THE EFFECT OF COOPERATIVE LEARNING MODEL ASSISSTED BY WORDWALL ON STUDENTS' WRITING ABILITY IN DESCRIPTIVE TEXT AT GRADE X OF SMA NEGERI 2 TANJUNGBALAI IN 2025/2026 ACADEMIC YEAR

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ABSTRACT

This research aimed to investigate the effect of the Cooperative Learning model assisted by Wordwall on students' writing ability in descriptive text. The study was conducted at SMA Negeri 2 Tanjungbalai in the 2025/2026 academic year using a quantitative quasi-experimental design with two groups: an experimental class and a control class. The sample consisted of 46 students, with 22 students in the experimental class and 24 students in the control class. The data were collected through pre-test and post-test writing assessments and analyzed using the t-test formula. The results showed that the mean score of the control class increased from 54.5 in the pre-test to 72.5 in the post-test, while the experimental class showed a greater improvement after being taught using the Cooperative Learning model assisted by Wordwall. The hypothesis testing revealed that the t-count value was higher than the t-table value at the significance level of 0.05 with the degree of freedom (df) 44, indicating a statistically significant difference between the two groups. Based on these findings, the null hypothesis (Ho) was rejected and the alternative hypothesis (Ha) was accepted. It can be concluded that the Cooperative Learning model assisted by Wordwall has a significant positive effect on students' writing ability in descriptive text. Therefore, this method is recommended as an effective teaching strategy to improve students' writing achievement.

Keywords: *Cooperative Learning, Wordwall, Writing Ability, Descriptive Text, Experimental Research.*

INTRODUCTION

In the field of education, english serves as both a subject of study and a vital means of learning. English is used in many countries because it functions as an international language, and it is also one of the most widely learned foreign languages. In Indonesia, english is regarded as the primary foreign language and is taught from elementary school up to the university level. Many areas also provide additional english courses to support language learning. As a result, the ability to communicate in english has become increasingly important in global settings. However, english instruction in schools has generally emphasized english reading skill as a functional ability. According to the national curriculum, english learning focus on four main skills: listening, speaking, reading, and writing. These four language skills are essential for students as they prepare to engage with society, their surroundings, and the professional world areas that undeniably require strong communicative abilities. (Septiani et al., 2023)

When studying a foreign language, particularly english, writing becomes one of the essential skills to master. In addition, writing provides an effective medium for expressing ideas, emotions, and viewpoints to others. (Nahdi & Yunitasari, 2020) say that writing, holds an important function because it enables individuals to express ideas for the purpose of informing, persuading, or even entertaining others. In addition, writing helps students improve their understanding of texts, especially when they practice reading. Writing is a way for learners to put their ideas, opinions, and feelings into written form. In the english curriculum, classroom instruction is directed toward four main skills: listening, speaking, reading, and writing. At the senior high school level, students study five types of texts, which include report,

recount, narrative, procedure, and descriptive texts.

Based on the observation at SMA Negeri 2 Tanjungbalai, this indicates that many students encounter difficulties in learning english. Some of them view english as a challenging subject because they find it hard to understand writing tasks, including composing descriptive texts. A descriptive text is a type of writing that presents the characteristics of a person, place, object, or event in a clear and detailed manner. According to (Suminar & Putri, 2018) in (Haris Mayekti et al., 2022), the main purpose of a descriptive text is to enable readers to clearly understand the subject and obtain information from the description provided. Many students still struggle in writing descriptive texts, particularly due to their limited vocabulary. Most students find it difficult to choose the right words to describe objects, people, or places, which results in sentences that are simple, repetitive, and sometimes inaccurate. This lack of vocabulary also affects their ability to develop ideas clearly and express their thoughts effectively in written form. As a result, their descriptive texts often lack detail, coherence, and variety. In addition, students' motivation to write is relatively low since the learning process still relies on traditional, teacher centered methods. This situation indicates the need for an innovative and interactive approach that can enhance students' vocabulary mastery and writing performance.

