

**INTEGRATING LISTEN-READ-DISCUSS (LRD) STRATEGY AND
WORDWALL AS GAME-BASED LEARNING TO IMPROVE
STUDENTS' READING COMPREHENSION**

A Thesis

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LANGUAGE AND ARTS EDUCATION DEPARTMENT
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ABSTRACT

INTEGRATING LISTEN-READ-DISCUSS (LRD) STRATEGY AND WORDWALL AS GAME-BASED LEARNING TO IMPROVE STUDENTS' READING COMPREHENSION

By

Masita Eka Prastyawati

Reading is an essential skill that helps students access information, expand their knowledge, and develop critical thinking. However, many students struggle with reading comprehension, especially in understanding vocabulary and making inferences, which can affect their ability to learn effectively. The Listen-Read-Discuss (LRD) strategy is commonly used to improve reading comprehension, but it has limitations in enhancing vocabulary retention and student engagement. To address this issue, this study integrates Wordwall, a game-based digital learning tool, with LRD to create a more interactive and engaging learning experience. This study aims to determine whether integrating LRD and Wordwall significantly improves students' reading comprehension compared to the original LRD strategy. Conducted at SMP PGRI 2 Sukadana with seventh-grade students, the research used a true-experimental design. The experimental group was taught using LRD with Wordwall, while the control group followed the original LRD strategy. The data were collected through reading comprehension tests and questionnaires, then analyzed using independent t-tests and Pearson product moment. The results show that the students in the experimental group improved significantly (pretest: 63.14; posttest: 80.83) compared to the control group (pretest: 58.75; posttest: 71.05). Vocabulary and main idea identification improved the most, while inferencing skills showed the least progress. A high positive correlation ($r = 0.663$) was found between game-based learning engagement and reading comprehension. These findings suggest that integrating LRD strategy and Wordwall can effectively enhance students' reading comprehension by making the learning process more engaging and interactive. Therefore, this method is recommended as an alternative solution to improving reading instruction in the classroom.

Keywords: Listen-Read-Discuss (LRD), Wordwall, Game-Based Learning, Reading Comprehension.

ABSTRAK

MENGINTEGRASIKAN STRATEGI LISTEN-READ-DISCUSS (LRD) DAN WORDWALL SEBAGAI PEMBELAJARAN BERBASIS GAME UNTUK MENINGKATKAN PEMAHAMAN MEMBACA SISWA

Oleh

Masita Eka Prastyawati

Membaca merupakan keterampilan penting yang membantu siswa mengakses informasi, memperluas pengetahuan, dan mengembangkan kemampuan berpikir kritis. Namun, banyak siswa mengalami kesulitan dalam memahami bacaan, khususnya dalam menguasai kosakata dan membuat inferensi, yang dapat memengaruhi kemampuan belajar mereka secara efektif. Strategi Listen-Read-Discuss (LRD) umumnya digunakan untuk meningkatkan pemahaman membaca, namun memiliki keterbatasan dalam meningkatkan retensi kosakata dan keterlibatan siswa. Untuk mengatasi masalah ini, penelitian ini mengintegrasikan Wordwall, sebuah alat pembelajaran digital berbasis game, dengan LRD untuk menciptakan pengalaman belajar yang lebih interaktif dan menarik. Penelitian ini bertujuan untuk mengetahui apakah integrasi LRD dan Wordwall dapat meningkatkan pemahaman membaca siswa secara signifikan dibandingkan dengan strategi LRD asli. Penelitian dilakukan di SMP PGRI 2 Sukadana dengan siswa kelas VII, menggunakan desain true-experimental. Kelompok eksperimen diajarkan menggunakan LRD dengan Wordwall, sedangkan kelompok kontrol menggunakan strategi LRD asli. Data dikumpulkan melalui tes pemahaman membaca dan kuesioner, kemudian dianalisis menggunakan uji t independen dan korelasi product moment Pearson. Hasil penelitian menunjukkan bahwa siswa pada kelompok eksperimen mengalami peningkatan yang signifikan (pretest: 63,14; posttest: 80,83) dibandingkan kelompok kontrol (pretest: 58,75; posttest: 71,05). Peningkatan terbesar terjadi pada penguasaan kosakata dan identifikasi gagasan utama, sedangkan keterampilan membuat inferensi menunjukkan peningkatan paling rendah. Ditemukan korelasi positif yang tinggi ($r = 0,663$) antara keterlibatan dalam pembelajaran berbasis game dan pemahaman membaca. Temuan ini menunjukkan bahwa mengintegrasikan strategi LRD dan Wordwall dapat secara efektif meningkatkan pemahaman membaca siswa dengan membuat proses belajar lebih menarik dan interaktif. Oleh karena itu, metode ini direkomendasikan sebagai solusi alternatif untuk meningkatkan pembelajaran membaca di kelas.

Kata kunci: Listen-Read-Discuss (LRD), Wordwall, Pembelajaran Berbasis Game, Pemahaman Membaca.

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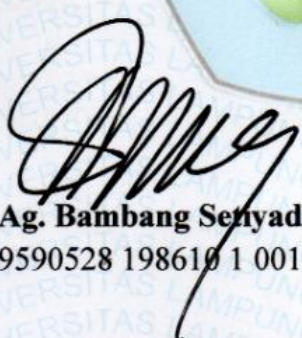
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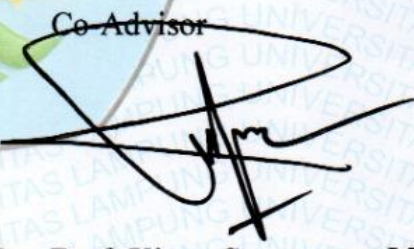


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LEMBAR PERNYATAAN

Dengan ini saya menyatakan dengan sebenarnya bahwa:

1. Tesis dengan judul “Integrating Listen-Read-Discuss (LRD) Strategy and Wordwall as Game-based Learning to Improve Students’ Reading Comprehension”, adalah hasil karya sendiri dan tidak melakukan penjiplakan atau pengutipan karya penulis lain dengan tidak sesuai dengan tata etika ilmiah yang berlaku dalam masyarakat akademik atau yang disebut dengan plagiarisme.
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CURRICULUM VITAE

Masita Eka Prastyawati was born in Gedung Wani Timur on July 18, 1998, as the first child of Mulyani and Zulaikah. She has one younger brother is named M. Hafidz Fathul Aziz. She began her education at MI Bustanul Ulum without attending kindergarten. After graduating in 2009, she continued her education at MTs Bustanul Ulum and graduated in 2012. In 2015, she graduated from MAN 1 Metro. In the same year, she was registered as a student of English Education Study Program of Tarbiyah and Teacher Training Faculty, UIN Raden Intan Lampung. She successfully her undergraduate studies in 2019. In 2023, she began a master's program in English Education at the University of Lampung.

DEDICATION

This thesis is fully dedicated to:

My beloved parents: Mulyani and Zulaikah

My friends in English Education 2023 of Lampung University

My Almamater, Lampung University

MOTTO

*“Indeed, after hardship comes ease. So when you have finished (one task),
continue to work hard (on another)”.*

-QS. Al-Insyirah: 6-7-

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At the end, the author hopes that this paper can be beneficial for the readers and those who want to carry out this research further.

Bandar Lampung, Juli 2025
The Author,

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I. INTRODUCTION

This chapter discusses some points related to the research. They are background of the problems, identification of the problems, limitation of the problems, the research questions, objectives of the research, uses of the research, scope of the research, and definition of terms.

1.1. Background of the Problems

Reading is a skill that can be challenging to master, yet it is crucial for students' learning. According to Schmidt (2010), reading is an active process where readers engage with the text, constantly interacting with it to build understanding. This process is essential in learning because reading involves critical thinking and understanding a text to gain knowledge and information. As Scanlon (2010) explains, reading is about making sense of the text and connecting new information with what we already know, enhancing language skills which are especially valuable for students.

Woolley (2011) emphasizes that reading comprehension is closely linked to how well students can understand texts. This means that effective reading allows students to grasp the overall content and requires a good command of vocabulary, grammar, and spelling. Comprehending a text is an interactive process where readers actively interpret the information they read (Woolley, 2011). However,

many students struggle with reading comprehension and often lack the motivation to read.

Based on the researcher's pre-observation in SMP PGRI 2 Sukadana, some students faced difficulties in understanding what they read. According to their English teacher, this issue affected their overall reading comprehension. Additionally, unintentional individualism in the classroom had resulted in high-achieving students excelling while others fell behind, leading to a growing reluctance to read among struggling students. Consequently, these students became passive learners, limiting their active participation and hindering their reading development.

Numerous studies had explored different techniques and strategies to help students overcome reading difficulties. One of them was using the Listen-Read-Discuss (LRD) strategy to solve the problems. According to Richardson et. al (2009) LRD is comprehension strategy that builds students prior knowledge before they read a text, during reading, and after reading by listening the teachers short lecturing, reading a text selection and discussing. The researcher concluded that LRD was a strategy that began with a teachers short oral explanation, followed by students reading the text after listening to the teacher's explanation, and then discussing the content of the text to evaluate the students' comprehension.

