Marthila, 2020) also reported in his research that most students in the seventh grade had lack in learning vocabulary mastery cause they felt difficult to learn and also they lost motivation in learning english during ELT. Firmanto (2007) added that Students' passive participation and low achievement in English mastery caused of their minimum vocabulary acquisition as the impact of monotonous of language process implemented in their class.

In this modern era where applications are incorporated into social activity, there is still a lack in the field of vocabulary learning. For example, the limitation of the language learning applications that focus on learning vocabulary. Mostly they just check if you match a term with the accurate translation or insert the right word into a sentence, but they cannot provide you with how the words are remembered.

Therefore, students need some method that is appropriate and easy to use in their learning process. One of the techniques that is known to memorize things easily is the mnemonic strategy. Mnemonic strategy is a formula designed to support memory and students can use it to make information easier to remember (Hayes, 2009). As Amiruddin (2011) stated a mnemonic strategy is very effective and can make students feel motivated and the classroom more interesting. As Thao (2022) said the Mnemonics strategy is effective for the vocabulary retention of students. Kridis (2023) found that training learners to use mnemonic techniques inside the classroom would be effective in the Tunisian EFL context. The findings stated that the students became easy to memorize vocabulary, active and fun in learning process. Another research done by Renjifo, Katherine, Paiva, & Rocio (2022) from University of Guayaquil, Ecuador found

that mnemonic method: pegword is the best option for teaching vocabulary for eight grade students.

Based on those previous research, mnemonic strategy still equipped students to learn vocabulary comprehensively. However, the students' cognitive engagement in teaching vocabulary through Mnemonic strategy has not not been widely investigated. Most of those researchs were focused on students' improvement without knowing their cognition aspect during learning. Therefore, this research aims to explore how student's cognitive engagement and perception towards learning vocabulary through mnemonic strategy. Students are actively engaged cognitively when using higher order thinking and are totally engaged in learning (Taylor et al.,2003)

METHOD

This research used a qualitative approach with cognitive engagement model and TPT Quadrant analysis by Himelle & Himelle (2017) for analysing the results of the observation. The cognitive engagement model was used to enhance opportunities for student's active participation and critical thinking. The model shows four quadrants that is determined by student's high cognition and participation. This research took 5 students of 10th grade from senior high school in Kuningan consisted of three females and two males as a sample. The duration of the time are four meetings. In the first to the

third meetings, students were given a lesson about mnemonic strategy while observed and in the last meeting they were interviewed.

The instrument used in this research are observation through exit slip, the researcher asked the students to fill the exit slip in the end of each meeting. In the end of the meeting, interview was taken place over five participants using five structured questions recorded by audio recorder to find their perceptions about the research that had been done.

The data that have been gathered from observation were analysed using quadrant analysis and both data from observation and interview were presented in form of descriptive intercative analysis adopted by (Miles & Huberman, 1994). The data were analysed according to several steps, The first, researcher collect the data from research activities carried out through observations and interviews. Next, the data that have been obtained by the researcher were organized into their category where the data belong to. Then, researcher do data display. in this step researcher unroll all the items and data that have been reduced to make it easy in digesting the essence data.

RESULTS AND DISCUSSION

In terms of students' cognitive engagement in teaching vocabulary through mnemonic strategy, the observation results through exit slip revealed in form of quadrant analysis (Table 1). Table 1 shows that for four

meetings, five participants reached various quadrant level of cognitive engagement. In the beginning of the meeting, it was only P1 who reached quadrant level III (High cognition/Low Participation) and the rests are mostly in quadrant level II. In the second meeting, students' cognition level improved and mostly students placed in quadrant level III, only P5 who stays in quadrant level II. In the third meeting, P2, P3 and P5 have an improvement and mostly students are in quadrant level IV. In the last meeting, quadrant level of participants stays the same. The researcher then determined the aggregate scores of each participant by summing up the quadrant level of each participant during research activity. It is shown that P1 have scores 15 which means the cognition level was good. It is the same to P2, P3 and P4 who have reached scores above 11 which means good, except for P5 who are still lack of cognition level. However, during research activity students become understand and participated more significantly when teacher taught mnemonic strategy in teaching vocabulary.

Table 1 Student's Cognitive engagement result

P	Quadran level (ii)				Scores (iii)	result (iii)
	M 1	M 2	M 3	M 4		
1	III	IV	IV	IV	15	Good
2	II	III	IV	IV	13	Good
3	I	III	IV	IV	12	Good
4	II	III	III	III	11	Good
5	II	II	III	III	10	Lack

Note:

ii = quadrant level

I = Low cognition/Low participation
II= Low cognition/High Participation
III= High cognition/Low Partcipation
IV= High cognition/High participation
 iii = scores - <5= bad
　　　　　　6-10=lack
　　　　　　11-16=good
P = participant
M= meeting

From the data Findings, it indicates that on the lesson days when teaching vocabulary through mnemonic strategy, students' cognitive engagement was good and they have reached the expected goal of the research. Based on the data findings from observation and interview, it can be gathered several points in discussion below.

Mnemonic Strategy can improve student's cognitive engagement

Based on the observation and interview findings, mnemonic strategy can improve students cognition seen in (table 1) where during teaching process students become more active in participation and have high cognition that they can be placed in quadrant 4.