Because of this problem, students often struggle to express their ideas clearly in writing. One approach that can help address this issue is the cooperative learning model, which encourages students to work together while engaging in interactive vocabulary activities. (Dewey, 1989) in (Astuti, 2021) says that cooperative learning refers to an instructional approach that organizes students into small groups, where they work collaboratively to enhance both their own understanding and the learning of their peers. by engaging students in small groups where they collaborate to develop ideas, discuss key characteristics of the topic, and select appropriate vocabulary. Through this interaction, students work together to organize the identification and description sections and construct clear, accurate sentences. They also review and refine each other's work to improve grammar, coherence, and word choice.

Moreover, to support a more interactive and effective application of the cooperative learning model, this research utilizes wordwall as an instructional digital tool. According to (Green, 1993) in (Zaharani, 2022), stated that wordwall encourages students to organize and explore a wide range of essential vocabulary, creating a rich learning environment. It also serves as an engaging tool that supports interaction and collaboration in group learning.

Based on the explanations presented above, this study is carried out under the title "The Effect of Cooperative Learning Model Assisted by Wordwall on Students' Writing Ability in Descriptive Text at Grade X of SMA Negeri 2 Tanjungbalai in the 2025/2026 Academic Year."

METHOD

This research applied a quantitative approach with a quasi-experimental research design to examine the effect of the Cooperative Learning model assisted by Wordwall on students' writing ability in descriptive text. The research used a pre-test and post-test control group design involving two groups, namely an experimental group and a control group. Both groups were given a pre-test to identify students' initial writing ability before the treatment. The experimental group was taught by using the Cooperative Learning model assisted by Wordwall, while the control group received conventional teaching methods. After the treatment process, a post-test was administered to both groups in order to determine the students' improvement in writing descriptive text and to identify the effectiveness of the applied treatment.

This research was conducted at SMA Negeri 2 Tanjungbalai during the 2025/2026 academic year. The population of the study consisted of all tenth-grade students, totaling 312 students divided into ten classes. In selecting the sample, the researcher used a simple random sampling technique. Based on the collected data, the sample consisted of 46 students taken from two classes. Class X-4, consisting of 22 students, was selected as the experimental class, while class X-9, consisting of 24 students, was chosen as the control class.

The instrument used in this research was a writing test in the form of descriptive text writing tasks. The test was administered twice, namely as a pre-test and a post-test. In both tests, students were instructed to write a descriptive text about a person based on the provided topic. The students' writing was assessed by using an analytic scoring rubric covering five aspects: content, organization, vocabulary, grammatical features, and mechanics. These criteria were used to evaluate students' ability in producing clear, coherent, and properly structured descriptive texts.

The procedures of data collection in this study were conducted in three stages: pre-test, treatment, and post-test. The pre-test was administered to determine students' initial writing ability before the treatment. During the treatment phase, the experimental class was taught through the Cooperative Learning model assisted by Wordwall. In this process, students worked collaboratively in groups, discussed ideas, completed interactive vocabulary activities through Wordwall, and practiced constructing descriptive texts together. Meanwhile, the control class was taught using conventional teaching methods in which the teacher explained the material directly and students completed the tasks individually without interactive cooperative activities. After completing the treatment, a post-test was given to both groups to measure students' improvement in writing descriptive texts. The collected data were in the form of numerical scores obtained from students' pre-test and post-test results. These scores represented students' writing performance based on the established assessment criteria. The data were then organized, tabulated, and prepared for further statistical analysis.

To analyze the data, the researcher used an inferential statistical analysis through the t-test formula in order to determine whether there was a significant difference between the mean scores of the experimental group and the control group. The analysis involved calculating the mean scores, standard deviation, and comparing the obtained t-test value with the t-table at the significance level of 0.05. If the calculated t-value was higher than the t-table value, the alternative hypothesis (Ha) was accepted. This indicated that the Cooperative Learning model assisted by Wordwall had a significant effect on students' writing ability in descriptive text.

