
**A SYSTEMATIC REVIEW OF THE EFFECT IN USING RIDDLE GAME
TECHNIQUE ON STUDENTS' VOCABULARY MASTERY**

Maria Peeva Mahseya Ngsurukh¹, Finny Anita², Elly Syhadati³

¹²³IKIP PGRI Pontianak, maria.peva@gmail.com

ABSTRACT

This research aimed to analyze the effect of the Riddle game technique on students' vocabulary mastery can be an effective technique to increase students' English vocabulary which is focused on synthesizing six previous studies (journals) about the Riddle game effect. The method of this research was using a systematic review. In this research, the sources consist of five journals and one proceeding conference paper. The sample of this research were six from eleven studies selected by inclusion and exclusion criteria using PRISMA Flow Diagram 2009. The data collection technique is library research or literature study through a search engine (Google Scholar) and repositories from other universities. The tool to collect the data was the PRISMA protocol. The data was analyzed by thematic analysis. The results of review showed that overall the students' conditions of vocabulary mastery were changed into some advances, namely: (1) students' score of English vocabulary was increased, (2) students' language skill improved, (3) students' intellection was developed, (4) students' emotional intelligence was increased. Therefore, students are more enthusiastic and enjoyed during vocabulary class. Shortly, these research suggested to apply Riddle game in order to enhance students' self confidence, critical thinking, and teamwork, which are needed for facing the competence in a world of job life.

Keywords : *Riddle Game, Systematic Review, and Vocabulary Mastery*

BACKGROUND

Nowadays, English can not be separated from daily school life. In Indonesia, the government has established English as the language that should be learned by the students in a curriculum. But the fact is English hard to learn. To communicate with others by using English, there is much skill in English that should be mastered such as listening, speaking, writing, and reading. The basic item to develop and complete the four skills of them is vocabulary.

According to (Hackman, 2008), Vocabulary is more than a list of words, and although the size of one's vocabulary matters, it knows how to use it which matters most. Then vocabulary is generically defined as the knowledge stock of words and words meaning used by or known to a particular person or group of persons. Vocabulary as a "communication toolbox" for students, every word is a tool, ready to be used at the right time. The more tools you master, the better your chances are of finding the right one to use words that you have. It means that vocabulary is important in teaching and learning English because learning English can be useless if students do not understand the meaning of vocabulary.

When teaching and learning processes most English teachers do the same mistakes, the teacher often gives written exercises without asking the students to read aloud, even though reading helps their tongue to be trained to pronounce words in English. Also for the vocabulary, the teacher only gives the meaning of that vocabulary in one context sentence, so when the students find the same vocabulary, but in a different sentence it makes them confused, passive, and less creative in playing with words.

Riddle Game is a fun technique to learn English. Riddle is like a puzzle where the students have to guess the answer that matching with the clues which are given. According to (Gozcu & Kaganaga, 2016), Games play an important role in language learning classrooms even though most of the teachers are not aware of it as a learning strategy. In essence, games prevent the lesson to be ordinary and boring. Conversely, they create a successful and positive classroom environment where students as their learning are central.

To find an effective way to learn English, the researcher does the systematic review of the Riddle game to know about the effect of the Riddle game technique on students' vocabulary mastery, which is focused in what kinds of students' condition after the implementation of Riddle game technique on their vocabulary. In this research, the researcher combine, select, syntheses and summarize all result findings of the journals that matched the effect and the application of the Riddle game technique to present new findings from other previous experts' research.

In accordance with (Clarke, 2011), A systematic review uses all the existing research and is sometime called 'secondary research' (research on research).The purpose of a systematic review is to deliver a completely summary of all the available primary research in response to a research question.

METHOD

The systematic review is used as the method of this research. In designing systematic review research, there are some steps to follow in order to create a good systematic review. Therefore the researcher used procedures of systematic review as adopted from (Siswanto, 2010), which consists of eight steps, they were identification of research question, develop a systematic review research protocol, set the location of the research database as a search area, selection of relevant research results, choose quality research result, data extraction from individual studies, synthesis of results by meta-analysis method or narrative method, and presentation of results.

The first step to construct systematic review is identified the research question that would be analyzed based on the research problem in certain field of academic. A research question should be formulated clearly to avoid misunderstanding. Second is develop research protocol, the researcher provides an explicit plans such as research question, inclusion and exclusion criteria, search strategy, data extraction, and data synthesis. Third is set research database, the researcher use search engine (Google Scholar) to find related studies such as Journal of MANTIK PENUSA, ANSIRU PAI, Sintakis, LINER, and Proceedings from seminar and international conference. Those three steps include in Planning phase of systematic review.