Various studies had examined the benefits of the Listen-Read-Discuss (LRD) strategy on students' reading comprehension (e.g., Prayuda, 2023; Terasne, 2018; Munfadrila, 2023). These studies consistently reported that using the LRD strategy had a positive impact on students' reading comprehension, enhancing engagement and activating their prior knowledge to facilitate better understanding. However,

some challenges had also been noted with the implementation of LRD. For instance, Dwiono (2017) had identified several issues: students often lacked a strong vocabulary, struggled with decoding words and sentences, had difficulty identifying the main idea and making inferences, and faced working memory limitations that affected their ability to retain information. Additionally, Ngatimah (2018) had emphasized the importance of building students' vocabulary, as vocabulary and spelling mastery were essential for effective reading comprehension. Vocabulary remained one of the key challenges in achieving improved comprehension through the Listen-Read-Discuss strategy. To address this issue, the researcher considers that integrating digital tools that support vocabulary acquisition and engagement is essential. Therefore, this study proposes combining the Listen-Read-Discuss strategy with Wordwall, a game-based learning platform that can enhance vocabulary mastery and student motivation during reading activities.

In language learning, vocabulary was essential. It involved knowing words and their meanings, which allowed people to communicate their ideas, feelings, and aspirations while interacting seamlessly with others. Vocabulary was crucial in developing the four core language skills: listening, speaking, reading, and writing. Thornbury (2002) emphasized that vocabulary was fundamental for effective communication, as grammar alone was not enough to convey ideas. Brown (2001) also noted that a strong vocabulary was key to mastering a foreign language, directly impacting reading comprehension skills. Building on these findings, this research aimed to incorporate new strategies within the LRD framework to address vocabulary-related issues.

One promising approach to supporting vocabulary learning was using engaging media, such as games, which combined learning materials with interactive entertainment an approach known as game-based learning. Game-based learning, as Prensky (2001) described, merged fun and engagement with structured learning, making the learning environment more interesting and motivating. Wordwall was one example of game-based media that teachers could use to make learning more enjoyable. Research by Rahmawati and Wijayanti (2022) found that Wordwall promoted engagement and improved vocabulary through interactive activities, while allowing teachers to track student progress and encourage critical thinking. Similarly, Junizar et al. (2020) found Wordwall to be effective for vocabulary development, especially at SMP Mutiara 1 Bandung, where it enhanced students' interest and comprehension in English.

For these reasons, this research integrated the LRD strategy with the digital, game-based learning tool Wordwall. Wordwall offered a systematic way to develop vocabulary by displaying high-frequency words in the classroom in a visually organized manner (Cleaver, 2018). Students could use Wordwall to engage in various activities, such as quizzes, matching games, anagrams, word searches, and other learning exercises. These activities could be customized and used online or printed for offline use. The researcher believed that Wordwall was effective for enriching vocabulary mastery and engaging for both teachers and students, making it an ideal tool to support vocabulary development within the LRD strategy.

Based on the description above, the researcher aimed to integrate Listen-Read-Discuss (LRD) with Wordwall to teach reading comprehension. Using media in

language teaching allowed students to interact directly with the language, learning new vocabulary, understanding meanings, and practicing pronunciation. Integrating LRD with Wordwall combined the strengths of both a teaching strategy and an engaging learning tool, creating a more effective reading instruction method than using them independently.

In this integrated approach, Wordwall supported the Listen-Read-Discuss (LRD) strategy by providing interactive materials, questions, and game-based activities that were not included in the original LRD model. By combining LRD as a learning strategy and Wordwall as a digital media tool, the researcher believed this approach could help teachers overcome students' difficulties in reading comprehension. The goal of this integration was to make reading lessons more interesting, effective, and enjoyable, so that students would be more motivated and could improve their reading skills.

Based on this idea, the researcher conducted a study entitled "Integrating Listen-Read-Discuss Strategy and Wordwall as Game-Based Learning to Improve Students' Reading Comprehension". The novelty of this study is in combining LRD and Wordwall in one approach. While many previous studies focused on LRD or Wordwall separately, this research put them together to solve two common problems in reading: students' lack of vocabulary and low interest or engagement in the reading process. This research has two main contributions. Theoretically, it gives new ideas for reading instruction by showing how traditional strategies can work well with digital tools. Practically, it offers teachers a fun and creative alternative for teaching reading, especially in English as a Foreign Language (EFL) classrooms at the junior high school level.

1.2. Identification of Problems

About the background of the problem, the following problems could be identified:

1. The process of learning to read in English was not interactive.
2. The Listen-Read-Discuss (LRD) method was quite good, but it still had some weaknesses, such as students having limited vocabulary.
3. Many students had trouble understanding what they read, and as a result, some especially those with low scores seemed lazy or unwilling to read.
4. Some students became passive during lessons, which made them less active and harder to improve their reading comprehension.

1.3. Limitation of Problems

Based on the identification of the problems above, the researcher limited the problems by focusing on the implementation of Listen-Read-Discuss integrating with Wordwall as Game-based Learning and original Listen-Read-Discuss in learning reading.

1.4. Research Questions

Based on the background of the problems above, the questions formulated by the researcher were as follows:

1. Is there any significant difference between students' reading comprehension taught by using Integrating Listen-Read-Discuss (LRD) and Wordwall as Game-based Learning and those taught by original Listen-Read-Discuss?
2. What aspects of reading improve the most after being taught by using Integrating Listen-Read-Discuss (LRD) and Wordwall as Game-based Learning?

3. Is there any correlation between game-based learning principles and reading comprehension achievement on the integration of Listen-Read-Discuss and Wordwall as Game-based Learning?

1.5. Objectives of the Research

Based on the research questions above, the objectives of this research were as follows:

1. To find out whether there is a significant difference in students' reading comprehension who are taught by using Integrating Listen-Read-Discuss (LRD) and Wordwall as Game-Based Learning and those taught by original Listen-Read-Discuss.
2. To find out the aspects of reading improve the most after being taught by using Integrating Listen-Read-Discuss (LRD) and Wordwall as Game-based Learning.
3. To find out whether there is a correlation between game-based learning principles and reading comprehension achievement on the integration of Listen-Read-Discuss and Wordwall as Game-based Learning.

1.6. Uses of the Research

This researcher hoped that the research on integrating Listen-Read-Discuss and Wordwall as Game-based Learning, aimed at improving students' reading comprehension, would be beneficial for the researcher, teachers, and students. The study was expected to provide the following benefits:

1. Theoretically

The findings of the study might have provided new knowledge about integrating Listen-Read-Discuss and Wordwall as Game-based Learning to improve students' reading comprehension.

2. Practically:

a. For students:

The application of Listen-Read-Discuss and Wordwall as Game-based Learning made students more interested in the teaching-learning process. Moreover, it helped them improve their reading skills.

b. For English teachers:

The study was expected to offer information about an appropriate method to improve the teaching-learning process.

c. For the researcher:

The results of the study answered the curiosity about whether integrating Listen-Read-Discuss and Wordwall as Game-based Learning could improve students' reading comprehension.

d. Pedagogically:

The results of the study provided knowledge about an alternative teaching method that could be used to improve students' reading skills.

1.7. Scope of the Research

This research focused on using the integration of the Listen-Read-Discuss Strategy and Wordwall as Game-based Learning to improve students' reading comprehension. The data on reading comprehension achievement were taken from the reading comprehension test. There were two tests in reading comprehension: a

pretest conducted before using the integration of the Listen-Read-Discuss Strategy and Wordwall as Game-based Learning, and a posttest, which was administered after it was conducted. Both the pretest and posttest were objective tests in multiple-choice format, with four options for each question (a, b, c, and d).

1.8. Definition of Terms

In order to avoid misunderstanding, some terms used in this research are defined as follows:

a. Reading Comprehension

Reading comprehension is influenced by the general knowledge possessed by readers. That is, what one already knows about a topic influences the acquisition of new information about that topic (Scanlon, 2010)

b. Listen-Read-Discuss (LRD) Strategy

According to Manzo & Manzo (1995), Listen-Read-Discuss (LRD) strategy is a comprehension strategy that builds students' prior knowledge before they read a text. This is a powerful tool for engaging readers with difficulty in class discussions.

c. Game-Based Learning

Game-Based Learning refers to a teaching approach in which games are used to pass on knowledge and skills (Kapp, 2014).

d. Wordwall

According to Witkowski & Baker (2012), a Wordwall is an interactive tool that includes a variety of words used in reading and writing exercises.

As the study has elaborated the points above; in brief this study already has the strong background in conducting the research. Still, this study needs the review of theories concerning the research topics and conceptual framework underlying the study as the next chapter is presented.

II. LITERATURE REVIEW

This chapter discussed the theories that were used in this research. These theories included the Review of Previous Studies, Reading, Reading Comprehension, Aspects of Reading, Teaching of Reading, Descriptive Text, Listen-Read-Discuss (LRD) Strategy, Advantages and Disadvantages of the Listen-Read-Discuss (LRD) Strategy, Procedure of the Listen-Read-Discuss (LRD) Strategy, Wordwall, The Steps for Making Wordwall, Game-based Learning, Integrating Listen-Read-Discuss (LRD) and Wordwall as Game-based Learning, Theoretical Assumption, and Hypothesis.