This research applied a quasi-experimental research design using a pre-test and post-test control group design. In this design, the experimental group and the control group were selected through a simple random sampling technique. Both groups were administered a pre-test to identify students' initial ability in writing descriptive text before the treatment was conducted. Afterward, different teaching treatments were implemented in each group. The experimental class was taught by using the Cooperative Learning model assisted by Wordwall, while the control class was instructed through conventional teaching methods. At the end of the treatment, both groups received a post-test to determine the effect of the applied teaching models on students' writing ability in descriptive text.

Table 1. Research Design

Group	Pre-test	Treatment	Post-test
Eksperimen	X	Cooperative learning + wordwall	X
Control	Y	Conventional Model	Y

Where:

X = Teaching descriptive text through the Cooperative Learning model assisted by Wordwall
Y = Teaching descriptive text through conventional teaching methods

The experimental class implemented the Cooperative Learning model assisted by Wordwall, in which students worked collaboratively in groups, discussed ideas, and completed interactive vocabulary and writing activities using the Wordwall platform. Meanwhile, the control class used conventional teaching methods that focused on teacher-centered instruction and direct explanation of the material. Through these different teaching approaches, the researcher aimed to identify the effectiveness of the Cooperative Learning model assisted by Wordwall on students' writing ability in descriptive text.

The process of collecting data required an appropriate research instrument. According to Arikunto (2006) in (Nasution, 2022), an instrument is a tool used to collect data in a research study. In this research, the instrument used was a writing test consisting of pre-test and post-test activities to measure students' writing performance before and after the treatment. The instrument consists of a written test that includes two components:

1. Pre-test, administered prior to the treatment for both the experimental and control groups, in order to determine the students' initial ability to compose descriptive texts.
2. Post-test, administered following the treatment to measure the extent of improvement in students' descriptive writing performance.

In both assessments, students are required to write a descriptive text about a person based on a given topic (for example: My Best Friend, My English Teacher, or A Famous Person I Admire). The topics are selected from familiar and contextually relevant themes to help students generate ideas more effectively.

The following writing assessment table is developed in accordance with the previously mentioned indicators and is adapted from Hyland's (2003) framework for evaluating writing performance:

Table 2. Scoring Guide

Aspect	Score	Performance Description
Content	20	The description is rich, relevant, and thoroughly developed. Key characteristics of the person are conveyed clearly and accurately, with no essential details omitted.
	15	The content is generally well-presented and relevant; most important details are included, although some points may lack depth or elaboration.
	10	The description shows limited detail; several key characteristics are insufficiently explained or missing, resulting in partial clarity.
	5	The content is minimal and lacks relevance; essential information is largely absent, making the description unclear.
Organization	20	The text is well-structured with a clear introduction, logical sequencing of descriptive details, and strong coherence throughout.
	15	Organization is mostly clear; ideas follow a reasonable order, though transitions between points may need improvement.
	10	The text displays weak organization; ideas are sometimes misplaced or insufficiently connected, reducing overall coherence.
	5	The writing lacks structure; ideas appear disjointed and randomly arranged, making comprehension difficult.
Lexical features (Vocabulary)	20	Vocabulary use is precise, varied, and fully appropriate for descriptive purposes; adjectives and descriptive expressions enhance the clarity of the description.
	15	Vocabulary is generally suitable, though some words may be repetitive or lacking specificity.
	10	Word choice is limited or imprecise; inappropriate vocabulary reduces the effectiveness of the description.

	5	The vocabulary is highly restricted and often misused, making meaning unclear.
Grammatical Features	20	The text demonstrates strong control of grammar; sentence structures are accurate, and the simple present tense is consistently applied with minimal errors.
	15	Some grammatical errors are present but do not impede meaning; overall sentence structures remain understandable.
	10	Frequent grammatical errors occasionally interfere with comprehension.
	5	Numerous grammatical problems significantly hinder understanding of the text.
Mechanics	20	Spelling, punctuation, and capitalization are consistently accurate; writing conventions are applied correctly throughout.
	15	Minor mechanical errors are present but do not disrupt readability.
	10	Mechanical errors occur frequently and begin to affect reading fluency.
	5	Persistent mechanical errors disrupt meaning and make the text difficult to read.

