# PROBLEM-BASED LEARNING USING WORD WALL WEBSITE MEDIA TO IMPROVE STUDENTS' WRITING ACHIEVEMENT AT SMP NEGERI 9 BANDAR LAMPUNG

# A Thesis

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#### **ABSTRACT**

# PROBLEM-BASED LEARNING USING WORD WALL WEBSITE MEDIA TO IMPROVE STUDENTS' WRITING ACHIEVEMENT AT SMP NEGERI 9 BANDAR LAMPUNG

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# Nadya Risky Hayrunnisa

This current research aims (1) to intently find out if there is a significant improvement in students' writing achievement after the students are taught through Problem-Based Learning using WWW and (2) to find out which aspect of writing that has the highest improvement after the students were taught through the PBL using WWW. This is a quasi-experimental research design that conducted a quantitative method with 30 students as the samples. Firstly, the researcher administered the pre-test to get the prior knowledge of the students. Then, the students were given treatments with a new modified method, namely Problem-Based Learning using Word Wall Website. Lastly, they were administered a post-test to gain the result. The scores were calculated through Microsoft Excel 2010, and the data were statistically analyzed through paired samples t-test in SPSS version 22.

The first finding (1) shows that there is a significant improvement in students' writing achievement after the students are taught through Problem-Based Learning using Word Wall Website. The score of post-test (72.90) is higher than pre-test (56.40) with the gain of 16.50. The *t*-value is 35.169 at the significant level of 0.000, which is lower than 0.05. The second finding (2) reveals that the aspect of writing that is improved the highest after the students are taught through the PBL using WWW is vocabulary. The new modified method with interesting features of technology successfully makes the students broaden up their vocabulary. As a result, they are able to write a descriptive text. Then, it is suggested for teachers to apply this modified method at class, because this is a very good choice to boost students' writing achievement. Lastly, to enrich the modification, it is suggested for further researchers to modify it with other technological media, such as videos and songs that can lead students to be joyful in learning English.

**Keywords**: Problem-Based Learning, Word Wall Website, Descriptive text, Writing achievement, Technology

#### **ABSTRAK**

# PEMBELAJARAN BERBASIS MASALAH MENGGUNAKAN MEDIA WEBSITE WORD WALL UNTUK MENINGKATKAN PRESTASI MENULIS SISWA DI SMP NEGERI 9 BANDAR LAMPUNG

#### Oleh

#### Nadya Risky Hayrunnisa

Penelitian terkini ini bertujuan (1) untuk sungguh-sungguh mencari tahu apakah ada peningkatan yang signifikan dalam prestasi menulis siswa setelah siswa diajar melalui Pembelajaran Berbasis Masalah menggunakan WWW dan (2) untuk mengetahui aspek menulis mana yang memiliki peningkatan tertinggi setelah siswa diajar melalui PBL menggunakan WWW. Ini adalah desain penelitian kuasi-eksperimental yang melakukan metode kuantitatif dengan 30 siswa sebagai sampel. Pertama, peneliti memberikan tes awal untuk mendapatkan pengetahuan awal siswa. Kemudian, siswa diberikan perlakuan dengan metode baru yang dimodifikasi, yaitu Pembelajaran Berbasis Masalah menggunakan Situs Web Word Wall. Terakhir, mereka diberikan tes akhir untuk mendapatkan hasilnya. Skor dihitung melalui Microsoft Excel 2010, dan data dianalisis secara statistik melalui uji-t sampel berpasangan dalam SPSS versi 22.

Temuan pertama (1) menunjukkan adanya peningkatan yang signifikan dalam prestasi menulis siswa setelah diajar melalui Pembelajaran Berbasis Masalah menggunakan Situs Web Word Wall. Skor post-test (72,90) lebih tinggi daripada skor pre-test (56,40) dengan peningkatan sebesar 16,50. *T*-nilai adalah 35,169 pada tingkat signifikansi 0,000, yang lebih rendah dari 0,05. Temuan kedua (2) mengungkapkan bahwa aspek menulis yang paling tinggi peningkatannya setelah siswa diajarkan melalui PBL menggunakan WWW adalah kosakata. Metode modifikasi baru dengan fitur-fitur teknologi yang menarik berhasil membuat siswa memperluas kosakata mereka. Hasilnya, mereka mampu menulis teks deskriptif. Kemudian, disarankan bagi guru untuk menerapkan metode modifikasi ini di kelas, karena ini adalah pilihan yang sangat baik untuk meningkatkan prestasi menulis siswa. Terakhir, untuk memperkaya modifikasi, disarankan bagi peneliti lebih lanjut untuk memodifikasinya dengan media teknologi lainnya, seperti video dan lagu yang dapat membuat siswa gembira dalam belajar bahasa Inggris.

**Kata Kunci**: Pembelajaran Berbasis Masalah, Situs Web WordWall, Teks Deskriptif, Prestasi Menulis, Teknologi

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By:

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# LEMBAR PERNYATAAN

Dengan ini saya menyatakan dengan sebenarnya bahwa:

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- 2. Hal intelektual atas karya ilmiah ini diserahkan sepenuhnya kepada Universitas Lampung.

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#### **CURRICULUM VITAE**

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Having graduated from bachelor's degree, she decided to level up her education by taking the master's degree English Education Language and Arts Education Department Teacher Training and Education Faculty in Lampung University.

## **DEDICATION**

From the depth of my heart, this thesis is dedicated to everyone who cares and loves me. I extend my deepest gratitude and dedication to Allah Subhanahu wata'ala, who always supports and guides His servants, and to Nabi Muhammad , whose teachings illuminate our path from darkness to light. Heartfelt appreciation goes to my beloved parents, Mr. Sartono and Mrs. Ramlah, for their unwavering support and prayers that have paved the way for my success; may Allah bless your lives abundantly. I would like to express my highest appreciation to my beloved husband Febri Yoga, S.Kom., and my beloved daughters, Khaira Gadya Nazafarin and Kaureen Gadya Adzilla, for their continuous support and prayers from the beginning of my study until the end. I am grateful to my cherished lecturers in the English Education Study Program at Lampung University, who have not only imparted knowledge but also significantly contributed to my personal growth. Lastly, a special dedication to my beloved younger sisters, Dinda Uqnul Amalia, S.Pd. and Ananda Dinny Nurhalifah, whose enthusiasm and time amuse me daily.

# **MOTTO**

This is recommended for those among you who believe in Allah and the Last Day. Whoever fears Allah, surely He will open a way out for him and bestow upon him sustenance from a direction he did not expect.

(QS Ath-Thalaq: 2-3)

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Bandar Lampung, June 2025 The author,

Nadya Risky Hayrunnisa NPM. 2223042029

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#### I. INTRODUCTION

This chapter concerns in several points such as background, research questions, objectives, uses, scope, and definitions of terms.

# 1.1 Background

Nowadays, English is a universal language used by most countries in the world as a primary language. The written and spoken forms are used for communication everywhere. In the second and foreign language, teaching writing is considered difficult among the four skills, which are reading, writing, speaking, and listening. Richards et al. (2002:303) assert that writing is one of the most challenging competencies for second or foreign language learners to acquire. Students must articulate their thoughts, ideas, and emotions clearly in written form to ensure comprehensibility for others. Conversely, students must develop proficient writing skills.

According to Sinaga (2017), Graham asserts that pupils who have substantial challenges in writing, together with those who cannot engage in writing activities, are at a severe disadvantage in contemporary society. To master writing, one must understand the writing process. Writing composition must integrate various elements, including the subject, diction, structure, intent, audience, clarity, progression, coherence, and transcribing. Producing quality writing requires heightened attention to topic, structure, terminology, language usage, and mechanics.

Considering that writing is regarded as the most intricate facet of language acquisition, students must exert considerable effort to cultivate proficient writing skills. Multiple variables impede the writing process. Firstly, it necessitates a robust comprehension of grammar, which for non-native speakers entails grasping structural principles that frequently diverge significantly from those of their native language. Secondly, writing generally receives diminished time and focus relative to listening, speaking, and even reading. Finally, English as a foreign language learners often struggle with doubts regarding the accuracy of their written work (Glean, 2022).

In the classroom learning process, until today, there are learners who see the learners as objects of learning rather than individuals whose potential needs to be developed. This may discourage potential learners. In such a situation, learners get bored with the material provided since all they do is to listen to the teacher's speech in front of the class. As a result, the learners are unable to understand what the teacher has just said.

Teaching writing in an EFL class is not an easy task for teachers. Different generations, different treatments (Monaco, et al. 2007). At present, the generation called 'Gen Z' who are students in schools is different from the previous generation. Their collective personality, thought processes, and educational tendencies are unique to traditional classroom practices and educational environments. Discussion of the characteristics of the *Gen Z* generation is important to discuss. By knowing the characteristics of this generation, teachers can use it to design appropriate learning models and strategies. Teachers should have good strategy of teaching writing. Some teachers teach writing traditionally as part of the learning process. The teacher gives the students topics and the students write down their ideas based

on the given topics. After completing the paragraphs, teachers collect and grade student worksheets. Therefore, teachers do not present interesting materials or media for students' writing activities. So, the teacher must think hard how to arouse their interest in learning English.