2.1. Review of Previous Studies

Several studies have explored the effectiveness of the Listen-Read-Discuss (LRD) strategy in teaching reading comprehension. This research reviews these studies to identify gaps and gain deeper insights into the use of LRD. The first study, by Prayuda et al. (2023), examined whether the LRD strategy could improve students' reading comprehension in recount texts and how students responded to it. The findings indicated that LRD significantly enhanced reading comprehension, with over 90% of students showing increased interest, motivation, and understanding during lessons.

The second study, by Terasne et al. (2018), investigated whether LRD could improve comprehension of report texts. Results showed that LRD helped students

overcome reading challenges, making it a valuable alternative in reading instruction. Munfadhila (2023) focused on improving reading comprehension among nursing students, finding that LRD improved their understanding of report texts. However, some limitations of the LRD strategy have been noted. Dwiono (2017) highlighted weaknesses in LRD's application, identifying issues such as difficulties teachers and students faced in reading comprehension classes. Similarly, Ngatimah (2018) found that while LRD improved comprehension, it did not enhance vocabulary and spelling, which are essential for reading proficiency. The researcher recommended further efforts to enrich students' vocabulary.

Regarding Wordwall, several studies show its potential as a game-based learning tool to improve vocabulary and comprehension. Rahmawati and Wijayanti (2022) found that Wordwall engaged students with interactive activities that enhanced vocabulary while allowing teachers to track progress and encourage critical thinking. Junizar et al. (2020) also identified Wordwall as an effective tool that improved vocabulary and reading engagement, particularly among students at SMP Mutiara 1 Bandung.

In summary, these studies confirm that the Listen-Read-Discuss strategy can improve students' reading comprehension. However, the original LRD strategy has limitations, particularly in enhancing vocabulary and spelling. Given vocabulary's critical role in mastering language skills, this study aims to address these gaps by integrating LRD with Wordwall. Wordwall as a game-based

learning tool, combines interactive games with learning materials to make lessons more engaging and effective. Thus, integrating Listen-Read-Discuss with Wordwall is intended to create a more comprehensive approach to improving both reading comprehension and vocabulary.

2.2. Reading

Reading is an active process in which the reader interacts with text and constructs meaning, for example, in making sense of unfamiliar words by relating them to existing schema and background knowledge (Wolley, 2011). It means that reading can be interpreted as a key knowledge that can provide a broad source of knowledge that everyone must have in language skills in obtaining an idea from a text in written form. According to Jack (2010), reading is the process of getting meaning from printed material. In other words, reading is to know the meaning of the words that have been read to get messages and information.

Reading is a complex process that requires the analysis, coordination, and interpretation of a variety of sources of information (Scanlon. et al, 2010). It means that the reader tries to be able to understand and get ideas from a text. The reader can get the message or meaning from the writer. According to Jack (2010), reading is said to give learners the opportunity to feel a part of a community of readers and to appreciate the enjoyment of fluent reading. Moreover, Jain (2008) state that reading is an important activity in life with which one can update his/her knowledge. So, reading is very important for daily activity because reading can gain extensive knowledge, get ideas and obtain information.

Regarding the explanation, the researcher concluded that reading is an important daily activity, and also reading is not only a source of information and a pleasurable activity but it is also the process of making the meaning of words, sentences, and connected text. Reading also needs the reader to background knowledge to build the readers comprehension.

2.3. Reading Comprehension

Comprehension is the center of reading (Tankersley, 2003). It can be known that to comprehend in reading need intentional thinking and more focus to able get understanding of the text. Moreover, Tankersley (2003) states that when comprehension is deep and thorough, a reader is able to understanding, evaluating, synthesizing, and analyzing of information and gaining through an interaction between reader and author. Reading comprehension is the process of making meaning from text. Therefore, the goal is to gain an overall understanding of what is described in the text rather than to obtain meaning from isolated words or sentences (Wolley, 2011).

In brief, reading comprehension is important in English language learning, not only for construct the meaning of the text, but also the students should get comprehension from the text as a product of its process. Reading comprehension is a complex task, there are many different cognitive skills and abilities which related with it such as previous knowledge, good reading strategy and high reading interest. Likewise, good reading comprehension will depend on good language understanding more generally. Reading comprehension brings the students success in teaching and learning process, since by comprehend the

material before, they will remember much more, it helps them when they learn English.

2.4. Aspects of Reading

There are certain aspects of reading that the reader has to understand. There are five aspects of reading comprehension in which the students can understand a text well, such as the main idea, specific information, inferences, references, and vocabulary in context (Brown, 2010). All items will be explained as follows:

1. Identifying Main Idea

The main idea refers to important information that talks more about the overall idea of a paragraph or section of a text. Main idea is the most important idea stated in the topic sentence and developed by supporting sentences in a single paragraph. Commonly, the main purpose of comprehending is getting the main idea. Thus, the main idea is the point of the paragraph. It is the most important thought about the topic. The example question about the main idea can be:

What is the main idea of the text?

2. Identifying Specific information

Commonly, supporting sentence or stated detailed develops or explain the topic sentence by giving reasons, facts, an incident, comparison, analogy, cause, and effect. Specific information exercises may ask students to look for names or dates, to find a definition of a key concept, or to list a certain number of supporting details. The question of finding supporting detail is as follows:

Who is main the character of the text?

3. Identifying Reference

Reference is a relation between objects in which one object designates, or acts as a means by which to connect to or link to, another object. Reference is a relation that obtains between expressions and what speakers use expressions to talk about. The reference are words or phrases used either before or after the reference in the reading material. They are used to avoid unnecessary depletion of words or phrases. It means that such words are used, they are signals to the reader to find the meaning elsewhere in the text. The following question is an example: “...and **it** has...” (*paragraph 3*). *The bold word refers to...*

4. Making Inference

The inference is about guessing something from the information which have we read or know. It is concluding considering all the facts; one of the comprehension strategies to conclude what is not directly stated in the text based on clues. Inference usually has to be derived from processing pragmatic information. Example question of making an inference can be: *What is the first paragraph talking about?*

5. Understanding Vocabulary in Context

The vocabulary is all the words that exist in a particular language or subject. The ability to determine the meaning of vocabulary items from context is one of the most important aspects of a successful reading. One way for learners to make guessing pay off when they do not immediately recognize a word is to analyze it in terms of what they know about it. Vocabulary in content can be

seen from the prefixes, suffixes, similar roots, grammatical context, and from the semantic context that may give clues. The question consisting of vocabulary aspect can be drawn as follow: “*She is **tall**.*” (*paragraph 2*). *The bold word is the synonym of...*

Based on the definition about reading comprehensions above, it can be inferred that in understanding written material, the students need to be able to decode what they read, make connections between what they read and what they already know, and think deeply about what they have read because reading comprehension means as an ability to understand the meaning or importance of something or the knowledge acquired as a result.

2.5. Teaching of Reading

Teaching is a kind of activity to transfer knowledge to other. Teaching is helping learner to acquire new knowledge or skills. Teaching consists mainly of telling, showing, guiding the learner in performance tasks and then measuring the results (Singer, 2014). It means that teaching is guiding to share knowledge and help in learning to find information in the learning process. Therefore, that eventually teaching reading is targeted at helping language learning to practice improving reading comprehension. During the process of teaching reading the thing that must be considered is the principle of teaching reading because the principle of teaching can limit the teacher when teaching reading. The principles of teaching reading are stated below:

1. Encourage students to read as often and as much as possible.

Harmer assumed that in reading, readers have to understand what the meaning of the words, see a picture, and understand the argument.

2. Students need to be engaged with what they are reading.

The students should be engaged with what they are reading so that they can get the information from the text.

3. Encourage students to respond to the content of a text (and explore their feelings about it), not just concentrate on its construction.
4. The students have to be accustomed to understanding, responding to the meaning of the text and expressing their feelings about the text.
5. Prediction is major factor in reading.

When the students read a text, they often look at hints, such as the content or book cover, photographs, and headline. These hints are useful for the students to predict what they are going to read.

6. Match the task to the topic when using intensive reading texts.

The teacher should choose an appropriate reading task. The reading has to match the topic.

7. Good teachers exploit reading texts to the full (Harmer, 2007).

The teacher should integrate the reading texts into more interesting and engaging class sequences. A teacher should cover all the things that the students can work out with the text. The teacher has to discuss the text fully, study language and give additional tasks to the students.

Based on the explanation, it can be summarized that the principle of teaching reading can improve the students' reading skills and help the students become

better readers. The seven principles will give teachers food for thought and reflection as they consider their beliefs about how best to help their students become proficient foreign-language readers.

Teaching reading is not a stuck activity. Students have to enjoy the reading process. The teacher must pay attention how to increase reading text in classroom because teaching reading needs more than only reading the text. In teaching reading, the teacher should be plan as a part of a lesson. The contemporary reading task, unlike the traditional materials, involves three phases: pre-, while, and post- reading stages.