Assessing students' writing ability requires the use of appropriate scoring criteria in order to obtain accurate and objective results. Scoring rubrics are important instruments in evaluating students' writing performance because they provide clear indicators and detailed descriptions of each aspect being assessed. Through these rubrics, teachers are able to measure students' achievement systematically, provide feedback on their writing, and identify students' progress in developing writing skills. In this research, students' writing was evaluated based on several aspects, namely content, organization, vocabulary, grammatical features, and mechanics.

Validity refers to the extent to which an instrument accurately measures what it is intended to measure. According to Suharsimi Arikunto, citing Scarvia B. Anderson, an instrument can be categorized as valid if it is able to measure the intended variable appropriately. In this study, the validity of the test was analyzed by using the product moment correlation formula.

$$r_{xy} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{[N\sum X2-(\sum X)2]\ [N\sum Y2-(\sum Y)2]}}$$

Reliability refers to the consistency and dependability of a research instrument in measuring a particular variable. According to Arikunto, reliability indicates the stability of the measurement results when the instrument is used repeatedly under similar conditions. In this study, the reliability of the test was calculated by using the following formula:

$$r_{11} = \frac{2rxy}{1+rxy}$$

RESULTS AND DISCUSSION

The students' test results are presented in the following table.

Table 3. Score of Pre Test and Post Text of Experimental Group

No	Students' Initial	Score of pre- Test (X)	Score of Post-Test (Y)	X2	Y2	X.Y
1	AMNS	70	85	3600	7225	5100
2	NA	80	85	4225	7225	5525
3	ZAH	55	80	900	2500	1500
4	DIP	65	85	2025	3600	2700
5	HS	65	85	3025	7225	4675
6	ANS	70	90	3600	8100	5400
7	RR	60	75	2025	5625	3375

8	FAF	80	65	1225	4225	2275
9	MY	45	75	1225	5625	2625
10	RAS	70	85	3600	7225	5100
11	NAPBA	65	80	3025	6400	4400
12	CN	70	90	1225	8100	3150
13	NAD	60	75	2025	5625	3375
14	CR	65	70	2500	4900	3500
15	R	55	90	900	8100	2700
16	QAD	60	75	1600	5625	3000
17	IDU	50	65	1225	4225	2275
18	MHFS	50	70	1225	3600	2100
19	ZAN	80	85	6400	7225	6800
20	AR	65	90	2500	8100	4500
21	TWBH	70	75	3025	5625	4125
22	AP	80	95	6400	9025	7600
	Total	$\sum x$ 1430	$\sum y$ 1770	$\sum x2$ 95100	$\sum y2$ 143950	$\sum x.y$ 115775

From the data above we could see that students' score in pre-test was lower than post-test. The avarage of students' score in pre-test was 65,0 and after giving treatment by using cooperative learning model, it was increased 15,4% until the average score was being 80,4 in post-test.

From the data above, it can be seen thatt the highest and lowest values in the pre-test are:

1. Score 80 are 4 students.
2. Score 70 are 5 students.
3. Score 65 are 5 students.
4. Score 60 are 3 students.
5. Score 55 are 2 students.
6. Score 50 are 2 students.
7. Score 45 are 1 students.

From the data above, it can be seen thatt the highest and lowest values in the post-test are:

1. Score 95 are 1 students.
2. Score 90 are 4 students.
3. Score 85 are 6 students.
4. Score 80 are 2 students.
5. Score 75 are 5 students.
6. Score 70 are 2 students.
7. Score 65 are 2 students.

Table 4. The Score of pre-test and post-test in control group.