Besides that, all of the participants perceived that teaching vocabulary through mnemonic strategy can sharpen their thinking skill. It is related to Amiryousefi & Ketabi (2011) stated that mnemonic strategy can help students learn faster and recall better by integrating the new material into existing cognitive items

and by providing retrieval cues. It is seen by students can create many mnemonic strategy during the lessons. Creativity is someone's ability to create some new items that is different from the previous one (Narwanti, 2011). The students who have high creativity also have better vocabulary mastery than those who have low creativity (Sari et al., 2020). (Thao, 2012) added that students who were creative and methodical in applying their own mnemonic strategies performed better at memorizing vocabulary.

The mnemonic strategy is still unknown by students

After the researcher conducted the interview, the data findings shown that there are still many students who do not know about mnemonic strategy shown in bellow.

Participant 1:
This is not how I have ever studied before. This is the first time; prior, the teacher's LKS was the only way I studied..

Participant 2:
I haven't studied in this manner before.

Participant 3:
This is the first time. It is used to be in common.

Participant 4:
I recently learned about this technique.

Participant 5:
No, I just started studying now using this approach.

The researcher found it astonishing how this could be. Since it suggests that there has not been much work done on mnemonic technique deployment in schools, if the students had never used this method before.

The Mnemonic strategy should be implemented in Indonesian schools

Based on the less of education attention of mnemonic strategy in educational subject, it is inequivalent to the data in the field of education. Meanwhile, there are a lot of the previous data related to the mnemonic strategy have shown a lot of significant of the benefits of mnemonic strategy. Kridis (2023) said that vocabulary teaching using mnemonic techniques inside the classroom would be effective in the Tunisian EFL context. Mnemonic strategy is an effective strategy in improving students' vocabulary (Putri, 2020).

The awareness of the importance of implementing mnemonic strategies in schools is crucial. Several students, based on interviews, expressed the need for this method to be adopted in every Indonesian school to enhance English proficiency. This was expressed by participants as follows.

Participant 3:

yes, this method should be implemented in every school in Indonesia that students are good in English.

Participant 4:

This method is so effective to apply in schools. Indonesia needs this that students can memorize vocabulary easily.

The Teachers' Role in Fostering Student Learning Outcomes

Students believe that their improved understanding of the material is largely attributed to the teacher's effective explanations in class. As Firmanto (2007) said that students' passive participation and low achievement in English mastery caused of their minimum vocabulary acquisition as the impact of monotonous of language process implemented in their class. Based on the interview, they said that they can understand the material because the teachers are kind and allowed them to ask when having some trouble as seen in table 4.

Participant 1:

I feel happy when studying because it is like a game so, it is fun and the teacher is kind.

Participant 2:

Studying makes me happy since it's enjoyable. It's like playing a game.

Hence, they actively engage in class discussions and feel confident to pose questions, empowered by their use of the Mnemonic Strategy in learning. Active participation not only aids students in achieving their goal of mastering vocabulary but also facilitates the recall of information that might otherwise be forgotten. (Bransford, J, D, 1979).

Mnemonic Strategy is Fun Method for Learning Vocabulary

The mnemonic strategy is a pleasurable and engaging method for acquiring and remembering vocabulary. It often involves using associations, images, or memorable phrases to make learning more enjoyable and effective. Based on the interview, the students said that they are happy when learning vocabulary through mnemonic strategy. It supported by Amiruddin (2011) that a mnemonic strategy that is very effective and can make the students motivated and the classroom more interesting.

However, initially confused since it was their first encounter with the material, they later found understanding through the enjoyable and non-boring nature of the method. Describing it as easy to use, participants 1 and 4 likened the experience to playing a game.

Participant 1:

I feel happy when studying because it is like a game so, it is fun and the teacher is kind.

Participant 4:
I feel happy studying like playing game then the teacher delivered the material in easy way so it is understandable.

CONCLUSION

In conclusion, students' cognitive engagement in learning vocabulary through the Mnemonic Strategy unfolds as a dynamic and enriching process. The strategy not only fosters comprehension and retention but also cultivates an interactive and enjoyable learning environment. Participants, initially uncertain, found the approach to be a stimulating experience, emphasizing its effectiveness in making the acquisition of vocabulary both accessible and engaging. As students actively participate, employing mnemonic techniques, they not only enhance their understanding of the material but also develop a positive attitude towards vocabulary acquisition, turning the learning journey into a rewarding cognitive endeavour. The Mnemonic Strategy, by seamlessly integrating education with enjoyment, emerges as a valuable tool in empowering students to master and retain vocabulary with enthusiasm.

The efficacy of the Mnemonic strategy for memorizing vocabulary is evident, and it's crucial to move beyond mere theoretical recognition. This positive revelation should translate into practical implementation in real-world scenarios. Teachers must remain attuned to the specific requirements of students when teaching vocabulary, continuously exploring methods that align with students' needs to enhance their educational objectives.

AUTHOR CONTRIBUTION STATEMENT

This research benefited from the collaborative efforts of three contributors. AGS, a student majoring in English education, served as the primary author, spearheading the research from conceptualization to the organization of the article. PKH played a pivotal role as the academic advisor, providing guidance to AGS throughout the research process. Additionally, SM supported AGS and assisted PKH in ensuring the successful completion of the research.

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