

**THE EFFECTIVENESS OF USING WORDWALL THROUGH
COLLABORATIVE LEARNING TO IMPROVE STUDENTS' WRITING
SKILLS OF TENTH GRADE STUDENTS
AT SMAN 13 BANDAR LAMPUNG**

(Undergraduate Thesis)

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ABSTRAK

EFEKTIVITAS PENGGUNAAN WORDWALL MELALUI PEMBELAJARAN KOLABORATIF UNTUK MENINGKATKAN KETERAMPILAN MENULIS SISWA KELAS X DI SMAN 13 BANDAR LAMPUNG

Oleh

TRIA LESTARI

Tujuan penelitian ini adalah untuk mengetahui peningkatan keterampilan menulis yang signifikan pada siswa kelas X dalam teks deskriptif melalui penggunaan Wordwall yang dikombinasikan dengan pembelajaran kolaboratif di SMAN 13 Bandar Lampung. Penelitian ini menggunakan metode kuantitatif, khususnya desain one-group pre-test dan post-test. Teknik random sampling digunakan untuk memilih sampel penelitian yang terdiri dari 33 siswa kelas X.E7 di SMAN 13 Bandar Lampung. Dalam pelaksanaan penggunaan Wordwall melalui pembelajaran kolaboratif, penelitian ini mengumpulkan data melalui tes menulis sebagai instrumen yang digunakan pada pre-test dan post-test. Data menunjukkan bahwa nilai rata-rata pre-test adalah 47,32, nilai rata-rata post-test adalah 63,60, dan n-gain dari kedua nilai tersebut adalah (0,31), yang menunjukkan bahwa tingkat peningkatan berada pada kategori sedang. Melalui uji Wilcoxon Signed Rank Test, hasil menunjukkan bahwa nilai signifikansi lebih kecil dari 0,05, yang berarti terdapat perbedaan yang signifikan pada nilai menulis siswa antara sebelum dan sesudah penerapan Wordwall melalui pembelajaran kolaboratif. Temuan ini menunjukkan bahwa penggunaan Wordwall melalui pembelajaran kolaboratif efektif dalam meningkatkan keterampilan menulis siswa.

Kata kunci: Keterampilan menulis, teks deskriptif, Wordwall, pembelajaran kolaboratif.

ABSTRACT

THE EFFECTIVENESS OF USING WORDWALL THROUGH COLLABORATIVE LEARNING TO IMPROVE STUDENTS' WRITING SKILLS OF TENTH GRADE STUDENTS AT SMAN 13 BANDAR LAMPUNG

By

TRIA LESTARI

The aim of this research is to investigate the significant improvement of writing skills of tenth grade students in descriptive text through the use of Wordwall combined with collaborative learning at SMAN 13 Bandar Lampung. This research employs quantitative research, particularly a one-group pre-test and post-test design. Random sampling technique is used to select the research sample consisting of 33 students in class X.E7 at SMAN 13 Bandar Lampung. In the implementation of Wordwall through collaborative learning, this research collects the data through a writing test as the instrument used in the pre-test and post-test. The data show that the pre-test mean score was 47.32, post-test mean score was 63.60, and the n-gain of both scores was (0.31), which indicates the level of improvement is moderate. Through the Wilcoxon Signed Rank Test, the result shows that the significance value was lower than 0.05, which indicates that there is a significant difference in students' writing scores between before and after the implementation of Wordwall through collaborative learning. These findings indicate that the use of Wordwall through collaborative learning is effective in improving students' writing skills.

Keywords: *Writing skills, descriptive text, Wordwall, collaborative learning.*

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Tria Lestari

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In

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The Faculty of Teacher Training and Education**



**ENGLISH EDUCATION STUDY PROGRAM
DEPARTMENT OF LANGUAGE AND ARTS
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Research Title : **THE EFFECTIVENESS OF USING
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Menyatakan bahwa skripsi ini adalah karya dari pelaksanaa penelitian saya sendiri. Sepanjang pengetahuan saya, karya ini tidak berisi materi yang ditulis orang lain, kecuali bagian bagian tertentu yang saya gunakan sebagai acuan. Apabila ternyata terbukti bahwa pernyataan ini tidak benar, sepenuhnya menjadi tanggung jawab saya.

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CURRICULUM VITAE

The researcher, Tria Lestari, was born on January 15, 2004 in Pesawaran. She is the eldest of two siblings; her younger sister, Laila Ramadhani Putri, is five years younger than her.

She began her education at PAUD Nurul Iman Condong Sari in 2007. Two years later, she attended SDN 1 Sindanggarut and completed her education there in 2015. After that, she continued her studies at SMPN 16 Pesawaran for three years. After completing junior high school in 2018, she went on to SMKN 1 Gadingrejo and graduated in 2021. In the same year, she attempted to enter college but was unsuccessful, so she decided to take a gap year. After a one-year gap year, in 2022, she was admitted as a student in the English Education Study Program at the University of Lampung.

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MOTTO

“Just let it go, do whatever you like. There’s no need for an answer if there’s no answer” (Aami)

“On days when you feel like the world is full of problems, it means you’re growing up; at some point, we all come to realize that the world doesn’t offer a happy life to everyone” (Grace)

DEDICATION

Bismillahirrahmanirahim, This thesis is proudly dedicated to:

My beloved Parents – Marino and Emilia

My sister – Laila Ramadhani Putri

My honorable lecturers

My Bestfiends

My proudly Almamater – University of Lampung

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Bandar Lampung, Mei 2026

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I. INTRODUCTION

This chapter contains the background of the research, research questions, research objectives, the uses of the research, scope of the research, and definition of terms.

1.1. Background

Learning and teaching English is a challenging process and also requires a lot of time as well as effort and a good and planned strategy. In education, teaching is not only about delivering material but also requires the creativity of teachers to create learning experiences that can help students understand the lesson and develop their skills. Teachers are expected to be able to design effective lessons in achieving learning objectives and engaging enough to make each student more actively involved in the learning process. Among the four basic language skills, writing is considered one of the important skills that students must master.

According to Hyland (2003) through writing, students are able to convey their ideas, thoughts, and feelings in a clear, structured, and meaningful manner. In addition, writing plays an important role in language learning because it is closely related to cognitive processes, especially thinking skills. Through writing activities, students are able to develop their ideas and express their understanding as well as communicate information effectively. Writing is considered an integral component of language learning, as it not only represents language use but also supports the development of critical and analytical thinking skills, Weigle (2002). Writing is one way for individuals to develop their ideas so that they become more meaningful and well-organized. Writing plays a key role in the learning process, especially for students in junior high and senior high school, as they are required to show what they know through writing. The ability to express ideas clearly and well is an important skill that helps with academic success and plays a key role in future

career opportunities, Graham & Hebert (2011). Therefore, improving students' learning outcomes is closely related to their ability to develop clear and meaningful writing skills.

According to Nunan (2003), writing is a complex cognitive process that requires continuous intellectual effort over a considerable period of time. Writing skill is not only difficult to teach but also challenging to master. Because writing requires students to understand all aspects of grammar in writing, develop ideas, as well as make proper judgments. Hyland (2003) notes that students often face difficulties in writing due to their inability express their thoughts clearly, carefully and meaningfully. Therefore, they require guidance and regular practice so that they can gradually improve their writing skills with steady support and practice.

Many Indonesian students still struggle with writing, particularly when asked to write descriptive works. Previous research conducted by Duha (2022) shows that many eighth-grade students experience difficulties in writing descriptive texts. Some of the problems found include limited vocabulary, lack of understanding of the basic structure of descriptive texts, as well as difficulties in using grammar, such as subject-verb agreement, correct use of tenses, punctuation, and capitalization. In addition, students also often find it difficult to develop ideas and organize them sequentially, so the paragraphs they write are less structured and not detailed enough. The research also found that students' learning motivation is still low, their experience in writing activities is still limited, the learning media used are less varied, and their understanding of grammar and vocabulary is still not optimal.