1. Pre-reading, it helps in activating the relevant schema, for example, teacher can ask the students question that arose their interest and activate the students background knowledge while previewing the text.
2. While-reading the aim of while reading stage (or interactive process) is to develop students' ability in tackling text by developing their linguistic and schematic knowledge.
3. Post-reading, it can be varied, encompassing any follow up exploitation of what has been read (Johnson, 2013).

It means that in teaching reading, the teacher should have or plan the stages of teaching reading which can make easier in teaching reading process, the stages that can be used in teaching reading are pre-reading, while reading, and post-reading.

In another hand, those explanations conclude that in the learning process, student must enjoy during the reading process. So that students can understand a given topic because through reading students can gain knowledge and lots of information. As a teacher must pay attention to how to improve understanding in reading texts because teaching reading requires more than just reading a text.

2.6. Descriptive Text

Descriptive text is a text which says what a person or thing is like, its purpose is to describe and several a particular person, place, or thing. In a broad sense, description, as explained by Kane (2000), is defined like in the following sentence: Description is about sensory experience how something looks, sounds, tastes. Mostly it is about visual experience, but description also deals with other kinds of perception.

In the similar vein, Knapp (2005) defines descriptive as the way to classify and categorize something based on the observation and interaction which make the readers can make objective or subjective opinion depending on the learning area or intent of the writer. In addition, Oshima (2007) states that a description is telling about how something is described using the five senses. Therefore, a good description is remarked when the reader can feel, see, hear and taste what the writer feels, sees hears and tastes. It can be said that by using descriptive text, the writer is able to make the readers imagine the object being described by portraying the visualizations and also the personalities of the object.

Generic structures of descriptive text based on Hammond (1996) in Zetira (2015) are identification and description. Identification is the person, place or thing to be described. The description is describing parts, qualities, and characteristics of an object. Meanwhile, the language features of descriptive text are described by Gerot and Wignel (1995) cited in Zetira as follows:

1. Focus on specific participant. In describing something in written descriptive must focus only one subject, for example: Borobudur Temple, a cat, my new house, and so on.
2. Use simple present tense. In which usually found the passive voice in the descriptive text especially when describes about particular place.
3. Use attributive and identifying processes. It is about the use of have and has.
4. Use frequent epithets and classifiers in nominal group, like attractive and beautiful.

In conclusion, descriptive text is a text that tells how something looks, tastes and sounds. It is recognized by using the five sensory of the body. The text is intended to describe the object into a written form. Thus, the reader can feel and imagine the object without seeing it directly. This text is started by the identification, and followed by the description of the object. Linguistically, it is related to the use of adjective, the use of simple present tense and focus on the specific object.

2.7. Listen-Read-Discuss (LRD) Strategy

Listen – read – discuss strategy is a strategy helps students understand text. The teacher gives a short teach to the students. Then the students read the text that the

teacher spoke about. After reading, the students discuss the information they read and the lecture of the teacher give. This strategy also helps the students use their prior knowledge. According to Richardson et al (2009) LRD is comprehension strategy that builds students prior knowledge before they read a text, during reading, and after reading by listening the teachers short lecturing, reading a text selection and discussing.

In addition, according to Manzo & Manzo (1995), Listen-Read-Discuss (LRD) strategy is a comprehension strategy that builds students' prior knowledge before they read a text. This is a powerful tool for engaging readers with difficulty in class discussions. Because the content is initially discussed orally, students cannot read the entire text on their own to gain at least a surface-level understanding of the reading. The students had less prior knowledge of the content acquired during the listening stage, allowing them to understand the text more easily. During the reading stage, The Listen-Read-Discuss strategy is relatively easy to create because it can improve students' understanding of many lessons. It means that the LRD strategy will make students understand a text by reading with a greater understanding.

Therefore, Listen-Read-Discuss is a reading lesson format specially designed for struggling readers (McKenna, 2002). It is concluded that using the LRD strategy is a powerful tool for engaging struggling readers in classroom discussions. Because this strategy activates the student's prior knowledge when they have a text, they read the text and compare their prior knowledge with what they already know, then discuss it with their friends to ensure the information from the text.

Based on explanations from experts, Listen-Read-Discuss strategy, students can build their prior knowledge before they read a text, during reading, and after reading by listening to short lecture, reading text selection, and discussing.

2.7.1. Advantages and Disadvantages of Listen-Read Discuss (LRD) Strategy

There are some advantages and disadvantages in the implementation of LRD strategy. Kayulita et al. (2020) stated that this strategy has advantages and disadvantages;

1. It is a powerful tool for engaging struggling readers, especially L2 learners.
Because the content of the text is covered orally at the beginning, the learners who are unable to read the text on their own can gain at least a surface understanding of the reading,
2. For students who lacked prior knowledge about the content, gain it during the listening stage, which will allow them to comprehend the text during the reading stage more quickly,
3. This strategy gives the effectiveness in teaching and learning reading.

The disadvantage of LRD strategy, there is also the burden of LRD strategy is challenging to use daily because developing the lecture and the student's prior knowledge is time intensive.

To conclude, this strategy has several advantages and disadvantages which are identified by previous researches. Hence, in order to maximize the implementation of Listen-Read-Discuss strategy and avoid similar problems to occur; therefore, this current research is intended to modify this strategy. The

modification is done based on problems that occurred in the previous research in order to maximize teaching and learning process and to prevent similar problems to occur.

2.7.2. Procedure of Listen-Read-Discuss (LRD) Strategy

According to Manzo & Manzo (1995) there are procedures of LRD as follows:

1. Listen: Teaching presents a lecture on the content of the reading that includes a graphic organizer of the information you discuss.
2. Read: Students read the selection, guided by idea that the reading may provide another understanding or interpretation of the content.
3. Discuss: Discussion of material. Encourage students reflect the differences between their reading of the content and presentation.

Based on the explanation above, using the Listen-Read-Discuss (LRD) strategy helps students read texts because the whole process of teaching reading using the Listen-Read-Discussion strategy will enable students to read. They will interact with others to discuss the target language options. In this strategy, students will be motivated to get the meaning of the text.

2.8. Wordwall

Fun learning is an important aspect in making students understands the lessons. Learning monotonously such as listening the teacher speaking potentially makes students feel bored and do not understand well. Coombs (1999) states that “learning occur a few minutes when teachers only speaking in front of the classroom and students sit passively”. In teaching learning process the teachers

need the tools to deliver subject such as media. Therefore, according to Harmer (2007) a range of objects, pictures, and other things that can be used as instructional media to present and manipulate language and to involve students in the activities.

In this research, the researcher would like to use Wordwall media as supporting media. A Wordwall is part of words or a collection of words used to teach vocabulary, letter-sound correspondence, spelling, and more. According to Tompkin (1997) word wall is list of words that are arranged based on alphabetical that teacher create in the classroom for purpose of word and vocabulary development. Then, Cronsberry (2004) stated that a Wordwall is a group of words that are displayed on a wall, whiteboard, chalkboard or a bulletin board in a classroom.

The Wordwall website is considered very interesting and not boring for students. This website-based application can be used to create learning media such as quizzes, matchmaking, pairing, anagrams, word randomization, word search, grouping, etc. Interestingly, in addition to providing users with access to the media they have created online, they can also download the material and print it on paper. According to Lewis, (2017) Wordwall is an online tool for designing study exercises that is completely free. Wordwall media is very helpful for researchers in enriching vocabulary mastery.

Wordwall website is one strategy to provide learning that will make students happy to learn. Through the media Wordwall is not only emphasized on just

understanding vocabulary can also be used to train students' understanding in defining a word. By applying the Wordwall website, students can remember the vocabulary without feeling that they are very serious in studying.

Wordwall uses more themes and use favorite words. Some interesting activities can be done, for example, there are various features in Wordwall, namely: match up, quiz, open the box, random wheel, unjumble, find the match, group sort, missing word, anagram, maze chase, gameshow quiz, matching pairs, true or false. However, only three are commonly used, namely: quiz (in the form of multiple choice), matching pairs, and true or false. These make students more active in the classroom. Besides that, the students easily make sentences and memorize the words.

In addition, According to Callella (2001) there are the advantages and disadvantages of using Wordwall, as follows:

a. Advantages

1. Can help the students to remember the words.
2. Servers as an important tool for helping students learn to read.
3. Promotes reading and writing.
4. Foster student independences.

b. Disadvantages

1. Need equipment to reproduce.
2. Need time to develop.
3. There were sometimes viewed as busy work.

2.8.1. The Steps for Making Wordwall

The steps for making Wordwall media:

- a. The teacher creates a word wall account by registering an email and password.
- b. The teacher clicks create activity to start creating learning media projects.
- c. The teacher chooses a word wall template that will be used as a learning medium.
- d. The teacher makes a title in the column.
- e. The teacher includes pictures or writing related to material was created to suit each type of game.
- f. The teacher clicks on the image upload.
- g. The teacher chooses the image that he wants to include in text.
- h. If we have selected a picture, the teacher clicks opens. After the picture is uploaded, the teacher enters information in the column.
- i. If we want to include material in several items, the teacher clicks add item.
- j. For the next item the teacher does the same steps as steps 5–10.
- k. If we have entered all the items, then the teacher clicks done.
- l. The teacher checks the results by clicking start.
- m. The teacher changes the theme to a more interesting one.
- n. When finished, the teacher shares learning media by clicking the share button.
- o. The teacher chooses the publish menu.
- p. The teacher copies the link or print out, and gives the link or print out to students, the learning media is ready to use.

