Developing Vocabulary Material Using Game Quiz Vocabulary in Teaching Speaking

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Article Info	Abstract
	The goals of this study are to define the procedure and outcomes of creating the vocabulary material using game quiz vocabulary in speaking instruction, to characterize the viability of creating vocabulary materials using game quiz vocabulary in speaking instruction based on the opinions of experts and practitioners, and to analyze the responses of teachers and students to the learning modules. There were three groups of the subject for this study: the students, the researcher as an observer and the English teacher in the class. The first validator provided the score of 84%. Likewise, the product received additional 80% of the total score from the second validator. The both validators concluded that the developmental product was adequate for teaching students how to speak. The vocabulary suitability procedure for the game quiz is broken down into two sections: an initial restricted field test and a main field test. According to the initial validation data, the developmental product obtained an 89% accumulation score. However, the second validation result received an 84% score increase. In addition, during the most recent meeting, the researcher asked the observer to assess the developmental product.

INTRODUCTION

English as one of international languages has an important role in daily lives it is acknowledged not only as a means of communications, but also as a scientific language. Accordingly, without mastering English, people cannot communicate with other people and we may be left behind in science, education and also in job vacancy. Many students do not want to try to learn English because it is difficult, on the other side, learning English will be fun in a different way. Teaching English also encourages enjoyment and motivation for language learning, especially when it is presented in a fun way (Atmawidjaja et al., 2019). To master good English language, student may have to learn the four basic language skills. Those are listening, speaking, reading and writing. They also have to master many language components, such as grammar, pronunciation and vocabulary.

Vocabulary is the types of words that are nouns, properties, and verbs in which the word is used in the use of language. Vocabulary is one of the language components that needed in mastering English; they need not only in grammar but also in vocabulary. As it stated by Thornbury (2002) that,

without grammar very little can be conveyed, without vocabulary nothing can be conveyed. To learn vocabulary with fun, there are several media that can support students in learning English. Smartphones among students and even our country have become a daily necessity. According to Ferdiana (2008) in Tahir et al. (2022) mentioned that a smartphone is a mobile phone with various functions. Therefore, the smartphone, as a communication tool, can also be used for professional work by businessmen and the general public. Brown (2000), in his research paper clarified that vocabulary is a fundamental to linguistic and it is important to language students.

Consequently, to improve the pupils' aptitude in understanding English language, it cannot be detached from the mastery of vocabulary, for the reason that it is able to be a capacity of the students' intellectual capacity in English and to construct their self-confidence in communicating English. In learning English, of course we must master the vocabulary because vocabulary is included in important aspects of English, with vocabulary knowledge we can easily understand, read texts in English, speak words in English, and listen to even write in languages English (Tambaritji & Atmawidjaja, 2020). In the other hands, by understanding the vocabulary, it can be a relevant for the learners to achieve any materials in order to increase their knowledge. Therefore, the aim of this study is to discuss the procedure and outcomes of creating the vocabulary material using game quiz vocabulary in speaking instruction.

Videogames

A videogame is a game in which the player interacts with a user interface to produce graphical response on a video scheme. A reward system in video games, such as a mark, may be dependent on the completion of tasks established inside the game. The researcher provided numerous definitions to describe what videogame is in order to assist this study. People perceive videogames to be a fun and brave environment, and online significantly multiplayer role-playing games and other games consist of extensively multiplayer elements, allowing them to express themselves without any difficulty. As an outcome, interpersonal player interaction on the web provides the other half of language learning (Reinders, 2011). According to Hodent (2020), videogames are one of the most widely utilized forms of entertainment and continue to pique people's interest. Another researcher explained (Granic et al., 2014), considering these potential benefits is important, in part, because the nature of these games has changed dramatically in the last decade, becoming increasingly complex, diverse, realistic, and social in nature. Based on the foregoing, it is possible to conclude that videogames can be well-defined as an outcome, interpersonal player interaction. It is one of the most popular forms of entertainment and continues to hold people's attention. Videogames can be used to teach a subject particular language in a captivating way.