Furthermore, in this research, an interview was conducted with an English teacher at SMA Negeri 13 Bandar Lampung to obtain information about what happens in the field. From the results of the interview, it appeared that there are challenges that often arise when teaching descriptive texts. The teacher explained that the main problem is the limitation of vocabulary possessed by some students. This condition makes it difficult for them to express their ideas in writing. They consider writing difficult and less enjoyable. In addition, the teacher still uses conventional techniques, such as relying only on textbooks, which makes the learning process less interactive and engaging. As a result, when students are asked to write, they

experience difficulties in expressing ideas, thinking clearly, and organizing descriptive texts systematically. This indicates that more interactive and engaging learning is needed so that students can focus better during the learning process. With a more colorful and varied learning atmosphere, it is hoped that students' interest in writing can increase, and ultimately their writing skills will develop better.

To help students overcome various difficulties in writing, teachers need to find the right learning methods so that students' writing skills can develop more easily. One way that can be implemented is through group work. By learning together in groups, students can help each other, exchange ideas, and understand the material gradually better. Through this process, they also find it easier to understand the lessons given. Collaborative learning is a learning method that involves students working together in groups and supporting each other during the learning process. In this situation, each student also does not need to think hard about their own lessons, students also contribute to the understanding and development of the group as a whole. The learning process becomes more effective and meaningful, and provides a more comfortable learning atmosphere for students to develop their abilities.

According to Dillenbourg (1999) collaborative learning is a learning process in which two or more people work together to study or understand something, with each member actively involved in finding solutions together. This opinion is also supported by Vygotsky (1978) who stated that interaction among students can help them understand and learn new things better. Through collaborative activities, When students do things in groups they get an understanding of what they are learning because they help each other out. In these groups students talk about what they think discuss the parts and work together to find the answers. Learning in groups makes students feel more motivated. They become more active in sharing their ideas. They can also learn new things from their group members, making the learning process more meaningful and engaging.

Moreover, teachers need to use more specific techniques to apply collaborative learning effectively. One technique that is suitable for teaching writing is collaborative writing. This method allows students to work together in a supportive

environment, leading to improved learning outcomes. Collaborative writing positively impacts students' learning processes and peer support. It has been shown to reduce students' anxiety about writing tasks, such as organizing ideas, expressing thoughts clearly, constructing strong sentences, and ensuring coherence between paragraphs.

To support this process, it is highly recommended that teachers select and prepare a variety of instructional media that can engage students, promote active learning, and encourage their meaningful participation in the teaching and learning process. According to Mayer (2009) learning through digital media can enhance students' engagement and improve understanding because multimedia elements such as text, images, and animation help learners process information more effectively than traditional instruction alone. Borg (2019) as cite in Amri et al. (2023) In the context of teaching writing, educational institutions and teachers need to pay close attention to how writing is taught in order to support the development of students' writing skills. This includes providing clear instruction, giving sufficient opportunities for practice and feedback, and integrating digital technologies to make the writing process more engaging and to support students' digital literacy. In this digital era, tools such as Wordwall and other interactive platforms can effectively support collaborative learning by making lessons more engaging and interactive. These tools encourage active student participation and help create a more dynamic teaching and learning process.

There are several previous studies related to use Wordwall and collaborative learning in improving students writing ability. Jawari Muslim et al. (2022) stated in their research with title Improving students writing skill by collaborative writing for students of XI IPA 2 in SMA Negeri 4 Kediri showed that the use of collaborative writing was effective, as it enabled all students to reach the minimum passing grade. The findings demonstrated that students at eleventh graders at SMA Negeri 4 Kediri who participated in collaborative writing showed significant improvements in their writing skills, motivation, and confidence. The researchers concluded that collaborative writing is an effective pedagogical technique for improving writing proficiency among high school students. Similary, Rahmawaty

et al. (2024) found that the implementation of collaborative learning strategies contributed to the improvement of students' writing skills and enhanced their active participation in the learning process. The findings indicated a significant improvement in students' narrative writing, particularly among those who were taught through collaborative approaches.

Regarding the use of digital tools, Amri et al. (2023) stated in their research the results showed that in eleventh grade students of social class 2 (XI IPS 2) the group taught using Wordwall had a significant improvement in their writing skill. The researchers concluded that the use of Wordwall, with its interactive, collaborative, and feedback-rich features, significantly enhanced students' writing skills, motivation, and engagement. They recommended its integration into language learning as a valuable technological tool to support writing instruction.

Veloni et al. (2024) conducted a study to examine the effectiveness of the Word Wall game in improving writing skills in second-grade students at SMP Negeri 7 Padang. The results showed that the use of the Wordwall game made a positive contribution to the development of students' writing abilities. In addition, the researchers reported that the use of Wordwall not only improved students' grammar and vocabulary but also increased motivation and engagement during learning activities. Putri, et al. (2024) in their study also reported that the use of AI-based tools, such as Wordwall, in language learning led to improvements in learning outcomes in the context of EFL. This indicates that students who use Word Wall have significantly improved writing abilities and stated that Wordwall is effective in enhancing students' writing skills.

However, previous studies have examined the impact of using collaborative learning and wordwall separately and not in combination. Furthermore they focused in various types of texts. Therefore, this research aims to investigate the effectiveness of using wordwall through collaborative learning to improve students' writing skills in descriptive text.

1.2. Research Question

Based on the background presented above, the research question of this study is formulated as follows:

”Is there any significant difference on students’ writing skills after being taught using Wordwall through Collaborative Learning?”

1.3. Research Objective

The general objective of this research, based on the problem formulation is: To find out whether there is any significant difference on students’ writing skill after being taught using Wordwall through Collaborative Learning.

1.4. The Use of the Research

- a. Theoretically, this research is expected to contribute to and strengthen existing literature by providing evidence that the use of digital interactive media, such as Wordwall, can facilitate students’ collaboration and enhance their understanding of writing, particularly in composing descriptive texts.
- b. Practically, this research is expected to assist English teachers in designing engaging and effective writing activities through the integration of digital tools and collaborative learning, thereby enabling students to improve their writing skills more effectively.

1.5. Scope of the Research

This research employs a quantitative approach to analyze the data. It focuses on the implementation of collaborative learning supported by digital interactive media, specifically Wordwall, in teaching descriptive writing on the topic of “a historical place.” In this research, students are required to produce a descriptive text, which is assessed based on Heaton (1991) five aspects of writing, namely content, organization, vocabulary, language use, and mechanics. During the learning process, students work collaboratively in groups to complete the assigned tasks. The population of this research consists of students at SMA Negeri 13 Bandar

Lampung, while the sample is selected from one of the first-grade classes that has previously learned descriptive text.

1.6. Definition of Terms

There are several terms defined by the researcher to provide a clear understanding of the concepts used in this research, as follows:

1. Collaborative learning is a learning approach that brings several students together in a group so that they can learn to work collaboratively. In collaborative learning, a group consists of two or more students who work together to complete tasks, solve problems, or understand new concepts. Through collaborative learning, students are encouraged to participate more actively, interact, and work together. They can develop ideas by exchanging ideas, knowledge, and skills with each other.
2. Writing is a process of expressing ideas, experiences, feelings, and thoughts in written form, which serves as a means of communication with others. Writing is a skill in which we can express our feelings or ideas which are arranged in words, sentences, and paragraphs by using our brains and hand, Nunan (2003). Writing involves the intellectual generation of content followed by its transcription. It emerges as a critical proficiency across scholarly and occupational spheres. In routine applications, writing fulfills an essential function by facilitating the transmission of data and the interchange of viewpoints.
3. Teaching writing is an activity that helps students understand basic concepts in writing. This also serves as a motivation for them to understand structure, organization, as well as the principles of proper and correct writing. This activity is useful for developing students' critical thinking and cognitive skills.
4. Descriptive text functions as a textual form dedicated to vividly portraying particular subjects, including persons, locales, items, or creatures, with clarity and depth. Proficiency in this genre demands examination of its primary components: communicative objectives, schematic organization, and lexico-grammatical features. Its central aim lies in delivering a comprehensive depiction of the focal entity. Structurally, it is typically divided into two main parts: identification, which introduces the subject, and description, which

elaborates on its characteristics in detail.