One of the solutions given in teaching writing is by using Problem-Based Learning. This method is basically a teaching and learning approach that uses real life problems that is used to start, motivate, and focus on knowledge. Problem-based learning (PBL) is an instructional method where students learn by engaging in the process of solving real-world and problems. PBL was found by Barrows around 1969. Suwastini et al. (2021) assert that PBL is a suitable pedagogical method for addressing the requirements of the 21st century. Dastgeer et al. (2015) assert that the PBL method is a more effective pedagogical approach than traditional methods for enhancing English writing skills. The researcher concludes that problem-based learning enhances student engagement and fosters creative thinking for articulating their thoughts in writing. Students may be motivated to investigate concepts and collaborate in groups for writing or projects. Students who are hesitant to inquire with the teacher may seek assistance from peers within their group or from other groups.

Based on the English basic competence of *Kurikulum Merdeka*, the eighth-grade students of junior high school are expected to be able to write some genres of text. One of the texts which should be learnt is descriptive text. Kane, as referenced in Harmenita et al. (2013), a descriptive text conveys sensory experiences, including the appearance, sound, and flavor of an object. Its primary objective is to provide a detailed and vivid representation of a particular person, place, or object, thereby enabling the reader to plainly envision the subject of the description. It can be

inferred that the writer must be able to delve into their idea when writing descriptive text in order to create a well-described object that the reader can sense. In addition, there are some things that should be concerned, for instance: the word choice, grammar, punctuation, sentence structure, cohesion, coherence and so on.

Related to the implementation of Problem-Based Learning, there are some researchers that have positive results. Nisa et al. (2017) conducted an examination into the impact of integrating Problem-Based Learning (PBL) with the writing process in English as a Foreign Language (EFL) writing classes, focusing on its effects on students' writing performance and their perceptions of this amalgamated methodology. Their findings indicate that PBL serves as a potent pedagogical approach for instructing writing, as it navigates students through the multifaceted stages of the writing process—from ideation to the creation of a polished final draft—while fostering autonomy. This methodology positions students at the forefront of the educational experience, with the educator or researcher serving predominantly as a guide. Throughout the composition process, learners engage in collaborative group efforts to cultivate and systematically arrange their thoughts, thereby facilitating the creation of coherent and well-structured paragraphs. Glean (2022) further substantiates this by investigating how the implementation of Problem-Based Learning (PBL) notably enhances students' proficiency in composing descriptive texts. It is asserted that Problem-Based Learning exerts a more profound influence on students' proficiency in composing descriptive texts compared to traditional methods devoid of PBL. As a result, the researcher recommends the implementation of the PBL method to educators in the learning process, particularly in the instruction of writing descriptive texts, as PBL is an effective teaching approach that facilitates students' ability to compose texts with greater ease. Kepakisan (2024) delves into the implementation of technologyintegrated Problem-Based Learning (PBL) as a method to elevate students' writing abilities. The research indicates that the integration of technology into problem-solving tasks significantly enhances students' educational results. Through the advancements of contemporary research and technological innovation, the writing practices of students have transformed, leading to a more efficient and stimulating educational atmosphere.

Referring to those previous researches presented above, the researcher tried to connect writing with technology, so that it can improve comprehension and memory. Many studies have examined the impacts of technology used in students' learning. The research is consistent and shows that using technology for creativity and innovation helps to improve students' learning process. While incorporating technology into project- and problem-based learning can offer engaging and valuable experiences, it also presents several challenges. Teachers are required to develop new technical competencies and adapt to an alternative instructional approach. Simultaneously, students must cultivate confidence and motivation in adopting this novel learning approach (Donnelly, 2009).

Since PBL was first emerged, it has since been developed and implemented across different education contexts and from K-12 through to the institutions of higher education. Nonetheless, the emergence of technology has enabled the use of computers and other associated tools, referred to as cognitive tools (Jonassen & Reeves in Savoji, et al., 2019), within the PBL environment. Utilizing technology in problem-based learning significantly enhances student comprehension and performance outcomes. The connection between the two can be described as follows: Technology enables students to efficiently and swiftly access a diverse array of information. Problem-based learning enables students to leverage

technology for researching, gathering data, and identifying solutions to the challenges they face.

Nonetheless, Problem-Based Learning (PBL) presents various shortcomings. Leong's (2009) study indicates that the challenges of PBL include initial confusion for some students, reluctance among certain students to share their thoughts on the problem, and the difficulty teachers face in structuring an open-ended problem for the learning process. Ribeiro (2011) discovered that effectively implementing Problem-Based Learning (PBL) necessitates the meticulous pre-design of open-ended problems. Nonetheless, various obstacles may emerge throughout the process, including apprehensions voiced by educators, such as reduced authority over the breadth of content and a rise in teaching responsibilities.

Thus, to make Problem-Based Learning effective in spite of its weaknesses, the researcher aimed to use Word Wall Website as the media in conducting PBL. The reason was that students need an appropriate media to increase their interest and self-confidence in writing, so that they can achieve the writing goals and improve their writing capability. Wordwall can help address this by creating interactive and engaging learning activities, making the process more appealing and stimulating. The teacher should give the students more activities which can attract their attentions in the teaching-learning process. Gandasari et al. (2021) assert that Word Wall is an engaging, interactive online learning tool characterized by an attractive design. It aims to engage students' interest in learning through interactive, gamebased activities. Regarding those claims, an appropriate medium is essential to sustain students' enthusiasm to compose quality texts, thereby enhancing their ideas and fostering creative thinking. Previous studies mostly concentrated on the implementation of Problem-Based Learning. This research employed both

Problem-Based Learning and a Word Wall Website to enhance students' writing achievement.

In accordance with Richards et al. (2002:304), the writing process is comprised of four stages: prewriting, drafting, refining, and editing. The researcher integrated the Word Wall Website into the prewriting and composing phases. The teacher organized the students into groups according to the theme while they were engaging in the game "Spin the Wheel," which is one of the features of the Word Wall Website. Then, they engaged in a labelled diagram game to match certain terms with the corresponding images. The students could generate a variety of ideas with the assistance of those words.

Based on all the background presented above, the researcher aimed to use Word Wall Website as the media in conducting Problem-Based Learning in facilitating students' comprehension in order to enhance their achievement in writing in EFL classroom. She intended to conduct a research entitled "Problem-Based Learning Using Word Wall Website as The Media to Improve Students' Writing Achievement". Furthermore, the researcher intended to know if there is any effect of the method in students' writing achievement and also to find out which aspect of writing was enhanced the most.

# 1.2 Research Questions

According to the above background explanation, the formulated research questions are :

- 1. Is there any significant difference in the students' writing achievement after the students were taught through the Problem-Based Learning using Word Wall Website?
- 2. Which aspect of writing is significantly improved the most after the students were taught through the Problem-Based Learning using Word Wall Website?

These research questions were the main reasons why this research was conducted.

# 1.3 Objectives

The objectives of this research are as follows:

- To find out if there is a significant difference in the students' writing achievement after the students were taught through the Problem-Based Learning using Word Wall Website.
- 2. To find out which aspect of writing is significantly improved the most after the students were taught through the Problem-Based Learning using Word Wall Website.

Those were the objectives of this research to ease the researcher in conducting it.

#### 1.4 Uses

The uses of this research are as follows:

- 1. From a theoretical perspective, the findings of this study are anticipated to contribute to the teaching methodology, particularly in the area of Problem-Based Learning.
- 2. Practically, This study provides valuable insights for readers, English educators, language analysts, and other professionals regarding the impact of the Problem-Based Learning method utilizing the Word Wall Website on enhancing students' writing performance.

This research was hopefully can be utilized by anyone regarding its newness and novelty.

### 1.5 Scope

This research focused on the investigation to find out whether there was a significant difference in students' writing achievement through the method of Problem-Based Learning using Word Wall Website as a teaching media. The subject of this research was the students in the eighth grade at SMP N 9 Bandar

Lampung. The type of text used in this research was descriptive text describing tourism places. This type of text was chosen since it includes in the English syllabus of that school. Moreover, the researcher also assumed that the aspect of writing enhanced the most after the treatments is vocabulary.

#### 1.6 Definitions of Terms

To facilitate a common understanding, several definitions related to the research uses were clarified. The terms can be defined as follows:

- 1. *Problem-based learning* is a learning model that can improve critical analysis and teamwork skills.
- 2. *Word Wall Website* is an application designed for the creation of educational material, including quizzes, matchmaking, pairing, anagrams, word randomisation, word searches, and grouping activities.
- 3. Descriptive text is a text which describes what a person or a thing is like.
- 4. *Process approach* allows students ample time to contemplate their concepts prior to composing their final draft.
- Writing constitutes a method of conveying and articulating ideas or thoughts, characterized by appropriate sentence structure and meticulous construction of the text in its written form.
- 6. *Achievement* is the outcome of a series of actions that indicates the proficiency of individuals in performing those tasks, typically represented by a score.

These are the definitions of terms that help readers understand the words that are pointed in this research.

This chapter has explained the prior chapter that includes background, research questions, objectives, uses, scope and definitions of terms.

## II. LITERATURE REVIEW

This chapter discussed things related to the of theory of the experts', the review of previous researches and related literature. Those were explained in a frame as the following.

#### 2.1 Review of Previous Researches

Several researchers used Problem-Based Learning to see whether it can improve students' writing skill or not. Nisa et al. (2017) conducted a study to investigate the effects of integrating Problem-Based Learning (PBL) with the writing process in an EFL writing class, emphasizing students' writing achievement and their perceptions of the implementation. The subjects comprised 31 pre-intermediate writing students from Lampung University. Data were collected via writing assessments, surveys, and classroom observations, and later analyzed employing both quantitative and qualitative methodologies. The results indicate that integrating PBL with the writing process constitutes an effective pedagogical strategy for writing training. This is ascribed to PBL's systematic phases, directing students from concept development to the final manuscript. The methodology placed students at the core of the educational experience, with the instructor acting predominantly as a facilitator. Collaborative group discussions significantly contributed to students' ability to formulate cohesive paragraphs through the collective sharing and construction of ideas.