In the digital era, videogames are channeling to become an essential part in the educational program. People are able to manipulate several games as media to teach pupils. The ability of videogames to engage children in learning experiences has resulted in the rise of media. However, it

appears that very few commercial games have educational value. In addition, Griffiths (2002) explained the benefits of videogames as follow:

a) Videogames can be used as research and/or measurement tools. Furthermore, as research tools they have great diversity

b) Videogames attract participation by individuals across many demographic boundaries (e.g., age, gender, ethnicity, educational status)

c) Videogames can assist children in setting goals, ensuring goal rehearsal, providing feedback, reinforcement, and maintaining records of behavioral change

d) Videogames can be useful because they allow the researcher to measure performance on a very wide variety of tasks, and can be easily changed, standardized and understood

e) Videogames can be used when examining individual characteristics such as self-esteem, self-concept, goal-setting and individual differences

Quiz

A quiz is a type of game or cognitive activity that involves competitors seek to accurately answer queries on a number of specialized themes. Quizzes can be used in education and other sectors to test improvement in knowledge, abilities, and skills, or simply as a pleasure. They can also be televised for entertainment purposes, usually in the style of a game program. As people know that quiz symbolizes a quick and informative assessment of students' understanding. Within a classroom setting, teachers frequently administer a quiz to measure how well students grasp a material. As a result, it functions as a process for understanding pupils' understanding of the subject topic. Besides, according to Oxford Dictionary (2019) in Bunau (2020) declared, quiz is a test of knowledge, especially as a competition between individuals or teams as a form of entertainment. Other researchers believe that quizzes are a great way to play games for fun, to make self-assessment tests or final exams (Bontchev & Vassileva, 2010). According to (Hamari et al., 2016) as cited in Zainuddin et al. (2020) mentioned that gamification/quiz has the advantage of making learning enjoyable through friendly competitions, challenges, and prizes, making it an effective technique of promoting students' involvement in learning. Furthermore, quiz involves the use of features like scores, badges, rankings, and rewards, making immediate feedback possible. This encourages students to engage in the learning environment and enables them to accomplish tasks. During gamification, it is possible to monitor and assess successful learning (Hassan, Habiba, Majeed, & Shoaib, 2019; Zainuddin et al., 2020). In addition, quiz represents a breakthrough in education that can transform the way people learn in and out of the classroom via its intrinsic capacity to motivate action, solve problems, and enhance learning in the most diverse areas of knowledge and life of individuals (Deterding et al., 2011; Gee, 2003; Prensky, 2001; Blohm & Leimeister, 2013; Arif et al., 2019).

As a final point, a quiz might be characterized as a medium for assessing students' skills and ability to implement educational practices. Quizzes are a wonderful approach for people to engage in

recreational activities while also creating self-evaluative tests and final evaluations. It is as effective as other methods in improving students' abilities to achieve a higher grade or develop their insight.

Teaching Speaking

Speaking instruction involves defining a skill, demonstrating or improving it, explaining what it means and why it is important, and then providing targeted practice opportunities and encouraging feedback. Teaching speaking also involves integrating this teaching directly into classroom life by ensuring that children can and should apply their new skills as they learn their subject. In this study, the researcher will be focusing only on teaching speaking. According to Goh (2016), to teach speaking requires planning of activities which not only allow learners to practice oral language but also focus their attention on important linguistic elements that can improve their accuracy. However, if the goal of the language course is truly to enable students to communicate in English, then speaking skill should be taught and practiced in the language classroom (Bahrani & Soltani, 2012).

Strategy to Teach Speaking Skill

Certain communication scenarios are linked to a script, which is a recurring series of verbal exchanges. Proposals, invitations, praises, apologies, and other socially and culturally normative interactions frequently adhere to patterns or scripts. The transactional transactions that take place during actions like getting information and making a purchase also fall under this category. The relationship between one speaker's turn and the one that follows can frequently be predicted in these scripts. By providing students with scripts for various scenarios, instructors can aid in their development of speaking skills by enabling them to anticipate what will be said and how to respond. Instructors can practice helping students manage and vary the vocabulary that different scripts contain by using interactive activities.

Speaking Activities

According to (Bahrani & Soltani, 2012), conventional classroom speaking exercises frequently take the shape of pairs of questions and answers. There is frequently only one right, planned response, and both the inquiry and the answer are regimented and predictable. Asking and responding to the question serves as a demonstration of one's capacity for doing accordingly. Additionally, there is an information gap in authentic communication; each party acknowledges something that the other does not. Likewise, in order to fulfil their intended goal, participants might need to elucidate their meaning or seek validation of their comprehension. For educators to design speaking exercises in the classroom that foster communicative competence, they must include a goal, a gap in knowledge, and opportunities for various ways to communicate.