5. Wordwall serves as a digital tool for generating educational games designed to sharpen students' reactive capabilities. Freely accessible and integrated with evaluative functionalities, it aids educators in formulating instructional exercises. Offering diverse templates adaptable for pedagogical purposes, the platform permits effortless navigation between options. Moreover, it equips teachers with mechanisms to devise and allocate student assignments, thereby augmenting classroom-based learning initiatives.

Those points above include the background, research questions, research objective, the use of the research, scope of the research and definitions of terms of the research. Thoroughly, this chapter consists of the explanations that are prior to give more information to the next chapter.

II. LITERATURE REVIEW

This chapter discusses several theoretical concepts that support the research, including the concept of writing, aspects of writing, process of writing, and teaching writing. It also covers the concept of collaborative learning, descriptive text, Wordwall, and teaching writing using wordwall through collaborative learning. In addition, this chapter presents the theoretical assumption and the hypothesis of the research.

2.1. Concept of Writing

Writing is a multifaceted skill that plays an essential role in expressing thoughts, feelings, and ideas in a well-organized manner. It functions as a key medium of communication, enabling individuals to convey their messages clearly and effectively to others.

2.1.1 Definition of Writing

There are many definitions of writing that have been stated by several experts. According to Nunan (2003), writing is the process of thinking to invent ideas, thinking about how to express into good writing, and arranging the ideas into statement and paragraph clearly. It means that the students are expected to explore the ideas and arranging into good paragraph. Similarly, Leki (1992) describes writing as a way of communicating, where the writer uses it, language to express ideas, thoughts, and feelings. This highlights the communicative purpose of writing, emphasizing its role in sharing personal and external experiences with others.

Meanwhile, According to Brown (2001) writing is a cognitive process. Brown emphasizes that writing is a thinking process, wherein writers must not only generate interesting ideas but also develop them into structured forms.

Raimes (1983) also describes writing as a cognitive process, emphasizing that writing is not simply a matter of putting words on paper, but involves a series of mental activities such as generating ideas, organizing them, drafting, revising, and editing. She highlights that writers need to think carefully about what they want to say and how to express it clearly, making writing a complex and recursive process that develops over time. This needs the help of your eyes, brain and hands working together. Therefore, writing is both a cognitive and productive process. It requires writers to think of ideas organize them and turn them into text. When students engage in writing activities, they can improve their thinking skills and develop their English proficiency. This includes enhancing their understanding of grammar and expanding their vocabulary.

Furthermore, According to Harmer (2004) writing is a process that involves planning what will be written, composing an initial draft, revising by evaluating content and structure, and producing a well-organized final version. He emphasizes that writing is not direct to the final stage but is a recurring process where the writer can return to previous stages to improve their writing.

Based on the explanation above, it can be concluded that writing is a complex process that involves more than just writing words on paper. Writing requires critical thinking and the ability to organize and express clear ideas in a written form. In addition, writing is an important way to communicate, allowing individuals to share their thoughts, experiences, and knowledge with others in a clear and meaningful way.

2.1.2 Aspect of Writing

Writing is the act of putting thoughts or ideas into words in a way that can be clearly understood by others about what you mean. Writing needs to consider several important things. Good writing skills need to include these essential elements so that students can succeed, because they have to create clear and effective writing. According to Heaton (1991), there are five aspects of writing. They are:

1. Content refers to the substance of writing, the experience of the main idea (unity), i.e., groups of related statements that a writer presents as unit in developing a subject.
2. Organization refers to the way ideas are arranged and presented in a piece of writing. It involves the overall structure of the text as well as the arrangement of paragraphs and sentences to ensure coherence and clarity.
3. Vocabulary refers to the selection of appropriate words that suit the content of the writing. It is based on the assumption that writers aim to express their ideas as clearly and directly as possible.
4. Language Use (Grammar) refers to the correct application of grammatical rules and syntactic structures in combining and organizing words, phrases, clauses, and sentences. This aspect helps to show logical relationships within a paragraph.
5. Mechanics refers to the writer's ability to produce text accurately in terms of punctuation, spelling, and capitalization.

Based on the statements above, it can be concluded that there are five components or aspects of writing as identified by Heaton (1991) which are widely used in assessing writing skills. These components include content, organization, vocabulary, language use, and mechanics. Each of these aspects plays a crucial role in evaluating students' writing ability as well as the overall quality of their written work.

2.1.3 Process of Writing

The writing process is something a writer does by going through different steps that are connected to each other, which help in making a written piece. These steps help writers work on their ideas to make the final result better organized, easier to understand, and more successful. Seow (2002) suggests that writing a piece of text involves four key steps: pre-writing, drafting, revising, and editing. The explanation of each stage is presented as follows:

1. Pre-Writing

At this stage, students engage in various activities such as brainstorming, discussions, asking questions, and providing encouragement before they start writing. This process helped students prepare their writing and gain motivation to write while maintaining focus on the main ideas they would write about.

2. Drafting

The second step is drafting, where students choose from the ideas they thought of during the pre-writing stage and organize them into a structure. The outcome of the brainstorming meeting gives a plan for how to describe the topic. The content considered the writing aspect first.

3. Revising

The next step after writing is revising. At this point, students look at their drafts to make the writing better in terms of what it says, how clear it is, and how well it's organized, often using advice from themselves, their teachers, or their classmates. Revising is a process where writers not only improve their writing style but also work on making their ideas clearer and better. At this point, teachers help students go through the revising process to make the text better and more accurate until it is ready to be completed.

4. Editing

The final step in the writing process is editing. The students review their writing to correct any errors based on the feedback they had received. This includes checking grammar, punctuation, vocabulary, and the overall presentation of the text. The goal of editing is to improve clarity and accuracy so that the final version is well-structured and free from mistakes.

Based on the discussion above, the writing process can be seen as made up of four connected steps: pre-writing, drafting, revising, and editing. In collaborative writing, students take part in every step of the process, but they focus more on the drafting part. During this stage, they work together to develop and organize their

ideas in a clearer and more structured way. At the beginning of the writing process, students come up with their own first ideas, and later they work with their classmates to improve and build upon those ideas during the writing stage. Each step plays an important role in helping students create a clear and organized written piece, as long as they properly understand and use the right methods. The teacher is very important in helping and directing students during the whole process, because good language learning happens when there is meaningful and effective teaching.

2.2. Teaching Writing

According to Brown (2000), teaching is defined as showing or helping someone to learn, as well as directing, guiding, and providing knowledge to enable understanding. In the context of teaching writing, Teachers should help students write clearly and express their thoughts accurately in writing. Therefore, teachers play an important role in assisting and encouraging students during the writing process to improve their writing skills. In addition, according to Raimes (1983), teaching writing is a special approach to reinforce learning. In other words, writing activities enable students not only to express their ideas in written form but also to develop a deeper understanding of language structures, enrich their vocabulary, and strengthen their critical thinking abilities, all of which are essential to the overall learning process. Therefore, to address issues in the writing classroom effectively, it is necessary to first identify and understand the common challenges faced by students during the learning process.