No	Students' Initial	Score of pre-Test (X)	Score of Post-Test (Y)	X2	Y2	X.Y
1	AH	45	75	3025	5625	4125
2	AS	50	75	3025	6400	4400
3	IKT	55	70	4225	6400	5200
4	NTP	65	70	4225	7225	5525
5	RAS	40	65	2500	4225	3250
6	EM	65	85	3600	7225	5100
7	CRM	40	70	3025	4900	3850
8	HA	45	65	3025	4225	3575
9	GLB	50	70	3600	6400	4800
10	AR	70	65	4900	5625	5250
11	S	50	65	3600	6400	4800

12	TRDYB	45	65	3025	4225	3575
13	KN	40	65	2500	4225	3250
14	NPHS	70	70	4900	4900	4900
15	LBB	55	80	4225	6400	5200
16	GCBS	65	85	4900	7225	5950
17	YEA	55	70	4225	5625	4875
18	PSD	50	75	3025	6400	4400
19	YET	60	70	4225	4900	4550
20	PA	65	75	4225	6400	5200
21	LAD	65	80	4900	6400	5600
22	IN	60	85	4225	7225	5525
23	NS	60	80	3600	6400	4800
24	LKS	55	65	3025	3600	3300
	Total	$\sum x$ 1310	$\sum y$ 1740	73500	$\sum x2$ 127250	$\sum y2$ 95525 $\sum x.y$

Based on the table, it showed that :

M = $\frac{\sum x}{N}$ x 100

M = $\frac{1310}{24}$ x 100 = 54,5

M = $\frac{\sum y}{N}$ x 100

M = $\frac{1740}{24}$ x 100 = 72,5

From the data above we could see that students' score in pre-test was lower than post-test. The avarage of students' score in pre-test was 54,5 and after giving treatment by using cooperative learning model, it was increased 18% until the average score was being 72,5 in post-test.

From the data above, it can be seen that the highest and lowest values in the pre-test are:

1. Score 70 are 2 students
2. Score 65 are 4 students
3. Score 60 are 3 students
4. Score 55 are 4 students
5. Score 50 are 5 students
6. Score 45 are 3 students
7. Score 40 are 3 students

From the data above, it can be seen that the highest and lowest values in the post-test are:

1. Score 85 are 3 students
2. Score 80 are 3 students
3. Score 75 are 4 students
4. Score 70 are 7 students
5. Score 65 are 7 students

CONCLUSION

This reseearch employs a quantitative approach using a simple random sampling technique to select the sample, which consists of grade X students of SMA Negeri 2 Tanjungbalai in the 2025/2026 academic year. The data were collected through three main stages: pre-test, treatment, and post-test. The instrument used in this research was a writing test aimed at measuring students' ability in composing descriptive texts. The Cooperative Learning model assisted by Wordwall was applied to help students develop their writing skills, particularly in organizing ideas and improving vocabulary. This approach was considered effective because it encourages students to work collaboratively, exchange ideas, and actively

participate in the learning process.

Based on the data analysis presented in the previous chapter, the results show that the alternative hypothesis (Ha) is accepted, while the null hypothesis (Ho) is rejected. This indicates that the implementation of the Cooperative Learning model assisted by Wordwall has a significant effect on students' writing ability in descriptive text. The findings also suggest that students' initial abilities influence their learning progress, especially when supported by appropriate instructional strategies. Through this method, students became more active, engaged in group discussions, and experienced a more interactive learning environment, which increased their motivation to learn English. Consequently, students showed greater participation during the learning process and achieved better writing outcomes.

REFERENCES

Ahmed, I., & Ishtiaq, S. (2021). Reliability and validity : Importance in Medical Research. 2401–2406.

Albashir Jamoom, Osama. (2021). EFL Students' Needs for Improving Their Writing Skills. Scholars International Journal of Linguistics and Literature, 4(4), 106–111. https://doi.org/10.36348/sijll.2021.v04i04.004

Amin, M. (2022). the Influence of Government Apparatus Competence and E-Government Policy Implementation on Improving Public Services At Department of Population and Civil Registration Ambon. Journal of Law Theory and Law Enforcement, 1(2), 1–15. https://doi.org/10.56943/jlte.v1i2.54

Astuti, S. (2021). Development the Study of Effectiveness Cooperative Learning Model in Classroom. JLCEdu (Journal of Learning and Character Education), 1(2), 74–82. https://doi.org/10.56327/jlcedu.v1i2.28