METHOD

In the development of research, since this study has to implement R&D (Research & Development), the researcher has responsible to conduct the study with that method. According to Borg and Gall (1983), R&D is a type of research that produces a product. This research is a type of research and development or known as Research and Development (R&D). The definition of research and development is focused on the process, research does not produce objects, while development produces objects that can be perceived and touched. What is more, research and development implements as a scheme that is useful to produce a particular invention, and acquire the suitability of the products by legalizing the produces (Sugiyono, 2011). By implementing research and development by Borg and Gall, the researcher anticipates this study will create or develop product which can be applied in classroom or class activity as well to maintenance students' capability, mainly in learning English vocabulary.

Research Questions

Based on the background of the research that has been described, the following is the identification of the problems that will be addressed in the research:

1. How is the process of developing the vocabulary material using game quiz vocabulary in teaching speaking?
2. How is the eligibility of the vocabulary material using game quiz vocabulary in teaching speaking according to experts and practitioners?
3. How do students and teacher respond to the vocabulary material using game quiz vocabulary in teaching speaking?

Subject of the Research

In conducting this research, the researcher invited two lectures of IKIP Siliwangi and one English teacher as an observer at class. This study associated two lectures: an English lecturer who served as an expert validator for teaching materials, another English lecturer who served as an expert validator for language, and a seventh-grade English teacher who served as an observer of educational media. The research sample for this study consists of a pair of classes with 30 seventh graders who participate in the investigation activity and a seventh grade English teacher as an observer to witness class activity and offer recommendations to the researcher for better progression. The procedure in which learning product performs and questionnaires were administered to each student sample at various times during the research.

Data Analysis Procedure

In collecting the data, two methods of analysis were used: qualitative and quantitative. Questionnaires about student responses and the opinions, advice, and recommendations of experts

regarding the product were used to gather qualitative data. In assessing the product, the teacher's suggestions and advice also provided data. On the other hand, surveys and validation sheets provided quantitative data.

The Analysis of Validation Sheet

Moreover, the researcher rendered ten questions pertaining to the eligibility of content, the eligibility of language component, and the eligibility of presentation component—multiple indicators that need to be developed. The researcher modified this formula to measure the validation sheet for validator and observer:

$$Percentage = \frac{Total\ (\sqrt{})\ Checklist}{The\ Highest\ Score} X\ 100$$

The researcher adjusted the following scoring rubric to assess the opinions of experts and observer regarding the product:

Table 1. Scoring Rubric for Validation Sheet

Percentage	Score
81% - 100%	Very Eligible
61% - 80%	Eligible
41% - 60%	Quite Eligible
21% - 40%	Not Eligible
0% - 20%	Very Unworthy

RESULTS

Based on the analysis, the researcher realized that the students were not motivated to learn English language because they had difficulty in translating many English words. By that means, the researcher took responsibility to develop vocabulary material through digital-based game to teach vocabulary, precisely in teaching speaking. The researcher selected an application known as "English Learning Game" on Google Play Store to develop the product. The researcher selected numerous topics to meet students' needs in the term of English vocabulary. Similarly, the researcher had to adjust the topics to be in accordance with Indonesian curriculum (which is Curriculum 2013), therefore the learning process was well accomplished. The following pictures were the initial product which was being developed.

Figure 1. The Initial Product

The picture above was the initial product (draft product) before accomplishing revision and recommendation from validators, observer, and students' responses. After developing the prototype product, the further step was expert validation to achieve the appropriate score. The experts or validators were two lecturers of IKIP Siliwangi Bandung. Furthermore, the researcher then provided several questions which were in the form of validation sheet to be distributed to the validators in order to assess the developmental product. The validators might basically giving check mark in the table provided and offering their recommendation towards the product. The eligibility of product contained of three components, to be exact, content feasibility component, presentation feasibility component. Those components were fundamentals to validate the initial product. First validator mentioned that the product was relatively suitable to be adopted in classroom activity, even though it was required to complement several categories in order to improve students' vocabulary. First validator added, in improving students' vocabulary, the researcher had responsibility to teach speaking session thoroughly in the course of research progress. Correspondingly, the researcher added more topics to teach vocabulary as a responsibility towards revision and development process to improve students' speaking skill. The researcher selected numerous topics namely: Numbers, animals, profession, action words, foods, places, body, rooms, and adjective words.