2.3. Concept of Collaborative Learning

Collaborative learning is an educational method where students work together to improve their understanding and learning experience. It happens when two or more students work together as peers to learn, figure out solutions, make better decisions, and finish tasks, Laal and Ghodsi (2012). According to Dillenbourg (1999), collaborative learning involves mutual engagement in a coordinated effort to

construct knowledge, where learners are actively involved in one another's learning processes. This collaborative approach promotes creativity, facilitates the exchange of diverse perspectives, and enables students to develop a better understanding of the various elements involved in the process of writing an essay. In this context, the teacher functions as a facilitator who provides guidance and support by ensuring that students comprehend the learning objectives, monitoring group interactions, and offering assistance when needed.

2.4. Descriptive Text

Descriptive text is a kind of writing in English that is used to give a detailed picture of a person, place, object, or event. According to Gerot and Wignell, (1995) "descriptive text is a kind of text aimed to describe a particular person, place or thing". Many students find it difficult to understand descriptive texts that explain how to describe a person, place, or thing. From the definition above, it can be concluded that descriptive text is all about providing clear and detailed information about something you can see or feel, such as the characteristics, appearance, or qualities of a person, place, or thing.

The English descriptive text is made up of two general structures, which are identification and description. In addition, according to Bamanti and Oktaviani (2011) as cited on Amelia and Iman (2022) The generic structure of a descriptive text consists of two main parts namely:

- 1) Identification; this part introduces or identifies the subject that will be described, such as a person, place, object, or animal
- 2) Description; this section provides detailed information about the characteristics, qualities, or features of the subject mentioned in the identification.

Furthermore, descriptive text has several distinctive language features:

- a. It commonly uses adjectives, classifiers, and quantifiers to describe the subject in detail, for example "*very beautiful*," "*has thick fur*," and "*a large building*."

- b. The tense that is generally used is the simple present tense, as it describes general facts. However, the past tense may also be used when referring to something that no longer exists.
- c. It often employs mental verbs, such as thinking verbs (*think, believe*) and feeling verbs (*feel, like*), to express opinions or impressions.
- d. Adverbs are also used to provide additional information about actions or descriptions, for example “*extremely high*” or “*runs very fast.*”

2.5. Wordwall

According to Azhura, et al. (2024) that learning media are important in education because they help speed up and make teaching and learning easier. Learning media helps students understand the material better, makes them more interested in learning, and encourages them to be actively involved in the learning process. Wordwall learning media is an easy-to-use and engaging learning tool that helps students feel more excited and interested in learning. Wordwall is an online tool that teachers can use for classroom activities, and there's a free version available, so its easy for educators to use for learning purposes.

In addition to being simple and cost-effective to use, this medium provides a wide range of features for presenting learning materials in the form of interactive activities, such as quizzes and games. Furthermore, Wordwall can be accessed through any device connected to the internet, which makes it possible to use it in many different learning situations, like online classes. According to Amri et al. (2023), using Wordwall as an interactive learning tool greatly helped improve students' writing abilities, showing that it supports effective and engaging writing teaching approach. Therefore, Wordwall is not just a way to share materials, but also a fun and interactive way to check understanding. Through different kinds of educational games, students can learn in a fun way, which helps them stay more interested and involved in their studies.

excitement and involvement by letting students discover what’s inside, which helps teachers introduce or revisit lessons in a more fun and interactive way. The

Matching Game helps students connect important terms with their meanings, and it lets teachers check how well students understand the concepts. The Random Wheel is a game-style tool that helps students look forward to the next question or activity, and teachers can use it to randomly pick names or topics.

The Anagram template asks students to reorder letters to make the right words, which helps them learn vocabulary and spelling better, and teachers can use it for practicing language skills. Flash cards help students learn at their own speed by letting them go over information on their own, and they also help teachers by allowing them to repeat important words or ideas in class. The Random Card template mixes up the items to make the questions come in different orders each time, which helps keep students interested and lets teachers quickly check how well students are understanding the material. By fixing the sentence, students can work on how sentences are structured and use grammar properly by sorting mixed-up words, which helps teachers spot usual mistakes in sentence structure.

The Matching Pair template helps students remember information by having them find pairs, such as vocabulary words, synonyms, or math facts. Teachers use this method to improve memory and recall in a fun and engaging way. When students find a match, they pick matching items, which keeps them involved and lets teachers see how accurate and quick they are. The Group Sorting template helps with organizing and thinking through ideas logically, offering teachers a flexible way to group topics in subjects such as science or social studies. The Complete the Sentence activity, which is a cloze exercise, helps students improve their reading comprehension and grammar skills by filling in the missing words in a sentence. This activity allows teachers to check how well students understand sentence structure and vocabulary usage. These templates are both interesting and flexible, making them great for teaching in different ways and combining online and in person learning.

2.6. Procedure for Teaching Writing Descriptive Text using Wordwall Through Collaborative Learning

The Procedure for Teaching Writing Descriptive Text using Wordwall Through Collaborative Learning are as follows:

Based on (Principle of CL, Collaborative Writing by Reither & Vipond 1989).

1. Prewriting
 - a. The teacher asks students to individually make a list of ideas based on the given topic before working in groups.
 - b. The teacher divides the students into small groups and ensures that each group consists of a diverse mix of abilities and strengths.
 - c. The teacher gives the same topic to all students (descriptive text), and each group is asked to organize their ideas and create an outline.
 - d. The group then divides the outline by selecting or assigning sections for each member to write an initial draft individually.
2. Drafting
 - a. The groups read their initial drafts and discuss significant differences in voice, content, and style. They work collaboratively to resolve these disparities.
 - b. After the discussion, the groups combine the individual sections into a single, cohesive document.
2. Revising
 - a. The groups then revise their work by reviewing the content and clarity, as well as checking for grammar, spelling, and punctuation errors.
3. Editing
 - a. Students complete the final version of their work and ensure that the editing process has been carried out before it is submitted to the teacher for checking.

By following these procedures, teachers can effectively teach descriptive writing using Wordwall through collaborative learning.

2.7. Advantages and Disadvantages

Here are several advantages and disadvantages of using the Collaborative Learning and Wordwall media in teaching writing:

2.7.1 Advantages

Collaborative learning has several advantages as well as collaborative writing:

1. **Enhancing Problem-Solving Skills:** Collaborative learning projects usually involve group work to finish a task or solve a problem. During the activity, group members share different opinions and ideas. Everyone can add something new that others may not have thought of.
2. **Improving communication skills** is important because working together depends on being able to talk clearly and work as a team to get things done. Participants use their speaking skills to talk about their thoughts, explain things clearly, and give straightforward feedback. They also use their writing skills when the task includes things like working on group writing projects or helping others edit their work.
3. Collaboration helps students to understand writing as a process, and makes it easier to understand something that can be hard to learn. One of the best ways to learn is by teaching others. When students help their friends, they also learn how to make their own writing better.
4. **Enhanced Motivation and Engagement:** Collaborative learning helps students feel more motivated and involved. When they collaborate on writing activities, it can help them be more creative, get involved more, and create a friendly and supportive learning setting.

In this study, the researcher used collaborative learning along with Wordwall as a tool. The following were the advantages of Wordwall:

1. **Increases student engagement.** Wordwall makes writing lessons more enjoyable and lively through activities such as quizzes, matching games, and word puzzles, which help students stay interested and engaged.

2. Help develop vocabulary. Wordwall offers different activities that help with spelling, using words correctly, and understanding their meanings, which are important for writing better.
3. Encourages active learning. Students aren't just sitting and listening; they take part in the learning process. This helps them better understand grammar, how sentences are built, and the ways to write effectively.
4. Students receive immediate feedback. After each activity, they can see their results right away, which helps them spot mistakes quickly and fix them, making their writing more accurate.
5. Wordwall supports collaborative learning. Many activities can be done in groups, allowing students to talk about ideas, share their views, and learn from each other. This approach helps build critical thinking skills and boosts confidence in writing.
6. The gamified nature of Wordwall boosts motivation. Scores, difficulties, and how things look can make students more excited and ready to practice writing often.