The next step is select the relevant studies using Prisma Flow Diagram 2009 to filter the studies based on eligibility criteria (inclusion and exclusion). As for the inclusion criteria were : (1) The studies were published journals and written in English. (2) The purpose of research of related studies were the effect of Riddle game technique on students' vocabulary mastery. There were 11 studies are found but six studies are include to inclusion criteria. After the inclusion studies were found, the researcher checking the quality of the six included journals (quality of research result) using quality assessment checklist based on some statements. Then, extract the data from six related studies from the part of abstract, research design, method, population, sample, sampling, and the result of research findings. Extract data aimed to get the needed information from each related studies to help in answering the research question. The last step is synthesis the data findings (qualitative data) from the six related journals using thematic analysis which in formed of some themes. Those steps are include in conducting phase or the main phase of systematic review. The last phase of systematic review is reporting the systematic review research in a form of research document.

The researcher took the eleven related studies (journals) which identified by Prisma Flow Diagram 2009 as the population of research, but there were six journals only for the sample of the research choosen by purposeful sampling. There were some criteria that use to choose the included journal as the sample. The inclusion journals of this study are : (1) The studies about riddle game technique, (2) Focus on students' vocabulary mastery, (3) The result of data findings has a significant difference before and after implemented riddle game technique, (4) Education level vary, (5) The journals published in the last of 10 years. The exclusion journals of this study are : (1) The studies no related with riddle

game technique, (2) Focus on other English skills, (3) Unpublished journals or studies, (4) Unrelated topic.

To gathering the data (source of related journals) in the research, library research or literature study is used as the technique. And PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) protocol is used for the tool of collected the data adapted from (Handayani *et al*, 2017), consists of several steps in this study : 1) defining eligibility criteria, 2) defining information sources, 3) study selection, and 4) data collection process.

TECHNIQUE OF DATA ANALYSIS

The researcher analyze the data continued from the conducting phase in systematic review adopted from (Siswanto, 2010) consist of selection of relevant results, choose quality of results, data extraction, and synthesis of results. Conducting phase determine the credibility of data findings.

First is selection stage, the researcher used Prisma Flow Diagram 2009 process which adopted from (Ngoc, *et al.*, 2017), the flow diagrams were composed four parts: Identification, Screening, Eligibility and Inclusion. Identification, the researcher does the identifying process manually by typing the related keywords based on research question and researcher title. The result of journals were found three studies from Google scholar and eight more were found from digital library. In screening the researcher read full text those studies that found to double check and ensure that those elected studies meet all the researcher's inclusion criteria. Next in eligibility, the researcher divided the eleven studies into two criteria there are inclusion and exclusion criteria, there were six studies screened and five studies are excluded. As the final result the researcher took those six studies that assessed for the included phase.

Second stage is choose quality of research result, in this step the data of inclusion studies were evaluated depend on some of these quality assessments namely : (a) Were the journals paper published in 2010 or above? (QA1), (b) Were the journals paper write down the significance results of the application of riddle games technique related to students' vocabulary mastery?(QA2), (c) Were the journals paper write down the methods used in the research especially (CAR & Experimental research)? (QA3). From each studies paper, the answers would be given the label based on previous statements above such as yes, for the problems and method that written in journals paper 2010 and

above (Y) and no, for problems and methods that are not listed (N). If the studies are fit into those three statements in the list the researcher would give check mark (√).

Third stage is extract data, through this stage the researcher made a table focused on the list point from each related studies such as author and year of publication, titles of studies, type of studies, purpose, method, and result. The aim of this stage is to analyze the similarities and differences that support the researcher in finding the research question.

The last stage is synthesize the data, the researcher use thematic analysis as mentioned by (Braun & Clarke, 2012), there are six phase of thematic analysis namely : (a) Familiarizing yourself with the data, the researcher reading and re-reading again the data obtained such as transcript of the interview, observation, notebook, or even electronic file, recording, etc. (b) Generating initial codes, the researcher starts to get the data by making initial codes for all of the important findings that represent a summary of a portion of data. Underlined the words or take notes of the sentences which is influenced and necessary for the research is the main activity in this phase. (c) Searching for themes, the researcher start to analyze the initial code pattern from codes to themes. (d) Reviewing potential themes, the researcher in checking the quality of the themes before. (e) Defining and naming themes, the researcher select extract themes to present then setting out the story of each theme around these extracts. (f) The last is producing the report in a form of a journal article and dissertation.