Those are the steps to making word wall. Therefore, the teacher and students will get easy access to this platform.

2.9. Game-Based Learning

Game-based learning is a method of obtaining new concepts and skills through the use of digital and non-digital games (Grace, 2019). The application of games in education can foster notable improvements in both learning and education outcomes (Kula, 2021; Syafii, 2021). According to Boctor (2013), the process by which the game-based learning approach supports learning comprises two steps: First, games can motivate students to combine knowledge from various disciplines and utilize it in decision-making processes; and second, students can test how game outcomes change based on the choices and decisions they make. It also allows students to communicate with other participants and discuss game-related moves; this increases coordination which, in turn, improves social association skills.

From a broad pedagogical perspective, Prensky (2001) classified this practice as an approach which mainly focuses on the completion of tasks and role-playing simulations through electronic games. To be considered an approach, game-based learning involves a series of learning theories. To this purpose, Margarida, et.al. (2010) identified three main paradigms connected to game-based learning with: behaviorism, cognitivism and constructivism. Firstly, game-based learning provides students with stimulus and positive or negative reinforcement; thus, the learning process happens when there is a change of reaction between them. Secondly, this approach also requires the students' active participation in order to

learn, this involves both memorization and problem solving. thirdly, game-based learning involves learning by doing, which implies constructing and interpreting knowledge and applying it in the virtual world according to the learner's own knowledge and experience.

In addition to these principles, Kam et.al. (2013) also stated that students need to be aware of their learning process; this implies reflective learning. Thus, learners should consciously think, analyze, and learn through the reflection of their gaming experience. Meanwhile, based on Perrotta (2013) Game-based learning broadly refers to the use of video games to support teaching and learning. Although it is a relatively established notion, it is hard to define precisely. So that have arrived at a definition by extracting the key principles involved as follows:

1. Intrinsic motivation: Playing is by and large voluntary and self-driven learning through intense enjoyment and "fun".
2. Authenticity: Contextualized goal oriented instead of abstract learning
3. Self-reliance and autonomy: Passion and interest that lead to a will to specialize
4. Experiential learning: Learning by doing

Another that, the established scholars in the game-based field such as Prensky (2001), Wilson et al, (2009) and Aldrich, (2015) claimed that the integration of entertainment game-based elements promotes engagement to learners' active participation in learning (Pesare, et.al. 2016). Fun, adaptive, play, rules, goals, interaction, interaction, conflict, problem-solving, interactive and representation are the key elements in game-based learning (Prensky, 2001). These elements in

games integrate both entertainment elements and learning principles (Hamari et al., 2016). For instance, the game elements encourage players to try different ways of learning and thinking in order to master the learning topic (Lim & Leong, 2017). Therefore, game-based elements are important and should be incorporated in GBL courseware.

Based on the description above, it can be known that Game-based learning offers an innovative and effective approach to education. By combining game elements and learning principles, this method can improve student motivation, engagement and learning outcomes. In this research, the researcher applied the principles proposed by Perotta (2013), Because, these principles are flexible enough to be applied in various learning contexts and game types, both digital and non-digital.

2.10. Integrating Listen-Read-Discuss and Wordwall as Game-based Learning

The following is an integration of Listen-Read-Discuss (LRD) and Wordwall as game-based learning to improve students' reading comprehension:

Tabel 2.1. Table of Teaching Procedures

The Original LRD Strategy	The modified LRD Strategy and Wordwall	GBL Principles by Perotta (2013)
	1. The teacher displays the digital Word Wall using the LCD. 2. Students play the Wordwall game "Random Wheel" to guess key words related to the topic. 3. The teacher discusses these words to activate students' prior knowledge.	Authenticity Intrinsic Motivation Authenticity
Listen: Teaching presents a lecture on the	Listen 1. The teacher gives a brief	

content of the reading that includes a graphic organizer of the information you discuss.	explanation of the content of the text. 2. Students listen while noting important points.	
Read: Students read the selection, guided by idea that the reading may provide another understanding or interpretation of the content.	Read 1. Students read the text independently. 2. During reading, students can refer to the Wordwall for vocabulary help.	Self-reliance and autonomy Authenticity
Discuss: Discussion of material. Encourage students reflect the differences between their reading of the content and presentation.	Discuss 1. Students discuss in small groups about the content of the text. 2. The teacher facilitates class discussions using the "Group Sort" feature in the Wordwall to categorize information from the text.	Self-reliance and autonomy Authenticity
	1. The teacher holds a question-and-answer session using "Quiz" on the Wordwall to check overall understanding. 2. Students create a text summary.	Intrinsic Motivation Experiential Learning

The researcher identifies the parts of the Listen-Read-Discuss (LRD) and Wordwall integration that use the principles of game-based learning:

1. Intrinsic Motivation:

- a. "Random Wheel" game in pre-activity.
- b. "Quiz" game in post-activity.

All these games are designed to create fun and engaging learning, encouraging students' voluntary participation.

2. Authenticity:

- a. Use of a digital Wordwall displaying topic-related key words.
- b. Discussion of key words to activate students' prior knowledge.
- c. Use of Wordwall for vocabulary help while reading.
- d. "Group Sort" feature to categorize information from the text.

These activities present learning in a relevant and goal-oriented context.

3. Self-reliance and autonomy:

- a. Reading the text independently.
- b. Refer to Wordwall for vocabulary help while reading.
- c. Small group discussion about the content of the text.

These activities encourage students to take initiative in their learning.

4. Experiential learning:

- a. All games and interactive activities with Wordwall.
- b. Group and class discussions.
- c. Summarizing texts.

This whole learning process engages students in “learning by doing”, providing hands-on experience in using and understanding key concepts.

This integration effectively combines the LRD strategy and Wordwall as a game-based learning tool, covering all the mentioned game-based learning principles. This approach has the potential to improve students' reading comprehension through active engagement and fun learning.

2.11. Theoretical Assumption

Reading comprehension is a complex cognitive process that involves actively constructing meaning from text. It requires the reader to engage with the material, connect it to their existing knowledge, and build a coherent understanding of the content. Effective reading comprehension is crucial for academic success and lifelong learning.

The Listen-Read-Discuss (LRD) strategy is believed to enhance reading comprehension by activating students' prior knowledge before they encounter the

text. This strategy involves three key steps: listening to a brief lecture or explanation, reading the text, and engaging in a discussion about the content. By providing context and background information before reading, LRD is thought to improve students' ability to understand and retain new information.

Vocabulary plays a critical role in reading comprehension. A strong vocabulary enables students to better understand the text, make inferences, and connect ideas. It is assumed that by improving vocabulary, students can enhance their overall reading comprehension skills. Game-based learning, particularly when integrated with traditional teaching methods, is believed to increase student engagement and motivation. By incorporating elements of play and competition, game-based learning can make the learning process more enjoyable and potentially more effective. The use of digital tools, such as Wordwall websites, is thought to provide an interactive and dynamic learning environment that can support vocabulary acquisition and reading comprehension.

Integrating the Listen-Read-Discuss strategy with game-based learning tools like Wordwalls is assumed to combine the benefits of both approaches. This integration is expected to provide a more comprehensive and engaging learning experience, addressing multiple aspects of reading comprehension, including vocabulary development, prior knowledge activation, and active engagement with the text.

2.12. Hypotheses

In quantitative research, it is needed to compose the hypothesis based on the problems formulated in the first chapter. The hypotheses formulated by the researcher are as follows:

1. There is a significant difference between students' reading comprehension taught by using Integrating Listen-Read-Discuss (LRD) and Wordwall as Game-based Learning and those taught by original Listen-Read-Discuss.
2. There is an aspect of reading improve the most after being taught by using integrating Listen-Read-Discuss (LRD) and Wordwall as Game-based Learning.
3. There is correlation between game-based learning principles and reading comprehension achievement on the integration of Listen-Read-Discuss and Wordwall as Game-based Learning.

This chapter has explained the Literature Review. The following chapter will go into the methods of this research.

III. METHODS

This chapter presented the method used in this study. The setting of the research, population and sample, research design, procedure, data collecting technique, instruments, and data analysis technique were explained.

3.1. Setting of the Research

The researcher conducted the research at SMP PGRI 2 Sukadana. This school was located on Jalan Putra Aji I, Sukadana, East Lampung. In this school, the students lacked reading comprehension, and their reading comprehension did not improve, based on the information from their English teacher. It showed that this school experienced problems with students' lack of reading comprehension. Therefore, this school provided an opportunity for researcher to test the effectiveness of the proposed method in overcoming the reading comprehension problems experienced by students. The research was conducted on grade VII students of SMP PGRI 2 Sukadana for five meetings and was carried out in the first semester of the 2024/2025 academic year.

3.2. Population and Sample

The researcher used two classes as the sample of the research, one class as an experimental group and the other class as a control group. The population of this research consisted of seventh-grade students. The samples of the research were

chosen through cluster random sampling. VIIB was the control class, VIIC was the experimental class, and VIIA was the try-out class.