Glean (2022) presents evidence that substantiates the efficacy of Problem-Based Learning (PBL) in improving students' writing abilities, especially in the composition of descriptive writings. The research utilized an experimental approach, including a post-test to assess the effect of PBL on students' writing performance. Sixty students participated, evenly split into an experimental group and a control group, each consisting of 30 students. Statistical analysis indicated that the t-obtained value (2.68) surpassed the critical value from the t-table (1.67), resulting in the acceptance of the alternative hypothesis and the rejection of the null hypothesis. The results reveal that students instructed by the PBL technique exhibited markedly superior ability in writing descriptive texts compared to those who underwent traditional training. In light of these findings, the researcher advocates for the implementation of Project-Based Learning (PBL) in writing instruction, as it enhances students' capacity to articulate ideas more proficiently and fosters greater engagement in the educational process.

In alignment with prior research, Kepakisan (2024) investigated the application of technology-integrated Problem-Based Learning (PBL) as a method to improve students' writing abilities. This study utilized a qualitative methodology to provide comprehensive insights, gathering and evaluating data through techniques often employed to examine social phenomena in authentic contexts. The findings demonstrated that the integration of technology into project-based learning positively influenced students' knowledge and writing proficiency. Moreover, the incorporation of advanced, technology-enhanced learning tools revolutionized students' writing practices and fostered a more stimulating and efficient educational experience.

Elyana et al. (2021) performed a classroom action research study to assess the efficacy of a word wall as a pedagogical tool for improving writing skills, particularly through the "What Are You Doing?" material, among eighth-grade students at SMP Negeri 2 Sumowono. The research adhered to a cycle methodology comprising four phases: preparation, activity, observation, and reflection. Results demonstrated a consistent enhancement in students' writing abilities across each cycle, suggesting that the implementation of word walls favorably influenced their advancement. The study determined that word walls function as an excellent pedagogical resource for enhancing students' writing skills.

Darmawan et al. (2023) created extra instructional resources employing Wordwall-based learning media to facilitate the instruction of relative clauses and investigated the experiences of 12th-grade students interacting with the platform. The research employed a Design and Development (DnD) methodology, encompassing the phases of design, development, and assessment. The results indicated that incorporating Wordwall into the educational process offered students engaging, entertaining, motivating, and effective learning experiences. This interactive application provided an innovative method for understanding relative clauses.

Darliani et al. (2019) examined the utilization of the Wordwall website as an educational resource, gathering data via classroom observations and interviews. The Wordwall technique entailed presenting collections of phrases on colorful backgrounds, each symbolizing distinct instructional objectives. The findings revealed that all participants reacted well to the utilization of Wordwall, perceiving it as enhancing the enjoyment and engagement of the experience in learning to compose descriptive texts.

# 2.2 Concept of Writing

Writing is one way to communicate with other people besides speaking, reading, and listening. The word 'writing' seems to be very simple and easy to understand. However, it cannot be ignored. When a student writes a paragraph, he/she should write not only semantically correct but he/she should also use a correct grammar. Writing is not a spontaneous activity. It is learnt in a formal instruction. That's because students must produce a sentence or text using English correctly and in accordance with the order of tenses grammatically. The following is the definitions of writing by some experts.

Harmer (2004:31) characterizes writing as a method for producing words and expressing thoughts, feelings, and perspectives. He elaborates that writing is a process profoundly influenced by the traditions of specific genres, which must be acknowledged and integrated into teaching methodologies.

Additionally, Byrne, cited in Wibowo (2022), highlights that writing encompasses more than just the act of placing symbols on a page; it necessitates a structured approach to organizing letters into words, followed by the arrangement of those words into meaningful sentences. He emphasizes that these sentences need to be logically linked, indicating that writing is essentially a process of organizing ideas into a cohesive structure. In communication, the importance of writing is akin to that of speaking. In the realm of education, honing writing skills is crucial for students, as it empowers them to express their thoughts and feelings clearly in written communication.

Upon examining the definitions and principles of writing, one might infer that writing is the process of articulating ideas in written form. To produce effective

writing, authors must both ideas to articulate and the language and structural skills to convey those ideas in text form. Moreover, writing is recognised as a fundamental component of English language instruction that learners must grasp.

# 2.2 Aspects of Writing

In writing, there are several aspects which should be considered by students in order to write well. Jacobs, et al. (1981) mentions that in order to be effective, a piece of composition should meet the following qualities:

## 1. Content

Content refers to the substance of writing, the experience of main idea. i.e., group of related statements that a writer presents as unit in developing a subject. Content of the paragraph do the work of conveying ideas rather that fulfilling special function of transition, restatement, and emphasis.

# 2. Organization

Organization refers to the logical organization of content. It is scarcely more than attempt to piece together all collection of fact and jumble ideas. Even in early drafts it may still be searching for order, trying to make out patterns in its materials and working to bring particulars of its subject in line with what is still only a half-formed notion of purpose.

# 3. Vocabulary

Vocabulary refers to the selection of words those are suitable with the content. It begins with the assumption that writer wants to express the ideas as clearly and directly as he/she can. Choosing words that express his/her meaning is precisely rather than skews it or blurs it.

# 4. Language use

Language use refers to the use of correct grammatical form and synthetic pattern of separating, combining, and grouping ideas in words, phrases, clauses, and sentences to bring out logical relationship in paragraph writing.

#### 5. Mechanic

Mechanic refers to the use graphic convention of the language, i.e., the step of arranging letters, words, paragraphs by using knowledge of structure and some others related to one another.

Based on the categories of writing aspects above, it can be concluded that generally the aspects of the writing are classified into five aspects, namely, content, organization, vocabulary, language use, and mechanic. Students can make a well-organized text by those aspects. In conclusion, the aspects of writing are primarily related to content, organization of ideas, mechanics and use of language, and the reader's judgment or expertise. To produce a good, well-written, meaningful text, these components must be integrated.

## 2.3 Teaching Writing

Writing is a crucial English language skill that students need to acquire, and it is important for them to begin developing this ability early on. Harmer (2007) identifies several motivations for promoting student writing practice in both classroom and external settings. It is important to note that many assessments, regardless of whether they evaluate foreign language skills or other competencies, frequently depend on the writing proficiency of students to gauge their understanding. Instructing students in writing requires the dedicated focus and diligence of language educators.

Teaching writing entails guiding students to express their ideas in written format. Unfortunately, it is not as simple as anticipated. Both educators and learners must invest significant effort to attain exemplary writing. The instructor must consider multiple elements for the writing class, including the topic's complexity, the media

used, and the educator's pedagogical strategy, which includes approach, method, and technique. An area that requires additional examination is the methodology. Effective writing skills are necessary to apply. Consequently, it is anticipated that instructing kids in writing skills can foster their creativity.

# 2.4 Process Approach in Teaching Writing

In the process approach, students are provided time to conceptualise their writing, with the primary objective of enhancing their writing through a cyclical process. According to Oshima et al. (2006), the writing-based process approach comprises four stages: prewriting (to generate ideas), organising (to create an outline), writing (to produce a draft based on the outline), and polishing, which includes reviewing and editing (to refine the written content).

Harmer (2004)categorises the writing process into four stages: 1. Planning: In this phase, the authors should strategise and contemplate their writing objectives. The planning process consists of three steps: defining the writing's objective, analysing the audience, and contemplating the content structure. 2. Drafting; in this step, the authors produced their initial draft of the writing. 3. Editing (reflecting and editing); in this step, writers review their copy, amend the essential components, and solicit comments from additional readers. 4. Final version; in this step, the authors prepare their composition. It may differ

The process technique allows pupils ample time to contemplate their concepts prior to composing their final draft. Consequently, in this study, the researcher employs the process approach advocated by Harmer (2004), as it is straightforward, lucid,

from the initial draft, as it has undergone editing in the prior phase.

and appropriate for integration with the brain-writing and small group discussion technique.

# 2.5 Descriptive Text

The researcher used descriptive text based on the curriculum applied at school, *Kurikulum Mereka*. According to Asriati (2013), descriptive text aims to portray how something appears, smells, tastes, feels, or sounds. This type of text serves to provide detailed information about a specific subject, such as an object, animal, or person. The explanation can be divided into several key components:

# 1. Social Function of Descriptive Text

The primary purpose of descriptive text is to offer a detailed depiction of a particular person, place, or object.

## 2. Generic Structure of Descriptive Text

Gerot and Wignell, as cited in Sipayung (2021), outline the generic structure of descriptive text into two parts:

- o **Identification:** This section identifies the phenomenon or subject being described, which may be a thing, place, person, or animal.
- Description: This part elaborates on the qualities or characteristics
  of the subject in detail, including its attributes (such as beauty, value,
  or excellence) and distinctive features that make it unique.

# 3. Language Features of Descriptive Text

According to Emilia and Christie in Anggun (2016), descriptive text has the following language features:

1) It concentrates on certain participants as a main character.

- 2) The simple present tense is used as the dominant tense; but, when the thing being talked about is no longer in existence, the simple past tense may be used instead.
- 3) It typically employs relational processes or linking verbs (such as is, are, has, have, belongs to) to categorize and explain the characteristics, parts, and functions of phenomena.
- 4) It uses action verbs, material processes, and behavioural processes to provide more details on the behaviours and actions of the text's participants.
- 5) When describing feelings, it uses a mental verb or mental process.
- 6) To provide a more detailed description of the subject or object, it typically uses nominal group or noun phrases.
- 7) It use adjectives to enhance nouns and adverbs to modify verbs, so offering a more comprehensive description of the subject.
- 8) It employs adverbial phrases to provide more information regarding manner, place, or time, and is occasionally manifested in the embedded sentence that serves as circumstantial elements.