To ensure that the results of the theme findings in the thematic analysis are reliable and accurate, the researcher asks the lecturers from the faculty of the study program as a peer-review to check the accuracy of the theme findings analysis in each journal that has been reviewed. Therefore, the researcher made a peer review form consists of seven statements that related to the themes that would be check by the lecturer.

FINDINGS AND DISCUSSION

Research Findings

The Effect of Using Riddle Technique on Students' Vocabulary Mastery of The 2017/2018 Tenth Grade Students of SMK Swasta Pemda Langkat Bahorok

Authors : Lusiana and Eka Ramadanta Sitepu (2018)

This research was a quasi experimental research and aim to find out the effect of using riddle game technique on students' vocabulary mastery to tenth grade students.

Through their research, there were 2 themes findings of students' conditions which would be described below.

First is students' emotional intelligence, emotional intelligence, or called (EI) is a person's ability to accept, assess, manage, and control the emotions of themselves and others around them. Riddles step by step indirectly build students' emotional intelligence, it is proved by students are more relax when studying vocabulary using riddle games. Because riddles taught them patience in solving the clues and controlling their ego to give their other friends occasion to try to answer that riddle. Students' critical thinking is developing, riddle asked one of the students as the leader of each group to make decisions with their members of a group which opinions that excellent to be the answer to that riddle. This case put students to think carefully and fair to represent her or his group.

Second is the riddle's effect on students' vocabulary, riddles truly influenced students' conditions. After applied it, students ability to understanding words context and vocabulary is increased. Students are more motivated to mastery English vocabulary, focus to solve the problem because when they faced the riddle students learn to think critically and deeply about which answers as the best solution for those questions. During the learning and teaching process students are interested to try playing riddle games, and they easier to recalling and mention the words that are found before also know well how to use.

The Using of Riddles Technique To Increase Sudents' Vocabulary Mastery for The First Grade at Mts PAB 1 Helvetia

Author : Rafika Purba (2017)

The research was classroom action research (CAR) which is focuses on the implementation of the riddle game technique on students' vocabulary mastery and finds out the improvement of students' vocabulary mastery through the riddle technique. The result of her study can be seen from these 5 themes findings.

Students' intellection, intellection itself is the action or process of understanding, as opposed to imagination. When the riddle game technique is used to learn English the students' mindset is changing and forming, students are stimulated to develop their thinking more critically to judge something and problem. Riddle game turn students being a good critical thinker, students solve the clues, puzzle, even questions in the riddle it makes them have a curiosity about the matching answer to its riddle. By

analyzing the clues, statements, and questions in the riddle the students' creativity has appeared and the important information to find the riddle answer also forces them to think logically, because riddle sometimes can trap students into the wrong answer.

Feedback between teacher and students, in teaching and learning activity teacher and students were involved in an interaction. This kind of interaction shown that when the students get confused to solve the riddle clues and questions teacher as the leader guide students to find the answer together with the students. Riddle also gives an effect on students' socialization, students being more confident to ask their teacher, express their ideas about the riddle answers, and learn to be a leader in the present the answer of a riddle to represent their group.

Proof of test score, in this theme students' scores totally increase from cycle I until cycle 2, from pre-test to post-test. From the counting, it found that the mean score of the pre-test was 46,32%, 4 students got points up to 75. Post-test cycle I, the mean was 68,67 which is higher than the pre-test. There was 46,93% or around 23 students who got points up to 75 in the post-test cycle I. While, in the post-test cycle II, the mean score was 78,87 it was higher than post-test I. There were 85,71% or around 42 students who got points up 75 in post-test cycle II.

Students' outcomes of riddle practice, outcomes are impacts and results from an activity. During teaching and learning vocabulary using the riddle game technique students seem to enjoy, interested, and challenged to take a turn in playing the riddle game. Students learn to work together in a group and patiently solve the riddle until the answers are found. Benefits using riddle game students are entirely given positive responses such as happy, excited, and more spirit to learn vocabulary.

Level of student language proficiency, language proficiency is a measurement of how well a person mastered a language. Choose riddle games as the solution as the technique to teach language, especially English is the best choice. Students more active in playing language, because riddle asks them to think harder than before and carefully to interpret the meaning of the clues even questions. Students' ability to memorize the new vocabulary using riddle is more longer it caused riddle to teach students to learn English through playing a game in a fun and relaxing way, therefore students' easier to receive the new vocabulary.