3.3. Research Design

The research design used a quantitative approach to determine the significant difference in students' reading comprehension between two classes: the experimental class and the control class. In this research, the researcher conducted a true-experimental study, comparing students in the experimental class with those in the control class. Hatch and Farhady (1982) stated that the researcher applied a true-experimental design, in which an experimental group of participants received special treatment, while the other group did not, in order to measure the significant effect of this original strategy. Hence, there were two groups in the experimental research: the experimental and control groups. The experimental group received a new treatment by integrating LRD and Wordwall as Game-based Learning, while the control group received the original treatment. According to Setiyadi (2018), the design of the research was as follows:

$\begin{array}{l} \mathbf{G_1: T_1 X_1 T_2} \\ \mathbf{G_2: T_1 X_2 T_2} \end{array}$

Where,

G₁ : Experimental Group

G₂ : Control Group

T₁ : Pretest

X₁ : Integration of LRD and Word Wall as Game-based Learning Treatment

X₂ : Original Treatment (LRD Strategy)

T₂ : Posttest

The pre-test was used to obtain the students' reading comprehension scores before the treatment. Then, three treatment sessions were conducted in the form of learning activities on descriptive text materials. The experimental class was taught using Listen-Read-Discuss (LRD) integrated with Wordwall as Game-based Learning, while the control class was taught using the original Listen-Read-Discuss (LRD) method. After that, the post-test was administered to determine the significant difference in students' reading comprehension achievement after the treatments.

The data obtained from the experimental class was used to answer the first research question and was analyzed using the Independent Group T-Test. The second question was analyzed using the paired sample T-test, and Pearson Product Moment was used to analyze the data for the third research question, as this study aimed to investigate the correlation between the results of the Game-based Learning principles questionnaire and reading comprehension in the experimental class. Thus, the two classes learned using different methods: the control group was taught using the original Listen-Read-Discuss (LRD), while the experimental group was taught using Listen-Read-Discuss (LRD) integrated with Wordwall as Game-based Learning.

3.4. Variables

As an important factor, variables were needed in conducting the research. Creswell (2012) stated that a variable is a characteristic or attribute of an individual or an organization that a researcher can measure or observe and that varies among individuals or organizations studied. This research consisted of the following variables:

1. Students' reading comprehension as dependent variable (Y).
2. The integrated LRD and Wordwall as Game-based Learning as independent variable (X1).
3. Original Listen-Read-Discuss (LRD) Strategy as independent variable (X2).

3.5. Research Instruments

The instrument was a device used by the researcher to collect data, making the work easier and ensuring more complete and systematic results so that the data could be processed efficiently (Arikunto, 2010). In collecting the required data for this study, the researcher used two kinds of instruments: a reading comprehension test and a questionnaire. Each type of instrument is explained as follows.

3.5.1. *Reading Comprehension Test*

A test, in simple terms, is a method of measuring a person's ability, knowledge, or performance in a given domain (Brown, 2001). In this research, reading comprehension was tested when the researcher conducted the pre-test and post-test. The pre-test was given to the students before the treatment in the teaching and learning process, while the post-test was given after they received the treatment.

The instrument was created based on five reading aspects to observe whether learners improved their reading comprehension skills when taught using the integration of Listen-Read-Discuss (LRD) and Wordwall as Game-based Learning. Before administering the pre-test and post-test, the researcher conducted a tryout to evaluate the item facility, item discrimination, and distractor efficiency of the test.

The assessment used in this research was a multiple-choice test that included five aspects: main idea, supporting details, references, inferences, and vocabulary, to determine whether the test was valid and reliable. Each multiple-choice question had four possible responses: one correct response and three distractors. According to Wolf (1993), all distractors in multiple-choice questions should be plausible, and students should not be able to answer them correctly without reading and understanding the relevant parts of the passage.

The scoring criterion ranged from 0 to 100, meaning that if a student answered all test items correctly, their score would be 100. The formula for scoring the students' test results was as follows:

$$S = \frac{r}{n} \times 100$$

Where:

S = The score of the test

r = The total of the correct answer

n = The total items

3.5.2. Questionnaire

A questionnaire was a data collection technique conducted by giving a set of questions or written statements to respondents to answer. A questionnaire was an efficient data collection technique if the researcher knew with certainty the variables to be measured and what to expect from the respondents (Sugiyono, 2013).

The questionnaire in this research consisted of questions or statements about Game-based Learning. It was designed to identify which principles of Game-based Learning had the most influence on students' reading comprehension. The researcher used the principles of Game-based Learning based on Perrotta (2013) because these principles helped measure the extent to which Game-based Learning methods affected students' motivation, engagement, and comprehension in reading.

The Game-based Learning questionnaire consisted of 20 statement items, each with five response choices, to measure the principles of Game-based Learning. The results of the questionnaire were scored based on the Likert Scale, with scores ranging from 1 to 5. The response options ranged from "strongly disagree" to "strongly agree." To prevent participants from misunderstanding the questions, the questionnaire was provided in the students' native language, Indonesian.

3.6. Validity and Reliability of the instruments

In conducting the research and determining whether the test items were applicable, the researcher conducted a tryout to assess the validity and reliability of the test. This process was carried out to ensure that the test items were of good quality before being used for the pre-test and post-test.

3.6.1. *Validity of Reading Test*

Validity refers to how well a test measures what it is supposed to measure. There are four types of validity: face validity, content validity, construct validity, and empirical or criterion validity. The researcher used content validity and construct validity to determine whether the test had strong validity. Face validity concerns the test's layout, while criterion-related validity pertains to the potential assessment

of performance, such as in a replacement test (Hatch and Farhady, 1982). Thus, these two validities were deemed less important.

a. Content Validity of Reading Test

According to Setiyadi (2018), content validity is intended to analyze whether the items as a whole represent the material to be measured. If a measuring instrument represents all ideas related to the material, then the measurement tool fulfills the aspects of content validity. To meet these aspects, the researcher should ensure that the test items represent the curriculum used by the school. This means that the test items must truly assess the domain of reading skills.

In this research, the test items were validated by two experts based on the content of the instrument. Content validity was ensured by including reading materials that were developed according to the topics already taught and aligned with the current junior high school curriculum. The reading comprehension test focused on descriptive texts and was designed to match the learning objectives for 7th-grade students.

b. Construct Validity of Reading Test

The construct validity of test is test which is capable of measuring certain specific characteristics in accordance with a theory of language behavior and learning (Heaton, 1975). Construct validity is one kind of validity that is measures the ability which is supposed to measure. Based on theory above, the instrument's validity relationship refers to construct validity in which question reflects five kinds of reading skills, i.e., determining main idea, identifying specific information, identifying reference, making inferences, and knowing vocabulary. The content and

construct validity of the test were evaluated by an English teacher. The validator used a checklist table to ensure that all tests met the validity criteria. Here is the table of specification of reading comprehension test that is used for the research.

Table 3.1 Specification aspects of reading comprehension

No	Aspect of Reading Comprehension	Number of Items
1	Identifying Main Idea	1,5,9,13,21,24,31,36
2	Identifying Specific Information	2,6,10,17,22,25,32,37
3	Identifying Reference	3,7,11,14,18,23,26,29,33,38
4	Making Inference	4,12,15,19,27,34,39
5	Understanding Vocabulary	8,16,20,28,30,35,40

The validation instrument for the reading test was developed using five point Likert scale, consisting of the following categories: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), and Strongly Disagree (1). The scores provided by two experts judgment were analyzed to determine the average rating, which was used to assess the suitability of the reading test based on expert judgment. To measure validity, the researcher applied Aiken's V formula (Aiken, 1985), utilizing ratings from two validators to evaluate the validity of the reading test. The criteria for determining the validity level of the developed reading test are outlined in Table 3.2:

Table 3.2. Criteria for the Level of Validity

Value	Criteria
0.8 - 1	Very High
0.6 – 0.79	High
0.40 – 0.59	Medium
0.20 – 0.39	Low
0.00 – 0.19	Very Low

The following table presents the calculated Aiken's V score for 10 test items, reflecting the degree of agreement between raters and the overall validity of the instrument. The detailed breakdown of the scoring and interpretation is presented below.

Table 3.3. Result of Reading Test Validity

Items	Validator		S1	S2	Σs	n(c-1)	V	Criteria
	I	II						
Items 1- 10	41	48	31	38	69	80	0.86	Very High

With an Aiken's V score of 0.86, the validity of the reading test items is categorized as very high, indicating strong agreement between the two raters regarding the test's validity. This suggests that the test items are highly relevant and appropriate for assessing students' reading comprehension.

3.6.2. Reliability of Reading Test

Reliability showed whether an instrument was reliable and could be used as a device to collect data with stable test scores. A good test had to be both valid and reliable. In addition to the index of validity, the researcher also calculated the reliability. Ary (2010) stated that reliability concerned the effect of random errors of measurement on the consistency of scores.