## 4. Example of Descriptive Text

# THE NAME OF THE ROOM

This is our classroom. It is big. There are thirty tables and chairs for the students. There is also a desk for the teacher. A blackboard is put in front of the class. The windows are on the right side of the room.

We study subjects like Math, Bahasa Indonesia and Social Sciences in this room. Sometimes, our teacher tells us to present our work or play games in the classroom. To conclude, a descriptive text is a piece of text that describes something, a person, place or object in words and invites the reader to imagine it. In this research, the researcher asks the students to write a descriptive text about a place based on the generic structure and linguistic features mentioned above.

# 2.6 Teaching Descriptive Writing

Teaching writing is the paramount element in writing exercise, as student engagement is essential for a meaningful and enduring learning experience. Encouraging student participation in the practice, while simultaneously polishing and enhancing writing skills, necessitates a realistic strategy. The educator must clearly articulate the abilities intended for development. The teacher must determine which methods or types of exercises can enhance the learning of the target area. After identifying the target skill areas and methods of implementation, the instructor can concentrate on selecting a topic that will facilitate student engagement. By pragmatically integrating these aims, the educator can anticipate both passion and effective learning.

Gerot and Wignell, as cited in Anggun (2016), explain that descriptive text is used to convey how something looks, smells, feels, behaves, tastes, or sounds. In other words, when the goal is to describe sensory or behavioral attributes through writing, descriptive text serves this purpose by offering detailed information about the characteristics of people, places, or things. This detailed information helps readers form a clear mental image of the subject. Essentially, descriptive text focuses on providing an in-depth portrayal. They also identify two main components of its structure: identification and description. The identification section introduces the subject or phenomenon being described, while the description section elaborates on specific parts, qualities, and characteristics of the subject. Additionally, they

highlight key grammatical features of descriptive text, which typically include the use of simple present tense, action verbs, adjectives, as well as appropriate vocabulary and writing conventions.

Related to ideas above, there are some indicators of English descriptive text. First, generic structure (identification is to identify phenomenon be described, and description is to describe parts, qualities, and characteristics of subject). And secondly, the grammatical features (focus on language features (simple present tense, action verb, adjective), vocabulary and mechanics).

# 2.7 Concept of Problem-Based Learning

Problem-Based Learning is an instructional method where students learn by engaging in the process of solving real-world and problems. PBL was found by Barrows around 1969. Maastricht University and Mac Master University established a new teaching mode in the reform of medical education. They defined that Proble-Based Learning is an approach used to help students identify their own learning needs as they attempt to understand the problem, to pull together, synthesize and apply information to the problem, and to begin to work effectively to learn from group members as well as tutors (Gallagher, 1997). Maurer et al. (2012) describe Problem-Based Learning (PBL) as an approach centered on small group collaboration, where students take an active role in managing their own learning. This method emphasizes the meaningful construction of new knowledge by connecting it to what students already know.

In order to increase the students' writing achievement in descriptive text, the researcher suggests that using PBL as a method is a new strategy. Duch, as referenced in Glean (2022), characterizes Problem-Based Learning (PBL) as an

instructional methodology that employs authentic challenges as a foundation for cultivating learners' critical thinking and problem-solving abilities. This method is implemented on the assumption that utilizing PBL, particularly in instructing descriptive writing, can enhance the learning process's effectiveness and efficiency.

## 2.8 The Procedure of Problem Based Learning

The Problem-Based Learning technique commences with the instructor giving situations to the pupils. The cases are selected from a specific topic within the students' environment. PBL education is grounded in students' backgrounds, expectations, and interests. The Maastricht model (1960s), as outlined by Schmidt (1983), delineates the procedural application of Problem-Based Learning (PBL) as follows:

# 1) Clarifying terms

At the outset of the session, the problem(s) must be presented to the pupils. Utilizing paper cases prompts one student to read aloud, so initiating group discussion from the outset. The committee's primary goal should be to clarify problems, terminology, and concepts that are initially unclear. The aim of the initial phase is to achieve agreement on the meanings of various terms and concepts, as well as the context outlined in the problem. The knowledge possessed by group members or that acquired from a dictionary may be employed.

# 2) Defining the problems

Definition of the problems is the main goal during this phase. The group should discuss and reach an agreement on the tricky events, which need explanation. Occasionally, a problem has been intentionally described on the way to test students' ability to recognize certain symptoms. Though they have some prior

knowledge to recognize a problem, the prior knowledge does not allow them to resolve the problem straight away.

## 3) Brainstorming

Aspects on basis of prior knowledge are collected. This should result in ideas to structure the problem. Each individual may express his or her ideas free and without immediate discussion: it is important not to discuss and not to comment the ideas of others during this step, but to collect many ideas (prior knowledge). Together, students will compile ideas of the underlying circumstances of the problem (explanatory approach) and/or of implications arising from the problem (procedural approach).

## 4) Structuring and hypothesis

Upon reviewing steps 2 and 3, the students subsequently organize explanations into provisional solutions. In the fourth step, which constitutes the essence of the analysis, the problem is elucidated in several manners. Interrelated ideas are developed in relation to one another. Every group member is permitted to comprehensively articulate their thoughts regarding the subject issue. Group members may utilize all their existing knowledge. This prior knowledge may be from information acquired from previous education, facts and insights gleaned from various articles, or other sources. The remaining group members and the instructor are permitted to thoroughly examine the students' knowledge, present alternative interpretations, and challenge specific viewpoints. Brainstorming and dialogue constitute a collaborative process. It yields superior innovation and productivity compared to what any individual member could accomplish autonomously.

# 5) Learning objectives

Establishing learning objectives; the group attains consensus on the objectives; the instructor guarantees that the objectives are targeted, attainable,

comprehensive, and suitable. The methodical technique and discourse may provide multiple outlines inscribed on the blackboard. These outlines serve as potential explanations for specific problems. Nevertheless, due to students' insufficient past knowledge, inquiries will emerge and issues will occur. During this point of the discussion, discord among instructional group members should emerge. The students will discover that certain parts remain unexplained and unresolved during their debate. PBL empowers students to establish these elements as learning objectives, placing them in control of their education. The cognitive mismatch between 'what I know' and 'what I must know' to comprehend the external world is a fundamental prerequisite for Problem-Based Learning (PBL). Questions and challenges that arose throughout the workshop can serve as learning objectives for individual self-directed study. The primary objective of this stage is to establish learning goals that the group will focus on throughout phase six. This stage allows for the utilization of conceptual maps as a tool for summarizing research, establishing relationships, integrating material, facilitating knowledge retention, and defining new learning objectives.

# 6) Searching for Information

Autonomous learning; during this time, students return home to engage in studies. This phase seeks to resolve the questions posed during the problem-analysis phase and facilitate students' comprehension of the underlying theories related to the problem. The group participants acquire knowledge autonomously in alignment with predetermined learning objectives. Information is collected from books and various sources, including libraries, journals, and the internet. Project-Based Learning is essential since it allows students to identify their own resources. The minimal period for their individual study is two days, while it may be prolonged. Students may participate in learning autonomously, in pairs, or in groups. It is imperative to ascertain in advance the manner in which the

results of the self-study period will be conveyed: individually, by a small group, or through a discussion encompassing all groups. Students examine relevant sources of information and later integrate the new content, potentially resolving any outstanding issues.

## 7) Synthesis

The group disseminates findings from a confidential study. The tutor evaluates comprehension and may appraise the group. The third phase involves synthesizing and evaluating the newly received knowledge. Group members are exchanging information collected at home with one another. They also deliberated on whether they have now attained a more proficient, accurate, and detailed comprehension of the underlying issues. If certain students have not comprehended the concerns adequately, it is the responsibility of other students to elucidate the technique of their work. In this phase, it is essential to examine specific problem types to assess students' decision-making processes and the algorithms underlying their choices.

## 8) Feedback

It encompasses input from all students regarding the case, the method, and the tutor to enhance the learning experience. It is essential for students to assess the course and provide feedback on the quality of the problems, the group process, and the tutor's performance.

Those are the procedure of Problem-Based Learning based on Maastricht (1960s).

# 2.9 Strengths and Weaknesses of Problem-Based Learning for Teaching Writing in an EFL Classroom

Ghufron et al. (2018) highlight several advantages of Problem-Based Learning (PBL) in EFL writing classes, including the development of problem-solving

abilities, enhancement of self-directed learning, reduction of student anxiety, and increased self-confidence and motivation. Additionally, PBL encourages greater student responsibility, facilitates the sharing and exchange of ideas, promotes active participation, motivates students to utilize diverse learning resources, and fosters a positive attitude toward learning. Supporting this, Ateş and Eryılmaz (2010) confirm that PBL is an effective and practical approach to enhancing students' problem-solving and autonomous learning skills. Borhan (2012) further notes that students exposed to PBL tend to build self-confidence and motivation, experience less nervousness during learning activities, adopt a positive learning attitude, and take more responsibility, particularly when working collaboratively. He also emphasizes that teamwork enables easier idea exchange and increases student engagement. Moreover, Leong (2009) points out that PBL encourages students to adopt a creative approach to problem-solving, including the exploration of various learning resources.