In the second component, the validators assumed that the product presentation was attractive enough to attract students' inquisitiveness. The product presented high-definition pictures and clear voices to pronounce quite a lot of words. Even though, there were a few notes over the product. The validator mentioned that the researcher had to demonstrate additional pictures as a method to drill students in memorizing English vocabulary. The researcher then revised it based on validator's suggestion and added more pictures as various enrichment. The following pictures define the process; before and after revision.

Figure 2. Before Revision

Figure 3. After Revision

From the presented pictures above, it can be realized that the researcher added more pictures as a responsibility to the revision. The researcher offered several high-definition images in order to ease learning process.

After conducting all the revision from first validator and second validator, the developmental product was ready to be tested and was ready to be distributed to the students. The final product was an improvement product of the initial product. The researcher revised some components to achieve the standard criteria. Additional topic of content, additional pictures, and additional English vocabulary were contained within in the revision of improvement. Moreover, the product was ready to be disseminated as a medium to teach speaking skill, especially in learning English vocabulary. The following pictures are able to elaborate the final product.

The first validator provided the score of 84%. Likewise, the product received additional 80% of the total score from the second validator. The both validators concluded that the developmental product was adequate for teaching students how to speak and it was eligible.
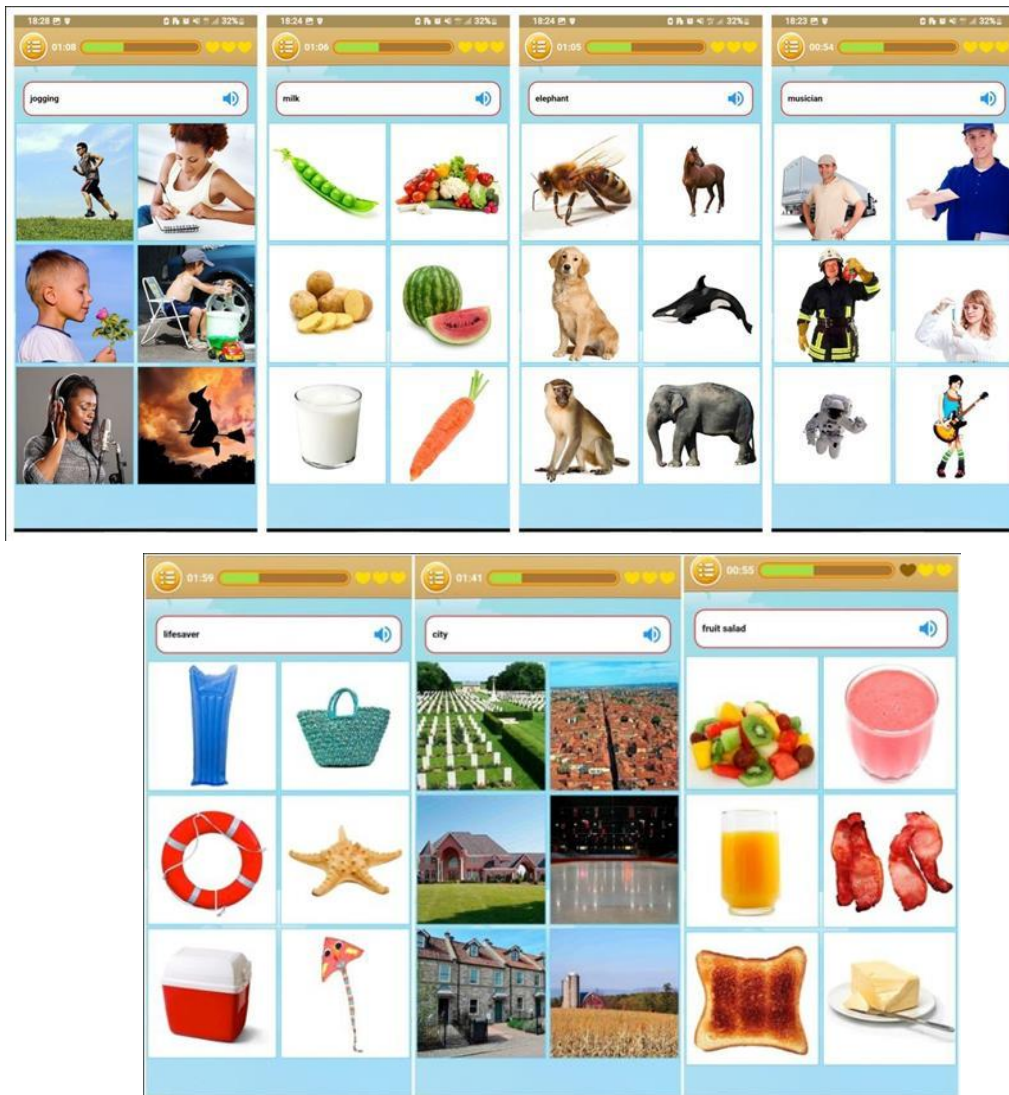
Figure 4. Final Products