The Effect of Riddle on Teaching Vocabulary of The Seventh Year Students of Mts Negeri Stabat

Authors : Yusrah (2019)

The next research was experimental research and aims to find out the effect of riddle on teaching the vocabulary of the seventh year students of Mts Negeri Stabat. In her research also found the significant effects of students' vocabulary mastery after riddle game is used as the appropriate technique in learning vocabulary. These are themes findings which are the proof of her research.

Riddle contribution to students' vocabulary, students more prefer to learn language especially English using games instead of the conventional technique. By using riddle game students' ability to comprehend new vocabulary is more practical. During find the meaning of each clue and statements students directly face unfamiliar words from those words they learn by themselves to understand the meaning of the word and how to use it correctly.

Students' reflections after using riddle technique, throwing back students' conditions after using riddle game some signs indicated as the results of riddles impacts on students feeling, achievement, classroom situation. Students indeed relax and enjoy learning vocabulary it is supported cause riddles are flexible for anyone from any age, educational background, and language level.

The Effect of Using Riddles Games on Students' Vocabulary Mastery**Authors : Ayu Ashari, Asriani Hasibuan, and Srimaharani Tanjung (2020)**

This research was experimental research and the purpose of research are to know the application of Riddle games, to know before and after use Riddle games, on students' vocabulary mastery at the seventh grade students of SMPN 4 Padangsidempuan. From their research, the result of students' progress throughout the teaching and learning process using the riddle game technique can be present through some themes as below.

Students' responses taught by riddle game in the classroom experiencing students progress in term of students mindset is changed, they think and act critically to solve the problems, because riddle asked them to think effectively and appropriately. Students are stimulated to imagine and describe the answers to a riddle, it makes them trained to speak and write easier using their own words. Students and teachers are encouraged to produce an active response, where applied riddles take the whole time to get interact with others such as asked the teacher about the difficult riddles and help the students to understand the clues, statements, even questions in riddles.

Students' positive reactions using riddle games, various reactions are showed by each student when the riddle game technique is used to teach vocabulary. Students are happy and more active involved themselves to play riddle games and break up the clues, statements, even the harder questions they never give up. Students' performance truly improved, they became more confident to present their task through a riddle, and express their thinking about a certain topic when learning.

The Effect of Riddle Game on Students' Vocabulary Mastery

Authors : Pdt. Partohap Saut Raja Sihombing and Betha Retha Sihombing (2017)

This experimental research aimed to know the effect of riddle games on students' vocabulary mastery at grade seven in SMP Swasta Tamansiswa Pematangsiantar. The results of students' progress in mastery of English vocabulary can be explained below.

Students' cognitive endowments and linguistic skills are developed, riddles teach students to think and solve the clues and questions from riddle deeply and thoroughly. Students are trained to solve their problems because riddles build their open-mindedness. Students are free to express their ideas about riddle when their turn to make a riddle, it improved their writing to create a unique riddle. When the riddle is applied teacher asked students to make a group, each group answers the riddle in front of the class, it trains students speaking skill. On the other side, when a student in a group read-aloud about their riddle to be answered by students of other groups, it can improve their listening skills. The other proof, when it time for each group to make some riddles to compete with others, their skill of writing is needed.

Character building of students, language learning using the riddle game technique produces a positive sense for students, they are ingenious and have a spirit to learn vocabulary. During playing riddle students' responsibility is forming, where they have to represent their group in answering riddles questions also manage their members of the group to work together and help each other to finish their tasks.

Improving Students' Vocabulary Mastery Using Riddles Game

Authors : Anggun Kurnia Ningrum, Dwi Riyanti, and Regina (2019)

This classroom action research was aimed to find out how can Riddle game improve students' vocabulary. From their research, these are the result findings of themes could be explained below.

Positive responses of students' behaviours, there are some responses that indicate students' vocabulary was changed through their conditions. From the first cycle to

second cycle improvement is appeared students are active and enthusiastic during vocabulary learning activities. Students can work together well with their friend in a group, it means the students can cooperate well with their peers. The process of learning and teaching using riddle game technique make the students cheerful and brave to learn vocabulary.