Furthermore, Ghufron, et al. (2018) also reveal that PBL in EFL writing classes has some weaknesses. The weaknesses are that it is difficult to implement, it needs much more time, more preparation, good management, and it is confusing for some students. These findings align with Ng Chin Leong's (2009) research, which identified several challenges associated with PBL. Initially, some students may find the approach confusing and feel reluctant to share their ideas during discussions. Additionally, teachers often face difficulties in designing appropriate open-ended problems to guide the learning process. Ribeiro (2011) further emphasizes that implementing PBL can be demanding, requiring extensive preparation time and presenting management challenges. These difficulties largely stem from the need to carefully develop open-ended problems prior to instruction and from obstacles encountered during implementation, such as teachers

experiencing a perceived loss of control over content coverage and an increased workload.

Therefore, it was hoped that Wordwall Website can cover the weaknesses of Problem-Based Learning.

## 2.10. Word Wall Website

Word Wall Website is a media to learn English with most of the features are games. Nuraeni et al., as cited in Fitria (2023), assert that learning media are essential for the efficacy of the educational process, since they directly affect student dynamics and involvement during instructional activities. The presence of learning media will encourage students to engage actively and creatively in the educational process, so facilitating the optimal development of their talents through effective learning.

0:08 Huge Blue **Boring** Smooth Small Fresh air Brown Nostalgio Calm Rough Scent Damp Earth Slippery Sights Sounds **Smells Emotions Textures** 다) 불 Kirim jawaban

**Picture 2.1 Word Wall Website** 

Picture above is an example page of playing game in the wordwall. Cristine (2004) proposed that Word Wall media serves as a bulletin board display of vocabulary words organized in a manner that is meaningful to students. This approach enables

students to encounter essential terms on a daily basis and leverage visual aids to enhance their comprehension of unfamiliar vocabulary. Word wall media constitutes a segment of visual media. Visual media can enhance the learning process for students, facilitating easier comprehension and better retention of information.

As a response to the influence of technology and information in education, we must be up to date in choosing learning media. The use of appropriate learning media will affect maximum learning outcomes. It all began in a secondary school classroom in London (UK) in 2006. For that generation, teachers have stuck laminated words on a wall to support literacy exercises. Josh Smith was working as a teacher, the founders, Josh and Ben, created a program where people could simply type a list of words for the same purpose. He added a random picker with a spinning noise like a TV game show. This was the first version of Word Wall. A handful of other templates followed and that first template became known. The Switch template feature was born and has been a core feature ever since. The company changed direction and in 2016 Wordwall.net website was launched. The concept was simple. Enable all teachers to create and share resources wherever they are in the world with the link: wordwall.net.

Learning media has been frequently used and popular in all levels of education especially in this millennial era. Swari (2023) describes Wordwall as a platform for gamification that aims to foster a more engaging and enjoyable learning atmosphere, especially to boost students' interest in reading. The incorporation of Wordwall into educational practices is thought to enhance student engagement, thanks to its variety of features that facilitate creative learning resources. Wordwall serves as an engaging and visually stimulating online game-based platform,

captivating students with its interactive quizzes and activities that encourage active participation. New users have the opportunity to delve into innovative avenues by examining instances of content crafted by educators on the platform. Wordwall functions as a web-based platform for creating engaging quiz games and can also be employed for conducting educational assessments.

Khairunisa (2021) characterizes Wordwall as a web-based digital gaming application employed by educators to present quiz questions and conduct material assessments. Created by Visual Education Ltd. in the United Kingdom, Wordwall provides several benefits, including the ability to print games and utilize them offline. Platforms such as Wordwall can indirectly foster creativity in both educators and learners. Furthermore, it offers learners the chance to amalgamate their prior experiences to achieve enhanced results. This technique not only augments pupils' knowledge but also fosters their character development. The objective of employing the Word Wall program in writing instruction is to provide students with a requisite level of English vocabulary for composing descriptive text.

Given that words are crucial in communication, acquiring vocabulary facilitates pupils in constructing meaningful phrases, the Word Wall program is an interactive media that enhances learning in hearing, speaking, reading, and writing through various game aspects. To effectively acquire a foreign language, pupils require not only the four aforementioned language abilities but also an extensive vocabulary. This form of media serves both as an educational resource for pupils and as an engaging assessment instrument. This application enables educators to develop engaging quiz-based activities that enhance students' writing abilities.

Word wall website is one strategy to provide learning that will make students happy to learn. Through this media, word wall is not only emphasized on just understanding vocabulary can also be used to train students' understanding in defining a word. By applying the word wall website, students can remember the vocabulary without feeling that they are very serious in studying. There are several kinds that the researcher uses in this research, such as *match up*, *find the match*, *unjumble*, *matching pairs*, *group sort*, *word search*, *labeled diagram* and *crossword*.

From the explanation above, we can conclude that word wall is a game application from web browser that can be used in educational process as a tool or learning media that bring many advantages. Word wall quiz is appropriate to evaluate students' learning outcomes in learning process with fun way. This media is very suitable to be used in every situation where several schools are still implementing the system of limiting class hours in which the teaching and learning activities are less effective.

In this research, the researcher used word wall media in the features: random wheel and labeled diagram to overcome this problem to increase writing achievement. Kieff, as referenced in Mandasari et al. (2015), elucidates that word walls promote autonomous work habits by providing students with rapid reference materials throughout reading and writing activities. Word wall media is incredibly advantageous in aiding pupils during the writing process, especially in relation to uncommon terminology and accurate spelling. This media is anticipated to enhance students' engagement in writing activities and facilitate the development of their skills in generating descriptive texts.

# 2.11 Problem-Based Learning using Word Wall Website on Process Approach

At its core, teaching writing involves guiding students to effectively communicate and express their ideas in written form. It is essential for teachers to offer materials that align with students' interests and needs while also introducing new knowledge. Rooted in constructivist theory as a response to traditional educational approaches, Problem-Based Learning (PBL) is found on three key principles for effective learning: it is student-centered, promotes active knowledge construction, and fosters collaboration among learners (Maurer & Neuhold, 2012).

On the other hand, teaching writing was like guiding students to follow the writing process. This research uses the theory of Maastricht (1960s) about problem-based learning steps for students to develop students' responsibilities, that is included in Schmidt (2011). Then, the researcher conducts problem-based learning using word wall website. The differences between Maastricht's Problem-Based Learning and the implementation of the Problem-Based Learning using Word Wall Website in process approach are jotted in a table in Appendix 4.

Based on the table, it can be seen that there are differences between Maastricht's Problem-Based Learning and the implementation of the Problem-Based Learning using Word Wall Website in teaching english. Furthermore, the researcher believed that this helps students to actively participate in the learning process and encourages them to contribute ideas creatively to produce a good writing through group work.

## 2.12 The Procedure of Problem-Based Learning using Word Wall Website

This document elucidates the processes for instructing writing through the Problem-Based Learning based on the theory of Maastricht (1960s), using Word Wall Website:

- 1. Clarifying terms: at the beginning of the session, the problem(s) should be presented to students. Teacher prepare several themes related to the descriptive text in the form of spin the wheel. The theme is adjusted to the learning material being discussed or based on the syllabus. They are main words (the mean of every types of descriptive text). All of the students play this game use their own phones. The objective of the initial phase is to reach a consensus on the definitions of the diverse words and concepts, as well as the context outlined in the problem. The knowledge of group members or that obtained from a dictionary can be utilized.
- 2. Defining the problem: the teacher asks students look for their students who have the same theme. They make groups based on the same category. They are seperated into six groups with a chosen leader. The leader of each group plays game on the word wall website. He/she has to match some words to the images in the form of labelled diagram to make a descriptive text. Those words can assist the students in generating a variety of ideas.
- 3. Brainstorming: the teacher encourages students to appropriately write down ideas from a series of images related to the theme. Each student should articulate their ideas freely and without immediate discussion. It is crucial to refrain from commenting on or discussing the ideas of others during this phase, focusing instead on gathering a diverse range of ideas (prior knowledge). Students will collaboratively compile effective sentences that encapsulate the overall meaning of the text and engage in discussions to enhance the quality of the descriptive text.
- 4. The teacher helps students to develop the ideas and write a descriptive with the proper diction or words.
- 5. In this phase, which is the essence of the analysis, the problem is articulated in several manners. Interrelated ideas are developed in relation to one

- another. Every group member is permitted to comprehensively articulate their thoughts regarding the subject issue. Group members may utilize all existing knowledge they possess.
- 6. Structuring and hypothesis: each group discusses which opinions are suitable to produce a good descriptive text.
- 7. The teacher explains the learning objective, the logistics needed, generic structures are used in making descriptive text, so that students can understand what kind of results are expected.
- 8. Learning objectives: Students review the steps and completion processes that have been carried out, such as generic structure, content, vocabulary, organization language use and mechanic.
- Group members are assigned with the tasks they have carried out. The task
  can be assigned in terms of learning objectives and based on the level of
  students.
- 10. Searching for Information: The group members gather knowledge independently in accordance with established learning objectives. Data is gathered from books as well as many sources, including libraries, journals, and the internet.
- 11. Synthesis: Each group presents the result of the written form to other groups.

  The teacher helps students to reflect or evaluate on their investigation and the processes they use.
- 12. Feedback: Students give feedbacks during teaching learning process. teachers will get information about whether learning is effective and acceptable to all students.

Those were the procedure that the researcher applied to the original Problem-Based Learning using Word Wall Website.

## 2.13 Modifying Problem-Based Learning with World Wall Website

No approach for teaching English as a foreign language is flawless, and each possesses its advantages and disadvantages. Therefore, it is important to understand the values and limitations of implementing integrated Problem-Based Learning using the word wall website. All of these are discussed below.