After product was alleged eligible, then in the preliminary field testing step, the researcher divided into a small group of students with the determined scheme which is assisted by the initial product. After learning or research process, the researcher distributed the questionnaire to 15 students of seventh graders of junior high school in Bandung Barat and an observer (English teacher) to witness the class activity during the research process. This arrangement was projected to obtain score and assessment from the observer and seventh graders. Furthermore, after completing the preliminary field testing step, the researcher directed further program. The researcher delivered the questionnaire after education process was accomplished. Based on the data, in the preliminary field testing, the score obtained 89% in accumulation. Thus, that score delivered the developmental product became appropriate to be adopted in the classroom activity.

The second stage of the research was main field testing. In this stage the researcher conducted the research over 25 seventh graders of secondary school. Similarly, in the second stage of the research, the researcher had responsibility in teaching speaking to the students. The researcher trained

all the students how to memorize English vocabulary through the developmental product and then educated them how to pronounce each word. What is more, the researcher provided the questionnaire proximately after learning process was finalized. The researcher delivered the questionnaire on the last meeting of research progression. The method was the same as the preliminary field testing. The students contributed score in the amount of 84%. That score determined the product turned out to be very practical and suitable to be implemented in school. Furthermore, several students revealed that the developmental product was stress-free to be comprehended and maintained them in memorizing various English words.

During research progression, the researcher invited an English teacher as an observer to observe and witness all the activities in the classroom. The observer perceived the entire teaching and learning scheme that the researcher adapted. After carrying out the research program, the researcher provided validation sheet and instructed the observer to evaluate the developmental product. The validation sheet composed of ten questions which were in accordance with the product. Based on the data, the observer assessed the product and offered the score in the amount of 82%. That score delivered the developmental product into very practical and suitable for teaching speaking. The observer mentioned that the product was suitable enough and was noticeable. The students were very excited to learn new English vocabulary and were eager to be involved in class activity.

DISCUSSION

The research was conducted in one junior high school in Bandung Barat. This study adopted research and development method (R&D) according to Borg and Gall. Based on the research method, there were several stages that the researcher had to complete, such as creating draft product, validation step, preliminary field testing, main field testing, and distributing the product in wider production.

After creating the prototype product, the researcher requested two validators to validate the initial product. The first validator mentioned that the product developmental product was very eligible to be implemented to students as a medium for teaching speaking in the form of English vocabulary. The first validator offered the score in the amount of 84%. In the same way, the second validator contributed score in the amount of 80% toward the product. The second validator approved that the developmental product was appropriate enough to teach speaking to the students. The second validator also declared that the product was useful enough to be employed in the shifting world.

Furthermore, the researcher conducted the research in two stages. The first stage was preliminary field testing. In the first stage, the research program requested 15 students to learn using the developmental product. The researcher distributed questionnaire sheet after teaching scheme was completed. Based on the data, the developmental product obtained score in the amount of 89% in accumulation. The second stage was preliminary field testing. In the second stage, the researcher requested 25 students to be involved in the research program. The process was similar to the first stage where the students achieved the identical treatment and similar arrangement. The students

offered score in the amount of 84%. That score determined the product turned out to be very useful and appropriate to be realized in school.

The last step was to achieve evaluation from the observer (English teacher). The observer witnessed the research progression from the beginning until the last meeting of the research. On the last meeting, the researcher requested the observer to assess the developmental product. The observer offered the score in the amount of 82%, that score conveyed the developmental product into very practical and proper for teaching speaking. The observer revealed that the product was adequate appropriate and was almost flawless. The observer added that students were very motivated to learn new English vocabulary.