Impacts of riddle for students, riddle game influence students' mean score from cycle I to cycle II it could be seen in the first cycle was 72,76 which was categorized as good and in second cycle was 85,26 which was categorized as excellent. Those score increase because students' understanding of vocabulary such as meaning of words, knowing to spell the words exactly, and how to use the words. Teaching process also change became interactive learning it proved by students are invited to hear the riddle questions from the teacher.

Discussion

The result of the findings showed there were similarities problem that obstructed the students to learn vocabulary. It proved by the findings from 4 journals and 1 proceeding conference paper (4 journals from junior high school level and the other 1 from elementary school level), was concluded that the main problem of difficulties to mastery vocabulary comes from students itself. They were uninterested, unmotivated, and unable to both write and read simple English. It has happened because their English teacher taught the vocabulary class used the conventional technique or ordinary learning techniques. And for the differences findings came from the different level of education when riddle game applied which was shown that even though the riddle game technique is implemented through a high level to the low level of school, it does not matter to its level but it result of findings showed that students' vocabulary mastery was improved.

By using riddle game technique the students conditions were changed from most of these aspects. They were students' cognitive abilities, students' emotional intelligence, students' intellection, students' level of language proficiency, and students' linguistic skill.

Students' cognitive abilities are improved by using riddle game technique it could be seen when the students faced the riddles clues and questions they tried to answers it by analyzed the sentences, thought critically, and took the decision to the possible answer of riddle questions. Cognitive abilities connected with an individual mental function ability to the problem solving, memorizing, focusing attention, speed of

information processing, and remembering. "riddle is a statement with a hidden meaning, which is to be discovered after a sharp mental review of various possibilities" (Olaosun & Faleye, 2015).

Students' emotional intelligence, emotional intelligence is the capacity of a person to be aware of, self-control, and able to handle interpersonal relationships judiciously and empathetically. Riddles indirectly gave them the knowledge to cooperate well in a group, act fairly when made decisions in a group, an ability to manage the task or issue even problem assigned for their, easier to socialize with the people around them, and could control their patience when solving riddles questions.

As stated in (Taskin & Ayan, 2016), Owing to the fact that people with high emotional intelligence build the society on a solid basis, activities such as educational games that affect the development of emotional intelligence positively are frequently put into practice in the education, school and social life of young people activity of children for a long time and admitted as a unique educational experience.

Students' intellection, riddles game technique turn students' thinking style, influences students' actions based on logical, work creatively, and improved students' ability to analyzed and observed something. Riddles offers a word game which is lead students to think based on reality. Riddles also could eliminate the students' stress of vocabulary task. In line with this, (Januseva & Lozanovska, 2017), Riddles have important educational value. Riddles help the learning process because they gathered experiences and different outlooks on life transmitted through generations, they introduce us to certain human features, etc. They enrich the consciousness and experience of the students and activate the thinking processes such as comparison, analysis and conclusion.

Students' level of language proficiency when using riddle game technique the students' ability of language such as understanding the context of the words, translate the meaning of words, choose appropriate words, and using words was increased. As mentioned by (Dolati & Mikaili, 2011), vocabulary games which especially focus on helping learners develop and use words in different contexts by making the lessons enjoyable. Riddle is one of vocabulary games that assist students' in comprehend the language especially English, it makes vocabulary learning more effectively.

Students' linguistics skill was developed, linguistic skill is related to reading, writing, speaking, and listening skill. Riddles game is a combination of game and

linguistic activities where the students are stimulated to speak and read when present the riddles answer, develop their skill in language communication with others in the classroom, trained the students to write some riddles questions using their own words, and familiarize themselves to listen riddles questions from English teacher to finish their individual task. As proved by (Alshareef, 2016), linguistic activities allowing students to train on the four English language skills, and using them in realistic contexts, to develop oral and written language skills of students in education and learning of the English language, it is also exciting for motivation and challenge, and fits with all levels.

CONCLUSION

On the whole of the systematic review, the use of the riddle game technique on students' vocabulary mastery was succeeded to influence the conditions on students' vocabulary mastery. The result showed that the students' score of English vocabulary was increased, students' language skill improved, students' intellection was developed, and students' intelligence was increased. As the results of riddle effects on students' conditions are thought critically, responsibly, courageously, confidently, motivated, enthusiastic, enjoyable, focused, and active during the teaching and learning activities. In the end, the riddle game technique truly influenced both students' conditions and students' vocabulary mastery. It means that the riddle game is a recommended technique for English teacher and students to rise and expand their vocabulary.

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