## 2.13.1 Advantages

Mathews-Aydinli (2007) outlines several benefits of implementing Problem-Based Learning (PBL) in EFL instruction. First, PBL centers on real-life situations, fostering meaningful and authentic interactions that are more impactful than conventional classroom activities such as role plays or repetitive dialogues. Second, PBL encourages students to become autonomous learners who can transfer classroom skills to real-world contexts, highlighting the importance of practicing language beyond the classroom setting. Lastly, because the problems used in PBL are grounded in real-life scenarios, learners are often more motivated to study, recognizing the practical relevance of the skills they are acquiring.

From the information above, it can be said that Problem-Based Learning provides many benefits in the teaching and learning process. Apart from that, word wall website has many advantages in the teaching process, namely; Providing material using pictures can stimulate and motivate students to produce lots of ideas. Word wall website is also a learning medium and assessment tool that can increase interest for students in the process. Word wall website was chosen because it has many features that can be used to create questions like games so that when students use it, it will be like learning and playing at the same time. At the end, students enjoy the learning process because they enjoy every stage.

## 2.13.2 Disadvantages

Patrick (2014) highlights several challenges associated with the implementation of Problem-Based Learning (PBL). One notable issue is the limited willingness of students to share their ideas within group discussions, as many exhibit hesitation when engaging in collaborative dialogue. Additionally, some students find it difficult to address unfamiliar problems, particularly during the initial stages of PBL. Communication barriers within groups may also arise, often due to low self-confidence. Furthermore, a number of students feel overwhelmed by the complexity of the problems, leading to self-doubt and a sense of discouragement that may result in withdrawal from the problem-solving process. Anxiety over academic performance is another common concern, as students often lack confidence in their ability to achieve satisfactory results.

The way to deal with the limitations above were the researcher must apply a more effective method, i.e. The Problem-Based Learning using Word Wall Website to helped students improve their writing achievement. The researcher should foresee certain disadvantages problems and optimize the benefits of PBL method. Hopefully, all learning activities could be successfully carried out.

## 2.14 Theoretical Assumptions

As formulated on the literature review above, teaching writing was not an easy task to teach, because many students were still difficult and not interested in learning English. It was difficult for students to express their ideas in writing. So, the teacher must think hard how to arouse their interest in learning English, especially in writing. Problem-Based Learning is a collaborative methodology that facilitates the construction of knowledge among students during the learning process, particularly through active group discussions and idea sharing. Nonetheless, the

stages of Problem-Based Learning failed to offer students opportunity to visualize and engage comfortably in the learning process. Consequently, the word wall website was employed in Problem-Based Learning to address the aforementioned issues, as it serves as a visual media that facilitates students' ability to visualize and cultivate ideas more effectively, thereby enhancing the elaboration of their concepts compared to traditional text, particularly in the context of descriptive writing. The students found the learning process more enjoyable and engaging with the use of technology. The researcher posited that using Problem-Based Learning through the Word Wall Website could enhance students' writing proficiency in descriptive texts. She also assumed that the aspect of writing that was improved the most after the treatments was vocabulary.

# 2.15 Hypothesis

In quantitative research, a hypothesis must be formulated based on the problem identified in the initial chapter. This research presents the following hypothesis in response to the concerns outlined in the preceding chapter:

1.) There was a significant difference in the students' writing achievement after they were taught through the Problem-Based Learning using Word Wall Website.

This chapter thoroughly examined the literature review. The subsequent chapter will delineate the methodologies employed in this investigation.

## III. METHODS

This chapter elaborated the research methods that involve research design, variables, population and sample, research procedures, data collection technique, instrument, validity, reliability, data analysis, and hypotheses testing.

## 3.1 Research Design

To answer the research questions, the researcher conducted a quantitative method by using pre-test and post-test group design as proposed by Setiyadi (2018). To collect those quantitative data, the researcher used both pre-test and post-test. From the statement above, the researcher used a quasi-experimental design to analyze the students' writing achievement through the problem-based learning using word wall website with the table below:

Figure 3.1 Research Design

T1 X T2

Notes:

T1 : Pre-test
X : Treatment
T2 : Post-test

In this research, the researcher used one class as the research sample. The experimental class was taught using the integrated Problem-Based Learning with Word Wall Website as a treatment. In this research, the subject was given a pre-test before treatment to know the students' priory achievement in writing skill. After that, they were given a post-test after treatment to reach out the result.

## 3.2 Variables

There were two kinds of variables in the research, those are called independent variable (X) and dependent variable (Y). The score of pre-test before treatment and post-test as a result of the Problem-Based Learning using Word Wall Website is as independent variable (X). Moreover, the achievement of students' writing is observed as a dependent variable (Y).

## 3.3 Population and Sample

## 1) Population

To get the answers of the research questions, the researcher needed to decide which school to be pointed. In this research, the population was the students at the the eighth-grade students of SMP Negeri 9 Bandar Lampung. There were 320 students at the 8th grade which are divided into 10 classes. The eighth graders were chosen based on the curriculum at the school. At this level, the students had to study descriptive text and adequate vocabularies.

However, although they had studied descriptive text and adequated vocabularies, the students at the eighth grade of SMP Negeri 9 Bandar Lampung still had several problems in writing a text. Therefore, the new teaching method proposed in this research is expected to solve this problem.

## 2) Sample

Sample of this research was one class of the 8<sup>th</sup> grade C of SMP N 9 Bandar Lampung. The technique used in determining the sample was randomly, which is the purposive sampling technique. Setiyadi (2018) explains that purposive sampling is a non-probability sampling technique where individuals or cases are deliberately selected because they are considered representative and capable of addressing the

research questions. In this research, it was done by conducting an interview to one of the English teachers in that school. It was known that the case study was the students of the class had low score in writing. They seemed to be in the beginner level of English. It is hoped that the change might be seen. The class consists of 30 students.

## 3.4 Data Collecting Technique

The data gathering approach in this research, according with its concept, was delineated into three parts. These comprise the pre-test, treatment procedure, and post-tests. In this study, the researcher gathered data through the administration of tests.

#### 1. Pre-test

This was conducted to assess the students' writing skill before administering the treatments of a method of Problem-Based Learning using Word Wall Website as the media in the first meeting.

## 2. Post-test

After implementing the treatments, a post-test was administered in order to see students' writing achievement as the result of the treatment. This test indicates the level of students' writing achievement and shows how they intend to perform through the implementation of the PBL using Word Wall Website. From this test result, it was also could be seen which aspect of writing that was enhanced the most.

#### 3.5 Instrument

This investigation employs a single instrument. A writing exam was conducted to gather data on students' writing proficiency in descriptive text following instruction

via Problem-Based Learning utilizing the Word Wall Website within a process oriented framework. The researcher instructed the students to collaboratively compose a descriptive text on a specified topic during the examination. The written test was administered twice: as a pretest prior to the treatments and as a posttest following the treatments. The evaluation criteria are derived from Jacobs et al. (1981) to determine the final scores of students' assignments. This scoring method is selected for its comprehensive framework for evaluating five writing dimensions: content, organization, vocabulary, language use, and mechanics.

Since testing writing is a subjective test, the research was not alone to collect the data. It uses inter-rater where the second rater was one of the teachers of that school. The reliability was tested between the correlation of rater 1 and rater 2.

## 3.6 Validity

Gronlund (1985) asserts that validity pertains to the interpretation and application of assessment results. For example, when it is determined that students have achieved specific learning objectives based on their test scores, there must be proof that the assessment tasks accurately and adequately represent those objectives. Validity is generally classified into two categories: content validity and construct validity. In achievement exams, content validity is crucial, as test results are deemed inaccurate if the test does not correspond with the material given to pupils. Conversely, construct validity pertains to the degree to which a test accurately measures the theoretical construct it aims to evaluate. This study evaluated both content and construct validity to confirm the assessments employed were valid.

## 3.6.1. Validity of Writing Test

Setiyadi (2018) states that a measuring instrument can be considered to have content validity if it adequately represents all the concepts or domains relevant to the material being assessed. In making the final test for English subjects, content validity is related to the extent to which the items in the test are prepared based on the existing curriculum. Here, the researcher correlated the writing tests with the curriculum for Junior High School. SMP NEGERI 9 Bandar Lampung used *Kurikulum Merdeka* to run the teaching and learning process. Besides, the tests were then created based on the materials that the students had been taught by the teacher of that school. Because the type of the text taught was descriptive text, the tests were certainly about a descriptive text.

The construct validity of the test assessment relies on the writing assessment rating scale developed by Jacob et al. (1981), which encompasses five key aspects: content, organization, vocabulary, language use, and mechanics.

## 3.6.1.1. Content Validity

A test is considered legitimate if it accurately measures what it is intended to measure. In making the final test for English subjects, content validity is related to the extent to which the items in the test are prepared based on the existing curriculum. In this research, the content validity was measured based on the learning objectives in English syllabus of *Kurikulum Merdeka* for the Eighth grade of Junior High School, as follows:

## **Learning Objectives:**

- Students are able to mention some vocabularies related to tourism place. (Name, Address, Sights, Sounds, Smells, Textures, Emotions)
- Students are able to use the vocabularies in sentences (Name, Address, Sights, Sounds, Smells, Textures, Emotions)

3. Students are able to compose and write a descriptive text related to tourism place.

## 3.6.1.2. Construct Validity

The construct validity of the writing test in this research is assessed according to the theory of academic writing. The pupils' writing must be structured according to numerous components: content, organization, vocabulary, language use, and mechanics. These elements align with the writing principles articulated by Jacob et al. (1981). The elaborations of the scoring rubric as the construct validity of this research is in a table in appendix 5.