CONCLUSION

In conclusion, based on the indication collected, the process of developing the vocabulary material using game quizzes vocabulary in teaching speaking was to finished with more than a few steps based on the research methodology, including developing a draft product; the researcher selected an application on play store to develop a product in teaching vocabulary, validating the idea; in this phase the researcher asked two validators to evaluate and assess the initial product, also possibly attained several revisions from the both validators, conducting preliminary and main field testing, and distributing the final product in an extended mass production.

Then the researcher created a prototype product and directed it for two validators to validate the first version of the product. The product development was highly eligible to be used by students as a medium for teaching speaking in the form of English vocabulary, according to the first validator. The developmental product was deemed suitable enough by the second validator to instruct students in speaking. The product was deemed sufficient by the second validator to be used in the changing world.

In addition, the research was carried out by the researcher in two phases. Preliminary field testing was phase one. According to the data indicates that the developmental product received an accumulation score of 89%. Some students mentioned that the product was stimulating enough as a medium in teaching speaking. The preliminary field testing was phase two. In the phase two, the product obtained score in the amount of 84%; it delivered the product became eligible enough. Obtaining the observer's (an English teacher) evaluation was the last step. From the start of the study to its final meeting, the observer saw its entire course. The researcher inquired the observer to evaluate the developmental product during their most recent meeting. The score that the observer provided was 82%. The observer stated that the product was motivating and students were excited to get involved during the course.

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REFERENCES

Arif, F. K. M., Zubir, N. Z., Mohamad, M., & Yunus, M. M. (2019). Benefits and challenges of using game-based formative assessment among undergraduate students. *Humanities & Social Sciences Reviews*, 7(4), 203-213. Doi: https://doi.org/10.18510/hssr.2019.7426

Bahrani, T., & Soltani, R. (2012). How to teach speaking skill. *Journal of education and Practice*, 3(2), 25-29.

Bontchev, B., & Vassileva, D. (2010, June). Educational quiz board games for adaptive e- learning. In *Proc. of Int. Conf. ICTE* (pp. 63-70).

Borg, W. R., & Gall, M. D. (1983). *Educational research: an introduction.* London: Longman, Inc.

Brown, F. A. (2010). Vocabulary knowledge and comprehension in second language text processing: A reciprocal relationship. *The Asian EFL Journal Quarterly*, 12(1), 88-133.

Bunau, E. (2020). Studio Quiz Used as a Test to Comprehend Listening Skill: Perception of English Education Study Program Student of Tanjungpura University. *JETL (Journal of Education, Teaching and Learning)*, 5(1), 28-33. Doi: http://dx.doi.org/10.26737/jetl.v5i1.1031

Cahyati, S. S., Parmawati, A., & Atmawidjaja, N. S. (2019). Optimizing English teaching and learning process to young learners (a Case Study in Cimahi). *Journal Of Educational Experts (JEE),* 2(2), 107-114.

Goh, C. C. (2016). *Teaching speaking. English language teaching today: Linking theory and practice*, 143-159. Doi: https://doi.org/10.1007/978-3-319-38834-2_11

Granic, I., Lobel, A., & Engels, R. C. M. E. (2014). The benefits of playing Videogames. *American Psychologist*, 69(1), 66–78. Doi: https://doi.org/10.1037/a0034857

Griffiths, M. D. (2002). The educational benefits of videogames. *Education and Health*, 20(3), 47-51.

Hodent, C. (2020). *The psychology of video games*. Routledge.

Reinders, H. and Wattana, S. (2011) Learn English or Die: The Effects of Digital Games on Interaction and Willingness to Communicate in a Foreign Language. *Digital Culture & Education*, 3, 3-29.

Sugiyono. (2011). *Metode Penelitian Kuantitatif Kualitatif dan R&D.* Bandung: Alfabeta.
Tambaritji, V. N., & Atmawidjaja, N. S. (2020). Improving Students' vocabulary Mastery Using Crossword Puzzle. *PROJECT (Professional Journal of English Education)*, 3(5), 588-596.

Thornbury, S. (2002). Training in instructional conversation. *Language in Language Teacher Education*, 4, 95-106.

Ullah, H., Abutarboush, H. F., Rashid, A., & Tahir, F. A. (2022). A Compact Low-Profile Antenna for Millimeter-Wave 5G Mobile Phones. *Electronics*, 11(19), 3256.

Zainuddin, Z., Shujahat, M., Haruna, H., & Chu, S. K. W. (2020). The role of gamified e- quizzes on student learning and engagement: An interactive gamification solution for a formative assessment system. *Computers & Education*, 145, 103729.