2.7.2 Disadvantages

In other hand, collaborative writing has several disadvantages according to Herwiana (2021) there are:

- a) Misunderstanding: Collaborative writing can sometimes lead to confusion or misunderstanding among students who are working together in a group. Some students did not understand what their friends were trying to say.
- b) Individualism: Some students did not feel comfortable sharing their opinions because one student wanted to handle everything by themselves. It might be harder to work with people who have different ways of thinking than to work alone.
- c) Passive students do not contribute a lot: Some students are quiet and don't share much ideas, so they don't contribute a lot. Some students are not active and don't take part in the task. Shy students didn't share their ideas because they were

scared of making mistakes. This issue mostly affected students who have poor English skills. They had nothing to say, didn't know how to use grammar correctly, and didn't have enough words to talk about. That's why they kept their mouths shut while their friends did the hard work.

- d) Some students were not able to write everything they wanted because they had to share their writing with others. They couldn't write their own thoughts because they had to collaborate on writing a single essay. In collaborative writing, students have to work together to create one piece of writing. Because of this, some students might think that their own thoughts aren't being heard properly. As a result, they often put their own opinions aside and focus on being respectful and making sure the ideas of other group members are considered and accepted.

According to Swari (2023), the disadvantages of using Wordwall, there are:

1. Limited free template: Wordwall provides a variety of templates; however, only six of them are available for free use. To access the other templates, teachers need to upgrade their account to a premium version and make the required payment. In addition, when using the free version, teachers are limited to creating their own games only up to five times.
2. Limitations of incorporating learning media: In creating the game, users are unable to upload video or audio. Therefore, the use of Wordwall is less suitable for teaching listening skills or improving students' listening abilities, as there is no audio feature available for listening activities.
3. Dependence on Internet and Devices: Wordwall requires reliable internet access and functioning devices (PC, tablet, or smartphone). In environments with unstable connectivity or limited device access, using Wordwall can be severely disrupted.

Based on the explanation above, using collaborative learning and wordwall media in teaching writing has many advantages and disadvantages. Such as improving communication, engagement, and writing skills. However, challenges like unequal participation and technical limitations should be considered. With proper planning, both methods can effectively support students' writing development.

2.8. Previous Studies

Numerous earlier studies relate to the subject of this research topic. The first study focuses on the impact of group-based learning on enhancing the writing abilities of students in English classes. Conducted by Bhandari (2022), this research utilized an experimental design. Fifty twelfth-grade learners from the Rupandehi district were chosen for the study during the 2020 school year. The students were split into two factions: one consisting of 25 individuals in the experimental category and the other with 25 in the control category. For data gathering, pre-test and post-test writing assignments were implemented, each valued at a maximum of 25 points, addressing tasks such as paragraph writing, letter composition, and essay crafting. Findings revealed that the group receiving instruction through collaborative techniques showed notably superior writing improvement compared to the control group that experienced traditional teaching methods. These results imply that collaborative learning effectively boosts students' writing abilities, allowing them to produce work of enhanced quality.

The second finding was conducted by Yesuf and Anshu (2022) explored the relationship between collaborative writing and the perceptions of EFL learners in regards to writing. The quasi-experimental design with both qualitative and quantitative approaches was applied in this study, involving an experimental group and a control group. The participants used in this study consisted of grade eleven students from Felegebirhan secondary school in Ethiopia for the year 2019. In this experiment, while the control group performed their writing tasks alone, the experimental group worked collaboratively on their writing assignment. It was found out that EFL learners perceive writing as an extremely difficult and even intimidating process, resulting in an overall negative attitude towards writing. In accordance with the results, the participants in the experimental group had a much better attitude towards acquiring writing skills compared to the control group, who did not show any improvements..

Moreover , Rezeki and Rahmani (2021) conducted a research on how CW strategy is applied in developing writing abilities and soft skills of learners. It employed a concurrent mixed-method approach where both qualitative and quantitative

instruments such as checklists, field notes, questionnaires, and writing activities were used for data collection. The participants were 17 tenth-grade students at Sekolah Tunas Bangsa Kubu Raya, an SPK (international curriculum-based) school in West Kalimantan, Indonesia. The results showed improvement in students' writing performance, and students also agreed that collaborative writing help them elaborate ideas and felt it boosted their self- confidence. The study concluded that CW not only enhances writing proficiency but also fosters essential social and emotional skills.

However, a separate study conducted by Latifah et al. (2020), that aimed at examining the effectiveness of collaborative writing approach in improving writing skills of high school seniors. In this study, the quasi-experimental design was used whereby two groups of participants were involved. One group was an experimental group which received instruction based on the collaborative writing while the other group was the control group which received conventional instruction. Both groups comprised of 30 participants in grade ten from MA Al-Ibrohimy for the year 2018/2019 academic period. It was found that collaborative writing technique was more effective than the conventional technique in developing the writing skills of participants. Both groups made improvement in post-test results, but the experimental group showed greater improvement than the control group.

Lastly, Nggawu et al. (2022) examined the effectiveness of the collaborative writing approach enhances the essay composition abilities of college students within an English as a Foreign Language setting. Their research utilized a classroom action research framework comprising two cycles, which consisted of stages for planning, acting, observing, and reflecting. The participants included 26 students in their third semester of English education who were taking an Intermediate Writing course at a university located in Indonesia.

The findings of the study showed that the implementation of collaborative writing improved students' writing skills and motivation. It also fostered greater interaction among students, encouraged critical thinking, and provided opportunities for peer support during the writing process.

There are previous studies that integrate wordwall as the tool to improving students writing ability. The first study conducted by Ritonga et al. (2025) investigated the effect of using Wordwall application-based learning media on junior high school students' writing outcomes in narrative texts. This research followed a quasi-experimental method with a nonequivalent control group design. The participants consisted of 60 eighth graders in MTS Al Ijtimaiah Siluman, where 30 students belonged to the experimental group utilizing Wordwall while 30 students were under the control group receiving conventional teaching. Based on this study, the use of Wordwall enables learner-centeredness, encourages creativity, and improves writing proficiency through instant feedback and educational engagement.

Additionally, Pratiwi et al. (2024) conducted research on the impact of using Wordwall.net and Canva as technology-based media to improve students' ability to write procedure texts in English. The CAR approach was used, whereby the research was conducted in three cycles: the pre-cycle, cycle one, and cycle two. The participants in the study were thirty-eight students in class seven of SMPN 8 Kandis. It was found that there was a consistent improvement in their performance. These applications aided in improving the understanding of the structure of procedures. Moreover, they increased the level of motivation of the learners and catered to different learning styles, including visual, auditory, and kinesthetic.

Lastly, Ariska et al. (2025) carried out research to evaluate the effectiveness of Wordwall learning media in improving students' skills in writing official letters in the context of Indonesian language classes. For conducting their research, the scholars employed a quantitative quasi-experiment approach where two groups of seventh graders were chosen from SMP Negeri 13 Kota Bengkulu; one was an experimental group while another one was control, and each of these groups comprised 30 students. It turned out from the findings obtained during the research that an experimental group achieved the mean post-test score of 80.15 compared to the control group that got 70.15. Statistical analysis of data conducted through the Mann-Whitney test showed the significance level of 0.003 (< 0.05). Thus, it can be stated that Wordwall substantially facilitated writing skills improvement in contrast to traditional methods.