In that table, the content score reflects the students' ability to convey their ideas and information through coherent and meaningful sentences. Organization assesses how well students arrange their ideas logically, ensuring that both topic and supporting sentences are clearly expressed. The vocabulary score is based on the students' ability to select appropriate words or idiomatic expressions to communicate ideas effectively. Language use pertains to the students' grammatical competence in constructing simple, compound, or complex sentences accurately and meaningfully. It also involves proper sentence structure and the correct use of linguistic elements such as nouns, adjectives, and temporal expressions. Finally, the mechanics score evaluates the students' proficiency in applying conventions of writing, including spelling, punctuation, capitalization, paragraph structure, and legibility.

According to experts, problem-based learning can improve students' writing skill. Hmelo (2004) had done a research that resulted that problem-based learning engaged students with authentic issues, which leads to more substantial content in writing.

## 3.7 Reliability

Reliability refers to the extent to which a test consistently produces accurate and stable results when administered under comparable conditions. Ensuring the reliability of obtained data is essential, regardless of its type (Hatch & Lazaraton, 1991).

# 3.7.1 Reliability of Writing Test

The test is subjective. In testing the reliability of the writing test, inter-rater reliability was used. Inter-rater reliability is often used for behavioral observations. A measure has high inter-rater reliability if two people who are observing a behavior agree on the nature of that behavior. Thus, in this research, it was computed through pearson product moment correlation in SPSS version 22 (see appendix 7).

From the two tables in the appendix, it could be seen that respectively the value of pearson correlations are 0.956 in the pre-test and 0.784 in the post-test. They are at the significant level of 0.000 which is lower than 0.05. It means that there is a correlation between the score of rater 1 and rater 2. Setiyadi (2018) reveals the degree of correlation interpreted by the value of r as elaborated below:

Table 3.5 Interpretation of *r* 

Value of r	Interpretation
0.00 - 0.20	Very low
0.21 - 0.40	Low
0.41 - 0.60	Medium
0.61 - 0.80	High
0.81 - 1.00	Very high

The first correlation value is in the stage of very high and the second is in the high level. In conclusion, the scores of rater 1 and rater 2 are correlated. Therefore, it can be concluded that the writing test employed in this investigation is reliable.

## 3.8 Research Procedures

In doing this research, the researcher used the following steps:

# 1. Determining the problem

After interviewing a teacher of SMP NEGERI 9 Bandar Lampung, it could be known that the students of the 8<sup>th</sup> grade still had low scores of writings. Thus, the researcher decided to do the research to that class.

# 2. Determining the subject of this research

In determining the subject, the researcher chose one class of the eighth grade of SMPN 9 Bandar Lampung of academic year 2024/2025, i.e. the VIII C graders.

3. Designing the instruments of the research.

In this research, the researcher prepared writing tests that included pre-test and post-test.

## 4. Administering the pre-test

Descriptive text was chosen as the topic of this current research. Furthermore, the researcher asked the students to write the list of description about the picture, then write a descriptive text. The time is 40 minutes for this test.

## 5. Conducting treatments

After giving the pretest, the treatments of implementation of the Problem-Based Learning using Word Wall Website were applied in three meetings in which each meeting contains 3 x 40 minutes.

## 6. Administering the post-test

The researcher administered the post-test after three treatments in the class. This test aims to measure the result of the students' writing achievement in descriptive text after the implementation of the new teaching method, i.e. Problem-Based

Learning using Word Wall website. The type of the test is the same as the pre-test which is in the form of written essay text.

## 7. Analyzing the data

The researcher arrived at a conclusion in this step based on the tabulated test data that have been administered. This research evaluated the students' writing in accordance with a scoring rubric that was derived from Jacobs, et al. (1981) of writing in terms of content, organization, vocabulary, language use, and mechanics.

## 3.9 Data Analysis

The researcher employed quantitative data analysis to examine the collected data based on its types. The examination of the instrument's data is delineated as follows:

- 1. Scoring the pre-test and post-test by using inter-rater.
- 2. Analyzing the test results and figuring out the pre and post-test gains. To compute the scores and determine whether the students' writing achievement had improved after treatment, the analysis was conducted using the statistical program SPSS version 22 through paired samples t-test.
- 3. By looking at the raw data of the students' scores, the researcher analyses which aspect of writing that is affected the most. It uses Microsoft Excel 2010 to view the scores.
- 4. Interpreting, describing and drawing conclusion

All calculations are then interpreted, described and drawn into conclusion.

## 3.10 Hypothesis Testing

Hypothesis testing is a method for determining the acceptance of suggested hypotheses in research. The following is the hypothesis of this research:

1. There is a significant difference in students' writing achievement after the students are taught through the Problem-Based Learning using Word Wall Website. Paired Samples T-Test is used to test the hypothesis with a significant level of p < 0.05 to know the significant difference in the pre-test and post-test. As a result, if there is no significant difference in the students' writing achievement after the students are taught through the Problem-Based Learning using Word Wall Website, the hypothesis will be rejected ( $H_0$ ). But, if there is a significant difference in the students' writing achievement through the modified method, the hypothesis is accepted ( $H_1$ ).

This chapter has elaborated the methods which were used in this research. It also reveales how the data were analyzed after the treatments to address the research questions.

## V. CONCLUSION AND SUGGESTIONS

This concluding chapter presents the insights derived from the findings and offers practical recommendations for future applications and investigations based on the analyses performed.

## **5.1 Conclusion**

In light of the findings and discussions presented in this current research, the conclusions are summarized as follows:

- 1. There was a different score between the pre-test and post-test towards the treatment. The score of the post-test was better than the score in the pre-test based on the analysis of both scores using comparative design with the type of the text was descriptive text. Problem-Based Learning using Word Wall Website had successfully affected the students' writing achievement. The word wall website had successfully covered the weakness of the original problem-based learning.
- 2. Among the aspects of writing skill, vocabulary is notably the most highly improved aspect in the implication of the modified method, i.e. problem-based learning using word wall website. The interesting features of word wall website successfully make the students broaden up their vocabulary. As a result, they are able to write a descriptive text.

# 5.2 Suggestions

Based on the research conducted at class, the following suggestions are directed towards teachers and further researchers involved in English language teaching and learning:

- 1. The researcher gives suggestions for teachers, which are:
  - In applying problem-based learning, teachers may broaden up the students' knowledges with various topic of descriptive text to enrich the learning experience and promote meaningful knowledge
  - 2). In applying word wall website, teachers had better maintain effective classroom management strategies, particularly during group discussions, to ensure all students have opportunities to participate effectively.
  - 3). Teachers have to be creative in applying the modified method of PBL using WWW because it can only be implemented in the schools that have technological stuffs like laptop, internet connection, projector and audio. This might be a limitation in classes with unsophisticated media. The effective implementation of the modified method relies on the capability of the school that can provide technology.
- 2. The researcher also gives suggestions for further researchers as following:
  - 1). Since this research was conducted in Junior High School, further researchers may choose Senior High School as the subject.
  - 2). Text used in this research is descriptive text. Further researchers can utilize other kinds of text, such as recount and narrative texts to achieve more advantages by using this modified method.
  - 3). Word Wall Website has been proven to cover the weakness of PBL. To enrich the modification, it is suggested for further researchers to modify

the problem-based learning method with other technological media, such as videos and songs that can lead students to be joyful in learning English.

These conclusions and suggestions provide a comprehensive framework for English educators and scholars who are interested in the implication of the Problem-Based Learning as a new modified teaching method and the application of Word Wall Website as a technological media. At the end, this chapter is the last chapter that concludes the results of this research and gives the suggestions.

#### REFERENCES

- Agustia, Munawir, A. and Ridwan (2024) Does Using Word Wall Website Improve Students' Vocabulary Retrieving?. *Journal of Language Teaching and Learning, Linguistics and Literature*, Volume 12, Number 2, December 2024
- Anggun, S.K. (2016). An Analysis of Descriptive Text in English Textbook Using Transitivity System (A Case Study of Reading Passages). *Journal of English and Education*, 2016, 4(1), 147-158
- Argawati, N.O. and Suryani, L. (2020). Project-Based Learning in Teaching Writing: The Implementation and Students' Opinion. *Journal of English Education*, Volume 8, Issue 2, June 2020
- Ariyani, Nazurty & Sukendro. (2025). The Implementation of a Problem-Based Learning (PBL) Model Assisted by Wordwall Media in the IPAS Subject to Enhance Students' Learning Outcomes. *Journal of Research in Science Education*, 11(2), 602–606.
- Ary, D., Jacobs, L. C., Sorensen, C. (2010). *Introduction to Research in Education*. Belmont, CA: Wadsworth Cenggage Learning.
- Asriati, S. (2013). Improving The Students' WritingbSkill by Using Process Writing Approach at The Second Grade Students of SMK Grafika Gowa. *Exposure Jurnal Pendidikan Bahasa Inggris*, November 2013
- Belinda, R.V., Raja, P. and Flora (2021) Modifying PPP in Promoting Communicative Language Teaching to Improve the Students' English Communicative Competence. *International Journal for Innovation Education and Research*, Vol:-9 No-8, 2021.
- Cristine, D. (2004). *Strategies for Building Vocabulary in Social Studies*. Harlow: Longman Pearson Education
- Darliani, Y and Agustina, C.F. (2019) The Implementation of Word Wall Strategy in Teaching Writing Descriptive Text. *The Journal of English Language Teaching, Literature, and Applied Linguistics [JELA]*, Volume 1, Number 2, October 2019
- Darmawan, Y.P., Santosa, M.H. and Dewi, K.S. (2023). Development of supplementary material using Wordwall for 12<sup>th</sup>-grade students in learning