Setiyadi (2018) explained that reliability referred to the consistency of measurements or how well those measurements could measure the same subjects at different times while showing the same result. In this research, the Split-Half Method, using odd and even numbers, was applied to find the coefficient of reliability for the first and second half groups.

$$r_1 = \frac{N (\Sigma XY) - (\Sigma X) (\Sigma Y)}{\sqrt{\{N \Sigma X^2 - (\Sigma X)^2\} \{N \Sigma Y^2 - (\Sigma Y)^2\}}}$$

Where:

n : the number of students in sample

r_1 : coefficient of reliability between odd and even numbers items

x : odd number

y : even number

$\sum X^2$: total score of odd number items

$\sum Y^2$: total score of even number of items

$\sum XY$: total score of odd and even number

(Lado (1961) in Hughes, 1991)

After getting the reliability of half test, the researcher then used Spearman Brown's Prophecy formula (Hatchy and Farhady: 1982) to determine the reliability of the whole test as follows:

$$rk = (2r_{xy}) / (1 + r_{xy})$$

Where:

r_k : The reliability of the whole test

r_{xy} : The reliability of half test

The criteria of the reliability are:

0.90 – 1.00 : High

0.50 – 0.89 : Moderate

-.49 : Low

(Shohamy, 1985)

The result of the try-out test reliability (the coefficient correlation of whole items) was 0.90. It could be inferred that the test had high level of reliability. Based on the

result of those analyses (See Appendix 5), the researcher dropped 10 items. Briefly, there were 40 items administered in the pre test and post test.

a. Level of difficulty

Level of difficulty is used to classify the test items into difficult items and easy ones. The items should not be easy for the students to see the difficulty of the test items; this research used this following formula:

$$LD = \frac{U + L}{N}$$

In practice, the formula can be expanded as follows:

LD : Level of difficulty

U : Total of the correct answer of the higher group

L : The total of the correct answer of the lower group

N : That is the total number of the students following the test

Classification :

- a. An item with LD 0.00 – 0.30 = difficult
- b. An item with LD 0.31 – 0.70 = Average (good item)
- c. An item with LD 0.71 – 1.00 = Easy

(Shomamy, 1985)

After the calculation, the test items are average in the level of difficulty and some are categorized as having difficult level. There are 7 items which are categorized difficult. They had been discarded as the result.

b. Discrimination power

Discrimination power refers to the extent to which the items can differentiate between high and low-level students on that test. Besides the difficulty level, to determine whether 150 items are of good quality, there should be a discrimination power. Discrimination power is used to differentiate between students with high ability and those with low ability. The following formula calculates the discrimination power:

$$DP = \frac{U - L}{1/2 N}$$

Notes:

DP : Discrimination Power

U : The total of correct answer of higher group

L : The total of correct answer of the lower group

N : Total number of students

The criteria are:

1. DP = 0.00 – 0.20 : Poor items
2. DP = 0.21 – 0.40 : Satisfactory items
3. DP = 0.41 – 0.70 : Good items
4. DP = 0.71 – 1.00 : Excellent items
5. DP = - (Negative) : Bad items (Should be omitted)

(Shohamy, 1985)

Based on the computation of discrimination power of the try-out test (See Appendix 5), it was found that there were 10 items (items number 5, 9, 15, 17, 21, 29, 30, 36, 37, and 39) considered as poor items and bad items must be omitted since the

discrimination power was between - (Negative) to 0.19. Next, there were 24 items (1,2, 4, 6, 11, 12, 13, 14, 18, 20, 22, 24, 25, 26, 31, 32, 33, 34, 35, 38, 40, 41, 42, and 44) which had satisfactory discrimination power. Then, there were 16 items (3, 7, 8, 10, 16,19, 23, 27, 28, 43, 45, 46, 47, 48, 49, and 50) which belong to good category of discrimination power.

3.6.3. Validity of Questionnaire

The researcher developed a questionnaire based on the principles of game-based learning using Perrota's (2013) theory. To ensure its validity, expert judgment was employed to analyze both face validity and construct validity. A validation form (Appendix 10) was provided to experts, who assessed whether all items accurately represented the principles of game-based learning theory using a validation checklist. The validation instrument utilized a five-point Likert scale with categories: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2), and Strongly Disagree (1). The ratings from three expert judgments were analyzed to determine the average score, which was used to assess the questionnaire's suitability. To measure validity, the researcher applied Aiken's V formula (Aiken, 1985), using ratings from three validators to evaluate the questionnaire's validity. The criteria for determining the validity level of the developed questionnaire are outlined in Table 3.4.

Table 3.4 Criteria for the Level of Validity

Value	Criteria
0.8 – 1	Very High
0.6 – 0.79	High
0.40 – 0.59	Medium
0.20 – 0.39	Low
0.00 – 0.19	Very Low

The table below shows the Aiken's V scores calculated for 10 test items, indicating the level of agreement among the raters and the overall validity of the instrument. A detailed breakdown of the scores and their interpretation is provided below.

Table 3.5 Result of Questionnaire Test Validity

Items	Validator			S1	S2	S3	Σs	n(c-1)	V	Criteria
	I	II	III							
Items 1- 10	42	48	41	32	38	31	101	120	0.84	Very High

With an Aiken's V score of 0.84, the validity of the questionnaire items is classified as very high, showing strong agreement among the three raters on the test's validity. This indicates that the test items are highly relevant and suitable for the questionnaire.

After accepting validation from expert, the questionnaire is tried-out. To analyze the construct and content validity, the results of try-out are calculated by correlating each item with total score using Correlation Pearson Product Moment in SPSS. The result showed that all items of questionnaire was valid ($r_{\text{table}} < r_{\text{hitung}}$). From the data showed that r_{table} for $n-2= 25$ samples with significance level 5% were 0.396, whereas all the items have r_{hitung} more than 0.396. It means that all items of questionnaire were valid. The table specification Principles of Game-based Learning questionnaire can be seen below:

Table 3.6 Specification Principles of Game-based Learning Questionnaire

NO	Principles of Game-based Learning	Items Numbers	Total
1	Intrinsic motivation	1, 2, 3, 4, 5	5
2	Authenticity	6, 7, 8, 9, 10	5
3	Self-reliance and autonomy	11, 12, 13, 14, 15	5
4	Experiential learning	16, 17, 18, 19, 20	5
TOTAL			20

3.6.4. Reliability of Questionnaire

To measure the reliability of questionnaire items, Cronbach's Alpha in the application of SPSS is used (George and Mallery, 2003, cited in Harris, n.d.). The reliability of each aspect in the questionnaire is assessed by correlating each item with its construct in SPSS. The questionnaire is scored according to the Likert scale, and the reliability of the questionnaire is measured using the Cronbach Alpha Coefficient. The researcher used this method because it is the most common approach to assess the consistency of the indicators in the questionnaire. The alpha ranges between 0 and 1. The higher the alpha, the more reliable the questionnaire will be (Setiyadi, 2018). And for knowing the classification of reliability are as follows:

- a. Between 0.800 to 1.00 = very high-reliability
- b. Between 0.600 to 0.800 = high reliability
- c. Between 0.400 to 0.600 = moderate reliability
- d. Between 0.200 to 0.400 = low reliability
- e. Between 0.000 to 0.200 = very low reliability

The result of the reliability was as follow:

Reliability Statistics	
Cronbach's Alpha	N of Items
.919	20

The computation showed that the coefficient reliability of Principles of Game-based Learning Questionnaire was 0.919. It could be said that the Principles of Game-based Learning Questionnaire was reliable and consistent.

3.7.Data Collecting Technique

As the data were in the form of reading comprehension for students, the data were gathered using two reading tests: the pre-test and post-test. Each student in each test had to answer the reading comprehension questions. The pre-test and post-test scores of the students were evaluated to determine their abilities before and after the treatments. The data collection technique was explained as follows:

a. Pre-test

The pre-test was conducted to identify the access points for reading comprehension aspects of the students before the treatments. The students were given a multiple-choice test for this assessment. The test items in the pre-test were similar to those in the post-test. The test was in the form of multiple-choice questions about descriptive texts with four alternative options.

b. Treatment

After conducting the pre-test, the students in the experimental class received the treatment using the integration of the LRD strategy and Wordwall as Game-based Learning. Additionally, the students in the control class were taught using the Original Listen-Read-Discuss Strategy. The students from both classes attended the learning process several times. The goal of the treatment was for the students to improve their reading comprehension.

c. Post-test

The function of this test was to determine the students' ability and progress in reading comprehension achievement after being taught using the chosen technique. The students were also given multiple-choice tests in this assessment, with four alternative options.

d. Questionnaire

The questionnaire was given to the students after the pre-test and post-test had been conducted. The questionnaire measured the principles of Game-based Learning that most influenced the students' reading comprehension. It took the form of close-ended questions, with responses ranging from "strongly disagree" to "strongly agree," and the scores ranged from 1 to 5. The students' native language (Indonesian) was used in the questionnaire to prevent misunderstandings.

In short, the data were obtained from two kinds of tests pre-test and post-test and also from the questionnaire. The two tests were administered to both the experimental and control classes. On the other hand, the questionnaire was administered only to the experimental class, as the researcher aimed to explore the correlation between game-based learning principles and reading comprehension achievement with the integration of Listen-Read-Discuss and Wordwall as Game-based Learning. Therefore, the test instructions for both classes were the same, without any modification.