On the other hand, the researcher emphasized that both approaches to collaborative learning and approaches to collaborative writing enhance students' abilities to write effectively. Contrary to previous literature, this paper introduces a unique method by integrating collaborative learning approaches with Wordwall as an electronic teaching aid. Specifically, the new method applies to the context of crafting descriptive essays. Overall, the new method encourages learners to communicate their ideas collectively, with the aim of improving their writing performance.

2.9. Theoretical Assumption

Learning and teaching of English are very essential processes in the educational sector since English is regarded and used as a world language. While learning English, learners are expected to master four basic language skills. Out of these skills, writing stands out as the hardest one because of the complexity involved. This skill involves the use of various components, including grammar, vocabulary, coherence, and organization. As a result, it becomes harder to learn than other language skills. Writing also serves as a means of communication using texts. Learners are able to express their feelings while writing; besides, they can share knowledge with others especially when undertaking group learning projects.

To effectively teach writing and support students in the learning process, an English teacher needs a solid understanding of suitable teaching techniques and instructional approaches. The teacher does not only act as a facilitator, but also as a guide who provides constructive feedback and consistently encourages students to develop and improve their writing skills. In this research, the researcher employs collaborative learning through the use of Wordwall to enhance students' writing abilities. Collaborative learning emphasizes group interaction, shared responsibility, and peer-to-peer learning, enabling students to work together in completing writing tasks and solving problems collaboratively. By incorporating Wordwall into this strategy, students can engage in interactive and gamified learning experiences that enhance their motivation and participation.

Wordwall has different templates like matching games, sorting, and quizzes that can be modified in such a way that they target vocabulary development, sentence construction, and grammar that would help with writing. The use of collaborative learning through Wordwall allows learners to engage in discussions and give each other feedback to co-construct written pieces. Such learning helps the learners enhance their writing skills and develop communication and teamwork skills, thus fostering responsibility in their learning process. Additionally, the interactive elements of Wordwall make writing practice more enjoyable and less tedious, which is particularly helpful for learners who may view writing as difficult or daunting. This method can also spark creativity and involvement, enabling students to articulate their ideas and emotions with greater confidence in writing, while promoting peer interaction and teamwork in group environments.

2.10. Hypothesis

Based on the problems identified in the first chapter, the hypothesis proposed in this research focuses on the following assumption:

“There is a significant difference on students’ writing skills after being taught using Wordwall through Collaborative Learning”

Thus, the theories that have been discussed in this chapter are the concept of writing, aspects of writing, the process of writing, teaching, writing, concept of collaborative learning, descriptive text, wordwall, teaching writing use wordwall through collaborative learning, theoretical assumption, and hypothesis.

III. METHODS

This chapter explains the research design, population and sample, research procedures, data collection techniques, instruments, reliability and validity, data analysis, and hypothesis testing.

3.1. Design

This study employed a quantitative research design to examine the impact of using Wordwall within a collaborative learning context on students' ability to produce descriptive texts. The study involved one single group of students using a one-group pretest/posttest research design. Through the process, students were exposed to activities involving Wordwall in addition to collaborative learning methods. During this period, students were involved in various games and collaboration activities to encourage them to come up with, arrange and develop their thoughts in writing. This would create an environment where the learners could express themselves imaginatively while describing particular ideas. Finally, after several lessons had been conducted, a post-test was conducted to test writing ability. Analysis and comparison between pre-test and post-test results would then be conducted.

According to Creswell (2009) quantitative research is an approach that is used to objectively verify the theory among different variables. Therefore, analysis of the data using the statistical method is possible. In order to address the research problem, the study adopted one-group pretest-posttest research design. Under this design, pretest was conducted before the treatment and post-test was administered after the treatment. The design was used to assess the effect of the treatment on the performance of students as shown below:

T1 X T2

- T1 : Administrating the Pre-Test for Students
 X : Wordwall Through Collaborative Treatment
 T2 : Administrating the post-test for Students.

3.2. Population and Sample

The population for this study comprised the first-grade students in SMA Negeri 13 Bandar Lampung in the 2025/2026 school year. The sampling technique used in this study was cluster random sampling. In this sampling technique, one intact class was chosen rather than individual students. The purpose of this sampling technique was to preserve the natural classroom environment and to make sure that the teaching process would be consistent with the curriculum in the school. One class out of twelve possible classes was chosen to be the experimental group in this population. Class X.E7, comprising 33 students, was the chosen class after coordination with the English teacher.

3.3. Research Procedure

In collecting the data, this research follow several systematic steps as outlined below:

1. Choosing Materials for the Intervention

At this phase, the researcher identifies suitable materials associated with descriptive texts and activities that are accessible on the wordwall platform.

2. Identifying the Population and Choosing the Sample

The research population consisted of first-grade students at SMAN 13 Bandar Lampung for the academic year 2025/2026. From this group, one classroom was selected as the sample for the study. This chosen classroom was identified as the experimental group and received treatment through the integration of Wordwall with collaborative learning techniques.

3. Implementing a Pre-test

Prior to the start of the treatment, a pre-test is administered to evaluate the students' baseline writing skills in descriptive texts. Students are instructed to compose a descriptive paragraph based on a specified topic. The evaluation concentrates on aspects such as the application of the generic structure of descriptive text, which includes identification and description, vocabulary use, grammatical correctness, and organization of content.

4. Implementation of the Treatments

Following the pre-test, the experimental class undergoes treatment involving collaborative learning tasks utilizing wordwall. This treatment is carried out over a span of three sessions. In each meeting, students participate in small groups to finish tasks related to descriptive paragraphs, emphasizing descriptive language, vocabulary, and sentence formulation while using wordwall as a learning resource.

5. Evaluating the Test Outcomes (Pre-test and Post-test)

Once both the pre-test and post-test have been graded, the results are examined using SPSS version 25. This examination involves computing the average scores and contrasting the findings to assess how well collaborative learning via Wordwall enhances students' ability in descriptive writing.

In conclusion, the data collection methodology in this study was carried out through several organized stages, including selecting the materials, determining the population and sample, administering the pre-test, implementing the treatment, conducting the post-test, and analyzing the results.

3.4. Data Collection Techniques

In collecting the data, the researcher conducted a pre-test and a post-test. The purpose of the tests was to measure the students' writing achievement.

a. Pre-test

A pre-test is given before the intervention to assess students' descriptive writing skills. In this test students are asked to compose short descriptive paragraph.

b. Post-test

A post-test is administered to evaluate any improvement. Students are once to write descriptive paragraph focused on identification and detail description of the subject. The post-test scores are assessed by two rater using rubric.

3.5. Instrument

The instrument used in this research was a writing test. The test involved assessing the students' ability in writing through a description task related to certain topics. The pre-test aimed at measuring the writing ability of the students prior to the intervention, whereas the post-test involved assessing any possible change or improvement that could be attributed to the teaching of the students through Wordwall within a collaborative setting.

3.6. The Report of Implementation

During the implementation of this research, one specific class was chosen for the research sample, which was class X. E7 from SMAN 13 Bandar Lampung, comprising a total of 33 students. The decision to select this particular class was made by the researcher because it was deemed to reflect the necessary population characteristics for the study. The research took place over five meetings, which included one session designated for the pre-test, three sessions for the treatment activities, and one session for the post-test. The entire duration of the research spanned around a month, commencing on October 3 and concluding on October 31, 2025. Each session was designed to last 135 minutes, adhering to a structured approach to teaching and learning. During the treatment sessions, the researcher utilized Wordwall in conjunction with collaborative writing tasks to instruct students on descriptive texts. The purpose of using Wordwall was to enhance students' mastery of vocabulary, sentence construction, and the language features associated with descriptive texts, while the collaborative writing tasks promoted students to exchange ideas, engage in discussions about content, and jointly create written texts.