- relative clauses. *Journal of Research on English and Language Learning*, Volume4, Number 1, February 28<sup>th</sup>, 2023
- Dastgeer, G. and Afzal, M.T. (2015) Improving English Writing Skill: A Case of Problem Based Learning. *American Journal of Educational Research*, 2015, Vol. 3, No. 10, 1315-1319
- Donnelly, R. (2009) Integrating Learning Technologies with Experiential Learning in a Postgraduate Teacher Education Course. *Studying Teacher Education*, Volume 2, Issue 1, May 2006, pages 91-104.
- Elyana, T. and Rini, S. (2021). Using Word Wall for Improving Students' Writing "What Are You Doing". *MIYAH: Jurnal Studi Islam*, Volume 17, Nomor 01, Januari 2021
- Fitria, T.N. (2023) Creating an Education Game Using Wordwall: An Interactive Learning Media for English Language Teaching (ELT). *FOREMOST JOURNAL*, Vol.4, No.2, August 2023
- Fraenkel, J. R., and Wallen, N. E. (2009). *How to Design and Evaluate Research in Education*. New York: McGraw-Hill.
- Gallagher, S.A. (1997). Problem-Based Learning: Where Did it Come from, What Does it Do, and Where is it Going?, *Journal for the Education of the Gifted*, 20(4), 332–362.
- Ghofron, M.A. and Ermawati, S. (2018). The Strengths and Weaknesses of Cooperative Learning and Problem based Learning in EFL Writing Class: Teachers and Students' Perspectives. *International Journal of Instruction*, Vol.11, No.4
- Glean, S.P. (2022) The Effect of Problem Based Learning on Students' Ability in Writing Descriptive Text at Grade VII Students of SMP Negeri 2 Tebing Tinggi. *THE EXPLORA*, Volume 8 No. 3, Desember 2022
- Hairuddin, N.H., Machmoed, H.A. and Jubhari, R.R. (2018). The Use of Problem Based Learning (PBL) Method in Teaching English Writing. *SELTICS*, Vol. 1, No. 1, Desember 2018
- Harmenita, R.Y and Tiarina, Y. (2013) Teaching Writing a Descriptive Text by Using Environmental Observation Strategy. *Journal of English Language Teaching*, Vol. 1 No. 2, September 2013, Serie A
- Harmer, J. (2004). How to Teach Writing. Harlow: Longman
- Harmer, J. (2007). The Practice of English Language Teaching. Harlow: Longman

- Hatch, E.M. & Lazaraton, A. (1991). *The Research Manual: Design and Statistics for Applied Linguistics*. United States of America: Heinle & Heinle Publishers
- Hmelo-Silver, C. E. (2004). Problem-Based Learning: What and How Do Students Learn?. *Educational Psychology Review*, 16(3), 235–266.
- Ilahiyati, N., Rohmah, Z., Hamamah. (2023). The Implementation of Wordwall Games in Vocabulary Learning. IJEE (Indonesian Journal of English Education), 10(1), 144-159
- Jacobs, H.L., Zinkgraf, S.A., Wormuth, D.R., Hartfiel, V.F. amd Hughey, J.B. (1981). *Testing ESL Composition: A Practical Approach*. Rowley: Newbury House
- Kadaruddin, Arafah, B., Kaharuddin, Ahmad, D. and Iska (2020) Word Wall Media: An Effective Teaching Technique to Enrich Students' Vocabulary in Secondary Level of Education. *International Journal of Advanced Science and Technology*, Vol. 29, No. 5, (2020)
- Kepakisan, I.G.N.M.M. (2024) The Implementation of Problem Based Learning Integrated With Technology to Improve Writing Skills. *Sintaksis : Publikasi Para ahli Bahasa dan Sastra Inggris*, Vol. 2, No.4 Juli 2024
- Khairunisa, Y. (2021). Pemanfaatan Fitur Gamifikasi Daring Maze Chase–Wordwall Sebagai Media Pembelajaran Digital Mata Kuliah Statistika Dan Probabilitas. Mediasi Jurnal Kajian Dan Terapan Media, Bahasa, Komunikasi, 2(1), 41–47.
- Lamatokan, A. (2018). Students' Perception toward Teachers' Teaching Styles and the use of learning Strategies in Teaching English. Eralingua. *Jurnal Pendidikan Bahasa Asing dan Sastra*, 2(2).
- Leong, P. N. C. (2009). The Power of Problem-Based Learning (PBL) in the EFL Classroom. *Polyglossia*, 16(2), 41–48.
- Mandasari, E.S., Rizal, S. and Nadrah (2015) The Use of Word Walls Technique to Improve Students' Writing Ability in Descriptive Text. Jadila: Journal of Development and Innovation in Language and Literature Education, Volume 2 Number 4
- Marensi, V., Suarman and Syahza, A. (2023). The Effectiveness of Using Word Wall-Based Learning Media in Increasing Students' Learning Activities on Economy Learning Subjects at SMA PGRI Pekanbaru. *Jurnal PAJAR (Pendidikan dan Pengajaran)*, Volume 7 Nomor 2 March 2023
- Mathews-Aydinli, Julie. 2007. Problem-Based Learning and Adult English Language Learners. Washington DC: CAELA Brief

- Maurer, H. and Neuhold, C. (2012). Problems Everywhere? Strengths and Challenges of a Problem-Based Learning Approach in European Studies. *Higher Education Academy Social Science Conference*, Session 4 Tuesday, 29 May, 14h, Canada Suite
- Monaco, M. and Martin, M. (2007) The Millennial Student: A New Generation of Learners. *Athletic Training Education Journal*; 2007; 2(Apr-Jun):42-46
- Nisa, K., Raja, P. and Yufrizal, H. (2017) Problem-Based Learning and Writing Process Combination in Teaching Writing. *U-JET Unila Journal of Englisgh Teaching*, Vol 6, No 6 (2017)
- Novianti, F.A. and Mufaridah, F. (2023) Literature Review: Wordwall Game Application in English Language Learning to Develop a Disciplined Character in the Millenial Era. *The 2nd English National Seminar English Education Study Program STKIP PGRI PACITAN*
- Oshima, A. and Hogue, A. (2006). *Writing Academic English*. New York: Pearson Longman
- Patrick, F., & McPhee, A. (2014). Evaluating the Use of Problem-Based Learning in a New Initial Teacher Education Degree. *Journal of Learning Development in Higher Education*, (6), 3–12.
- Rahmawati, A.P. and Wijayanti, P.R. (2022). Implementing Joyful Learning Strategy Using Wordwall in Order to Improve Reading Comprehension Skills. *Proceedings of Digital Literacy in Education and Science*, ISBN: 978-623-5729-30-5
- Ribeiro, L. R. C. (2011). The Pros and Cons of Problem-Based Learning from the Teacher's Standpoint. *Journal of University Teaching & Learning Practice*, 8(1), 34–51
- Richards, J.C & Renandya, W.A (2002) *Methodology in Language Teaching*. Cambridge: Cambridge University Press
- Savoji, A.P., Nesbit, J.C. and Gajdamaschko, N. (2019) The conceptualisation of cognitive tools in learning and technology: A review. *Australasian Journal of Educational Technology*, 2019, 35(2).
- Schmidt, H. G. (1983). Problem-based learning: Rationale and description. *Medical Education*, 17(1), 11–16
- Schmidt, H. G., Rotgans, J. I., & Yew, E. H. J. (2011). The process of problem-based learning: What works and why. *Medical Education*, 45(8), 792–806
- Setiyadi, A.B. (2018). *Metode Penelitian untuk Pengajaran Bahasa Asing*. Yogyakarta: Graha Ilmu

- Sinaga, M. (2017) The Effect of Roundtable and Clustering Teaching Techniques and Students' Personal Traits on Students' Achievement in Descriptive Writing. *Advances in Language and Literary Studies*, 8(6):69-75
- Sipayung, K.T., Tampubolon, S. Napitupulu, F.D. and Tobing, F.L. (2021). Generic Structure of Descriptive Text Written English Language Learner and Teachers. *Linguistics and Culture Review*, 5(S3), 1636-1650
- Suwastini, N.K.A., Puspawati, N.W.N., Adnyani, N.L.P.S., Dantes, G.R. and Rusnalasari, Z.D. (2021) Problem-based learning and 21<sup>st</sup>-century skills: Are they compatible? *EduLite Journal of English Education, Literature, and Culture,* Vol. 6, No. 2, August 2021, pp. 326-340
- Swari, N.K.T.A. (2023). Wordwall As A Learning Media to Increase Students' Reading Interest. *Jurnal Pendidikan Bahasa Inggris Indonesia*, Vol.11, No.1 Maret 2023
- Sweller, J. (1988). Cognitive Load During Problem Solving: Effects on Learning. *Cognitive Science*, 12(2), 257–285.
- Wibowo, A. (2022). Ability to Write Clinical Writing for Sixth Semester College Students of the English Department PGRI Semarang with Inside the Instructional Field. *ALLURE JOURNAL*, Volume 02, No. 1, January 2022, pp. 61-71
- Yulianto, D., Juniawan, E. A., Junaedi, Y., Anwar, S. and Umami, M.R. (2024) Fostering Mathematical Motivation with Wordwall Media: A Study of the ARCS Model (Attention, Relevance, Confidence, and Satisfaction) Based on Sex Among High School Students. *SJME (Supremum Journal of Mathematics Education)*, Vol.08, No.02, July 2024