3.8. Procedure of Data Collection

The researcher uses the following procedures in order to collect the data:

1. Determining subjects of the research

The population of this research are the seventh grade of junior high school students. The researcher takes one class as experimental class.

2. Selecting the material

The material of this research will be descriptive text based on Curriculum for junior high school students at the second grade.

3. Administering the try-out test

The aim of this test is to determine the quality of the test uses as the instrument of the research and to determine which item should have been revised or dropped for the pre-test and the post-test.

4. Revising of the instruments

In this part, the instruments will be revised based on the result of the tryout. The revision can be done by changing the ambiguous statements, distracters, double correct answers, or dropping the items that do not fulfill the good criteria of the research instrument.

5. Administering the Questionnaire

The questionnaires of this research are the questionnaire of Game-based Learning Principles. The items are administered to measure students learning Game-based Learning chosen. The items of the questionnaire of learning Game-based Learning are limited with five choices.

6. Administering the pre-test

The pre-test is administered to assess the reading comprehension aspects before the treatments are offered in the class. This test also consists of reading comprehension from the descriptive text of the multiple-choice test. After the test have been conducted every test item may be calculated.

7. Conducting treatments

After doing the pre-test, the students will be given three times treatments. The treatments by using the integration of LRD Strategy and Wordwall as Game-based Learning in experimental class.

8. Administering the post-test

As the treatments will be given the post-test will be conducted to assess whether or not there is a significant improvement between pre-test and post-test reading comprehension of students in pre-test and post-test results.

9. Administering the Questionnaire

The questionnaires of this research are the questionnaire of Game-based Learning. The items are administered to measure students learning Game-based Learning chosen after getting the treatment.

10. Data analysis

The data is analyzed using SPSS after carrying out the pre-test and the post-test. It is used to know the effects of reading comprehension of the students after being taught by using the integration of LRD Strategy and Wordwall as Game-based Learning and the researcher analyzes the students' response to the questionnaire by using Pearson Product Moment in SPSS.

3.9. Data Analysis

To find out the differences between experimental class and control class in their reading comprehension achievement, the researcher passes the following steps in analyzing the data as follows:

1. The researcher makes a scoring of students' pretest and posttest of two classes and questionnaire of one class.
2. In measuring a significant difference between experimental class and control class, the researcher uses the data analyzed by using Independent Sample T-Test in SPSS to find out the difference between students' reading comprehension taught by using Integrating Listen-Read-Discuss (LRD) and

Wordwall as Game-based Learning and those taught by original Listen-Read-Discuss.

3. In measuring the improvement, a paired sample t-test is used to analyze the scores of the experimental class.
4. The data from the Game-based Learning questionnaire and reading test are used in order to find the correlation between game-based learning principles and reading comprehension achievement on the integration of Listen-Read-Discuss and Wordwall as Game-based Learning. The data are analyzed by using Pearson Product Moment Correlation (SPSS) to investigate whether there is any correlation.
5. The researcher constructs the conclusion. The conclusion can be developed from the result of statistical computerization that is in SPSS and researcher observation during the teaching and learning process.

3.10. Normality test

After collecting the data for the pre-test and post-test, the data is analyzed using the Shapiro-Wilk test on SPSS Statistics version 27. The first requirement is to test the data normality. The normality test is used to determine whether the data from the experimental class one and the experimental class two are normally distributed or not. The hypothesis formulas are:

H_0 : The data has normal distribution.

H_a : The data has not normal distribution.

While the criteria acceptance of hypotheses for normality test are:

H_0 is accepted if $\text{Sig.} > \alpha = 0.05$

H_a is accepted if $\text{Sig.} < \alpha = 0.05$

3.11. Homogeneity Test

A homogeneity test must also be conducted before the data is processed. This test is run to see the similarity of the distribution between the two classes. The hypotheses are:

H_0 : The data is taken from two samples in the same variances (homogeneous).

H_a : The data is not taken from two samples with the same variances (homogeneous).

The criteria acceptance of hypotheses for homogeneity test are:

H_0 is accepted if $\text{Sig.} > \alpha = 0.05$

H_a is accepted if $\text{Sig.} < \alpha = 0.05$

3.12. Hypothesis Testing

Hypothesis testing is used to determine whether the hypothesis in this research is accepted or not. The researcher uses the Independent Sample T-Test in SPSS to find out the significant difference in students' reading comprehension. The formulation can be seen as follows:

H_0 : There is no significant difference between students' reading comprehension taught by using Integrating Listen-Read-Discuss (LRD) and Wordwall as Game-based Learning and those taught by original Listen-Read-Discuss.

H_a : There is a significant difference between students' reading comprehension taught by using Integrating Listen-Read-Discuss (LRD) and Wordwall as Game-based Learning and those taught by original Listen-Read-Discuss.

With the criteria of hypothesis:

H_0 is accepted if $\text{sig} > \alpha = 0.05$

H_a is accepted if $\text{sig} < \alpha = 0.05$

The researcher used the Pearson product-moment correlation to find out the correlation between game-based learning principles and reading comprehension achievement on the integration of Listen-Read-Discuss and Wordwall as game-based learning. The hypothesis of the research question is drawn as follows:

H_0 : There is no correlation between game-based learning principles and reading comprehension achievement on the integration of Listen-Read-Discuss and Wordwall as Game-based Learning.

H_a : There is correlation between game-based learning principles and reading comprehension achievement on the integration of Listen-Read-Discuss and Wordwall as Game-based Learning.

This chapter has discussed the design, variables, data sources, data collecting technique, data collection instruments, research procedures, data analysis, and hypothesis testing.

V. CONCLUSION AND SUGGESTIONS

The final chapter presents the conclusions of the research findings and suggestions for English teachers who apply the integration of the Listen-Read-Discuss Strategy and Wordwall as Game-based Learning to improve students' reading comprehension. This chapter also presents suggestions for further researchers who want to conduct a related study.

5.1. Conclusion

Based on the results of this study, it can be concluded that combining the Listen-Read-Discuss (LRD) strategy with Wordwall as a game-based learning tool is effective in improving students' reading comprehension. Although there was a difference in the pre-test scores between the experimental and control groups, the overall improvement in the experimental group was higher. This suggests that using Wordwall in each stage of the LRD strategy had a positive impact on students' reading skills. Among the five aspects of reading, vocabulary showed the most improvement, while making inferences showed the least. This means that students still need more practice in understanding implied meanings in texts. In addition, the questionnaire results showed that students felt more motivated when learning with interactive digital tools like Wordwall, which made the learning process more fun and engaging. The analysis also found a moderate positive relationship between

game-based learning and reading comprehension. However, other factors such as students' reading habits and the teaching methods used also play an important role in their learning outcomes.

5.2. Suggestions

After conducting her research on investigating EFL learners' reading comprehension achievement taught by the integration of Listen-Read-Discuss Strategy and Wordwall as Game-based Learning at SMP PGRI 2 Sukadana, the researcher suggests teachers and further researchers to do things as follows:

5.2.1. Suggestions for English Teachers

This study suggests that English teachers should mix teaching strategies with fun learning tools to help students improve their reading skills. The Listen-Read-Discuss (LRD) strategy helps students use their background knowledge and understand the text better, but it might not be enough to build vocabulary or keep students interested, especially in a regular classroom. Wordwall, which provides fun and interactive games, can make learning more enjoyable. When LRD and Wordwall are used together, they can create a more complete and interesting learning experience. Teachers are encouraged to use Wordwall not just as an extra activity, but as an important part of the lesson. It can be used not only for reading, but also for writing and speaking. Teachers should also include activities that make students think more deeply, like drawing conclusions or finding hidden meanings. By combining games and discussions, teachers can help students enjoy learning and improve their reading in a fun and meaningful way.

5.2.2. Suggestions for Future Researchers

For future researchers, this study opens several opportunities for further exploration. One possible direction is to test the integration of LRD and Wordwall in other language skills such as writing or speaking, where students can apply vocabulary and grammar in productive tasks. Researchers may also try this approach with students from different age groups, such as elementary or senior high school, to find out how digital tools like Wordwall work across various educational levels. In addition, future studies could compare Wordwall with other game-based platforms to discover which tools work best in different learning contexts. Another interesting area to explore is student motivation, especially how interactive media affects their willingness to participate, stay focused, and take responsibility for their own learning.

This study focused mainly on analyzing the improvement in reading aspects in the experimental class, especially identifying which aspect improved the most. However, the same analysis was not applied to the control class. Future research should consider comparing both groups in more detail, including which aspects of reading comprehension showed the most or least improvement in the control group. This would provide a more balanced view of how different teaching methods affect specific reading skills. It could also help explain why the control group showed lower overall progress, and whether that was due to the method itself, the class environment, or students' responses to traditional teaching. Such deeper analysis can contribute to more accurate and complete conclusions about the effectiveness of each teaching approach.

Overall, the research conclusions and suggestions have been presented. These suggestions can serve as useful guidance for future studies focused on enhancing students' reading comprehension.

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