The primary objective of this study was to examine the effect of using Wordwall through collaborative writing on students' achievement in writing descriptive texts. It is expected that with the combination of digital learning media and collaboration in learning processes, it would help increase the writing performance of the students. This study used the data from the pre-test and post-test conducted as a means of measuring the writing achievement of the students.

1. First meeting (Pre-test) – October 3, 2025

The experiment started by administering a pre-test in order to determine the level of writing proficiency among the participants before the treatment phase. The participants were asked to produce a descriptive passage of a place that they wanted to visit based on the instructions written on the assignment sheet. This test was conducted in class, and each participant was allotted an hour to write their passage. The pre-test results were used as a benchmark in determining improvements after the treatment phase. Furthermore, these results helped in planning the activities during the treatment phase since such activities might have an impact on the participants' performances. The results of the pre-test showed that most students had low levels of writing proficiency. This is because many of them had problems with the choice of appropriate English vocabulary. In addition, some had difficulties creating simple sentences due to poor knowledge of grammar and vocabulary, thus causing their poor performances. In addition, their writings contained incomplete and insufficient information.

2. Second Meeting (First Treatment) – October 10, 2025

The instructor conducted post-test after delivering instructions using Wordwall and cooperative learning to explain descriptive writing for historical sites. Greetings, a short prayer, and checking students' attendance were the initial steps during the instructional session. A picture illustrating a famous historical site like Lawang Sewu was introduced. Then, simple elicitation questions were posed by the instructor to initiate the discussion about the topic. During the pre-writing stage, the instructor discussed the definition of descriptive texts and its elements. Vocabulary was enriched through the Wordwall matching activity among students. Afterwards, the students talked about a historical site within their groups and created a basic

outline. In the process of writing, the teacher gave an example of a descriptive text to help students understand how to write it. Furthermore, the Wordwall activity entitled “Complete the Sentence” was included in this phase. The students wrote individually and integrated their paragraphs into one group paragraph. The revision was done based on peer review supervised by the instructor. Finally, students evaluated the lessons and the class ended officially with the closing remarks made by the instructor. Based on observations, almost all students participated actively during the entire instructional process. The majority of them were enthusiastic and competitive in answering the short quiz. Moreover, students were interested in the topic. However, some students participated passively in the lesson..

3. Third Meeting (Second treatment) – October 17, 2025

After the first lesson, the researcher guided the students to practice their descriptive text writing skills further. This time, the use of Wordwall and collaboration was enhanced in the classroom. Before conducting the main activity, the researcher asked students to recall what they had learned in the previous lesson. Next, he provided a brief description of the process of writing and discussed how Wordwall could help students with their writing. As part of the main activity, the researcher grouped students randomly to encourage them to participate actively. The researcher used Wordwall to teach them new vocabulary related to historical sites by asking them to match the word with its image. They were then asked to complete sentences to help them learn how to write descriptive sentences about the historical sites. At the planning phase, students shared ideas based on their knowledge and images of historical places regarding the site's appearance, history, location, and importance. Some students were excited and shared their ideas actively, but others found it difficult to contribute because they lacked vocabulary and knowledge. After the planning phase, the researcher encouraged students to write the first draft by merging their ideas in one paragraph. However, due to lack of time, not all phases were accomplished since the activities took longer than expected. There were instances when the class loosened control and made some students distracted. Despite this issue, most of them were able to follow the procedures and take part in the writing activity.

4. Fourth meeting (Third Treatment) – October 24, 2025

As part of the process, the researcher conducted an introduction of the lesson where he welcomed the students, led a prayer, checked the roll, discussed descriptive text information learned during the last lesson, and looked through the homework of the students. Thereafter, the students handed their homework to be evaluated. In the revision process, students used peer assessment method of learning whereby they exchanged their work and assessed their work in terms of content, structure, clarity, and completeness. Initially, students assessed grammar and mechanics, including spellings, punctuation, and capitalization. Afterward, they did content and organization, which included identification and description. After giving the feedback, students gave back the papers to their peers. At this point, students worked on their work following the assessment done by their peers, assisted by the researcher who supervised the whole class. Further, a Wordwall quiz of common grammar and vocabulary mistakes in descriptive text was given. In groups of one or two, some students presented their improved paragraphs to the other students as learners.

5. Fifth meeting (Post-test) – October 31, 2025

Before carrying out the post-test, the investigator informed students about the procedure, instructions, and errors to be avoided in the test. In the post-test, similar instruction was followed to what was used during the pre-test. Students were asked to write a descriptive essay about the place that they would love to travel to. The students followed the instruction well. However, the environment in class was slightly unfavorable because students had been involved in physical activities before this test.

Throughout the four meetings, the researcher made efforts to provide effective instruction and guidance to optimize the research outcomes. The explanations and learning activities were delivered systematically as part of the research procedure and were expected to support the validity of the results.

3.7. Validity and Reliability

The quality of good instrument is if the test has good validity and reliability.

3.7.1 Validity

According to Whiston (2012), validity refers to the extent to which a measuring instrument obtains appropriate data for its intended purpose. validity refers to the degree to which a measurement instrument accurately measures what it is intended to measure. There are five types of validity namely; face, content, predictive, construct and concurrent.

In this research, two types of validity were used to confirm that the research tool was appropriate and effective in measuring the writing skills of the participants. The two types of validity used in this study are explained below:

1. Content Validity

Content validity refers to the degree to which the test measures content or skills accurately that it aims to assess Fraenkel et al. (2012) . Content validity is achieved when the content covered is properly covered and relates well with the objectives of the test. In this research, content validity was demonstrated through proper coverage of the contents of the test according to the curriculum and syllabus of the first grade senior high school learners. Further, the instructions and writing tasks were reviewed to ensure their appropriateness by consulting academic advisors and English teachers. The writing task assigned is expected to be written as descriptive text appropriate for first graders. Therefore, the tool was acknowledged to have content validity because it was created in line with the Kurikulum Merdeka framework and matched the educational objectives for first-grade learners at SMA Negeri 13 Bandar Lampung.

2. Construct validity

Construct validity refers to the accuracy of an assessment instrument to existing theory and knowledge of the concept being measured. As a result, the testing tool has construct validity. In simple terms, having construct validity means that the test measures the construct in question and thus shows its existence. In this study, the researcher assessed students' writing using the scoring scale developed by Heaton (1991), the scoring scale includes five constructs: content, organization, language, vocabulary, and mechanics. These constructs make up the basic constructs of writing

ability, which were used to establish construct validity.

3.7.2 Reliability

Reliability refers to the stability and consistency of a measuring instrument over time. In other words, a reliable instrument is able to produce similar results when administered under consistent conditions at different times. According to Setiyadi (2013), reliability is concerned with the consistency of a measuring instrument.

In relation to the research instrument, namely the writing test, the researcher employed inter-rater reliability to ensure the consistency of the scoring results. To minimize subjectivity in the assessment process, the researcher collaborated with the English teacher at SMA Negeri 13 Bandar Lampung as a co-rater.

In addition to inter-rater reliability, the researcher utilized the *pearson product moment*, a statical formulation. In addition, the formula used to calculate the reliability coefficient is presented as follows:

$$r_{xy} = \frac{n \sum XY - (\sum X)(\sum Y)}{\sqrt{\{n\sum X^2 - (\sum X)^2\}\{n\sum Y^2 - (\sum Y)^2\}}}$$

Descriptions:

1. R : Coefficient of pearson correlation
2. N : The total number of students
3. $\sum XY$: The sum of the product of X and Y scores
4. $\sum X$: The total score of X
5. $\sum Y$: The total score of Y
6. $\sum X^2$: The sum of the squared scores of X
7. $\sum Y^2$: The sum of the squared scores of Y

After the test coefficient has been calculated, the next step is to analyze the coefficient value by referring to the reliability standard. The coefficient of reliability is interpreted based on the reliability criteria proposed by Arikunto (1998) as follows:

- a. A score of 0.00–0.19 indicates very low reliability.
- b. A score of 0.20–0.39 indicates low reliability.

- c. A score of 0.40–0.59 indicates moderate reliability.
- d. A score of 0.60–0.79 indicates high reliability.
- e. A score of 0.80–1.00 indicates very high reliability

Calculation of Pre-test

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

$$r_{xy} = \frac{33(74.156) - (1.549)(1.574)}{\sqrt{[33(73.123) - (1.549)^2] [33(75.416) - (1.574)^2]}}$$

$$r_{xy} = \frac{2.447.148 - 2.438.126}{\sqrt{[2.413.059 - 2.399.401] [2.488.728 - 2.477.476]}}$$

$$r_{xy} = \frac{9.022}{\sqrt{[13.658] [11.252]}}$$

$$r_{xy} = \frac{9.022}{\sqrt{153.686.216}}$$

$$r_{xy} = \frac{9.022}{12.397}$$

$$r_{xy} = 0,73 \text{ (high reliability)}$$

Calculation of Post test

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

$$r_{xy} = \frac{33(133.863) - (2.106)(2.090)}{\sqrt{[33(135.132) - (2.106)^2] [33(132.880) - (2.090)^2]}}$$

$$r_{xy} = \frac{4.417.479 - 4.401.540}{\sqrt{[4.459.356 - 4.435.236] [4.385.040 - 4.368.100]}}$$

$$r_{xy} = \frac{15.939}{\sqrt{[24.120] [16.940]}}$$

$$r_{xy} = \frac{15.939}{\sqrt{408.592.800}}$$

$$r_{xy} = \frac{15.939}{20.214}$$

$$r_{xy} = 0,79 \text{ (high reliability)}$$

Based on the results of the Pearson Product–Moment correlation analysis, both the pre-test and post-test instruments showed a high level of reliability. The pre-test obtained a reliability coefficient of 0.73, which falls into the high reliability category. Likewise, the post-test resulted in a coefficient of 0.79, which also indicates high reliability.

In summary, the analysis of both tests shows that the instruments produced consistent and stable results. Therefore, it can be concluded that the tests used in this research were reliable and appropriate for collecting the required data.

3.8. Data Analysis

After collecting the data, the researcher analyzed the data to find out whether there was a significant difference of using Wordwall through collaborative learning on students' writing skills. The analysis of students' writing achievement was carried out through several steps, as follows:

1. Scoring the students' pre-test and post-test results.
2. Tabulating the pre-test and post-test scores for statistical analysis.

3. Analyzing the data using SPSS version 25 by applying descriptive statistics and the Wilcoxon Signed Ranks Test.
4. Formulating conclusions to address the research inquiries based on the findings from the statistics.

To analyze the data, the researcher calculated the scores of both the pre-test and post-test. Furthermore, the researcher computed the average scores and mean values of the pre-test and post-test by applying the following formulas:

$$M d = \frac{\sum d}{N}$$

Notes:

Md = Mean

$\sum d$ = Students' score

n = Total number of students

(Arikunto, S., 2006)

3.9. Data Treatment

In this research, the data were analyzed using a paired-samples t-test with the assistance of SPSS version 25. This analysis was conducted to determine students' writing performance before and after the implementation of Wordwall through collaborative learning in writing instruction. In addition, a normality test was carried out to ensure that the data met the required assumptions for the statistical analysis.

- ***Normality test***

A normality test was carried out to examine whether the data was normally distributed or not. For this analysis, the Kolmogorov-Smirnov test and the Shapiro-Wilk test were utilized, with SPSS Statistics v.25 used for the calculations. If the obtained significance value (p-value) was higher than 0.05, the data were considered normally distributed. Conversely, if the p-value was lower than 0.05,

the data were classified as not normally distributed.

3.10. Hypothesis Testing

Hypothesis testing was conducted to determine whether the proposed hypothesis in this research was accepted or rejected. The hypothesis was tested using statistical software (SPSS) to see the result. To test the hypothesis, the collected data from the pre-test and post-test were analyzed using the repeated measures t -test formula with the following assumptions:

- H0: Sig. > 0.05
- H1: Sig. < 0.05

The hypothesis criteria are as follows:

1. H0: There is no significant difference on students' writing skills after being taught using Wordwall through Collaborative Learning.
2. H1: There is a significant difference on students' writing skills after being taught using Wordwall through Collaborative Learning.

The criteria for hypothesis testing in this research are as follows:

1. H0 is accepted if the significance value is greater than 0.05 (Sig. > 0.05).
2. H1 is accepted if the significance value is less than 0.05 (Sig. < 0.05).

Overall, in this chapter, the discussions covers the aspect of methods of the research, including the design, population and sample, research procedure, data collection technique, instrument, the report of implementation, data collection, data analysis, data treatment, and hypothesis testing.

V. CONCLUSION AND SUGGESTION

This chapter presents the conclusions and suggestions of the research, organized into several subchapters. The first subchapter discusses the conclusions drawn from the research findings, while the second provides suggestions based on the results for other parties, such as teachers and future researchers.

5.1. Conclusion

This research was conducted to find out whether the use of Wordwall through collaborative learning could improve students' descriptive writing skills. The research was carried out in five meetings, consisting of one pre-test, three treatment sessions, and one post-test. The pre-test results indicated that many students still experienced difficulties in generating ideas and organizing their writing.

After the implementation of the treatment, the findings showed a noticeable improvement in students' writing performance. The mean score increased from 47.32 in the pre-test to 63.60 in the post-test, with an N-Gain score of 0.31, which is categorized as a moderate improvement. All aspects of writing improved, including content, organization, vocabulary, language use, and mechanics. However, content showed the highest improvement because students were able to develop ideas better through group discussion and Wordwall activities. Meanwhile, mechanics showed the lowest improvement because students focused more on expressing ideas rather than paying attention to punctuation, spelling, and capitalization.

In conclusion, using Wordwall through collaborative learning is effective in improving students' descriptive writing skills, especially in content, although mechanics still need improvement and it provides an engaging and interactive

learning environment that helps students participate actively, share ideas, and develop their writing more confidently.

5.2. Suggestions

Based on the findings of this research, it is recommended that English teachers and future researchers consider the following:

1. Suggestion for English Teacher

Based on the findings, it is suggested that teachers who implement Wordwall combined with collaborative learning should establish clear classroom management strategies, especially during game sessions. Since students tend to become overly enthusiastic and create excessive noise, teachers are recommended to set stricter rules, such as limiting speaking turns, using a point-based reward system, and assigning specific roles within groups (e.g., speaker, writer, timekeeper) to control student participation. Additionally, teachers can use non-verbal signals or visual cues instead of verbal commands to reduce noise levels and maintain classroom discipline without interrupting the activity flow.

Teachers should also consider technical factors during the implementation, particularly internet stability and students' access to the platform. Since some students may experience difficulties in joining activities or navigating Wordwall features, teachers are advised to provide clear instructions and step-by-step guidance to ensure effective collaboration and smooth participation in writing tasks.

2. Suggestions for Further Researchers

Future researchers should consider better time management and classroom conditions to ensure that all stages of the writing process can be implemented optimally. Researchers are also encouraged to design more structured classroom management strategies to handle potential challenges, such as low student participation and less conducive classroom environments. In addition, applying

individual assessment is important to ensure that all students actively participate. Thus, the learning process can remain interactive while still being conducive and well-organized. Finally, further researchers may investigate other aspects of writing, such as creativity or critical thinking, to provide a more comprehensive understanding of students' writing development.

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