Cipta, B. S., Husnayaini, I., & Rasuan, Z. B. (2021). an Analysis of Students' Ability in Writing Descriptive Text. EEdJ: English Education Journal, 1(2), 10–17. https://doi.org/10.32923/eedj.v1i2.2087

Diana, A. D. M. (2021). an Error Analysis of Language Features in Writing. April, 1–93. file:///D:/PROPOSAL JELPUT/realated finding/AN ERROR ANALYSIS OF LANGUAGE FEATURES IN WRITING.pdf

Duha, M. (2022). FAGURU: Jurnal Ilmiah Mahasiswa Keguruan STUDENTS' DIFFICULTIES IN WRITING DESCRIPTIVE TEXT. 1(2). https://jurnal.uniraya.ac.id/index.php/FAGURU

Dzieciatko-szendrei, B., & Viry, G. (2024). Systematic review of the operational definitions and indicators of teacher communities Dragan Ga ˇ. 45(April 2023). https://doi.org/10.1016/j.edurev.2024.100640

Filippou, D., Buchs, C., Quiamzade, A., & Pulfrey, C. (2022). Understanding motivation for implementing cooperative learning methods: a value-based approach. In Social Psychology of Education (Vol. 25, Issue 1). Springer Netherlands. https://doi.org/10.1007/s11218-021-09666-3

Haris Mayekti, M., Faiza, D., Christanty, A., & Bestari, Y. (2022). An analysis of writing descriptive text at the second semester students' English language teaching UNU Purwokerto. English Education, Linguistics, and Literature Journal, 1(1), 2022. https://jurnal.unupurwokerto.ac.id/index.php/educalitra

Law, E. (2022). A critical study into the extent that co-operative learning promotes a greater confidence and a more accurate rendering of syntax in unseen translations for Year 12 IB Higher Latinists. Journal of Classics Teaching, 23(45), 4–12. https://doi.org/10.1017/S2058631021000404

Makwana, D., Engineer, P., Dabhi, A., & Chudasama, H. (2023). Sampling Methods in Research : A Review. 7(3), 762–768.

Møgelvang, A., & Nyléhn, J. (2023). Co-operative Learning in Undergraduate Mathematics and Science Education: A Scoping Review. International Journal of Science and Mathematics Education, 21(6), 1935–1959. https://doi.org/10.1007/s10763-022-10331-0

Naibaho, L. (2022). The analysis of students' reading and writing difficulties in learning english at universitas kristen indonesia. Jurnal Konseling Dan Pendidikan, 10(1), 157.

https://doi.org/10.29210/172700
Öztürk, B. (2023). The Effect of Cooperative Learning Models on Learning Outcomes: A Second-Order Meta-Analysis. Educational Policy Analysis and Strategic Research, 18(3), 273–296. https://doi.org/10.29329/epasr.2023.600.13
Purnamasari, D., Hidayat, N. D., & Kurniawati, L. (2021). an Analysis of Student ' S Paragraph Writing. English Education: Jurnal Tadris Bahasa Inggris, 14(1), 101–114.
Qismullah Yusuf, Zalina Jusoh, & Yunisrina Qismullah Yusuf. (2021). Cooperative Lerning Strategies to Enhance Writing Skills among Second Language Learners. International Journal of Instruction, 12(1), 1399–1412.
Septiani, P., Suharto, V. T., & Sudarwati, S. (2023). Implementation of Canva Assisted Problem-Based Learning Model for Education as an Effort to Increase Review Writing Skills. International Journal Corner of Educational Research, 1(3), 144–150. https://doi.org/10.54012/ijcer.v1i3.168
Sipayung, K. T., Tampubolon, S., Napitupulu, F. D., & Tobing, F. L. (2021). Generic structure of descriptive text written English language learner and teachers. Linguistics and Culture Review, 5(S3), 1636–1650. https://doi.org/10.21744/lingcure.v5ns3.1950
Tumanggor, N. C. (2023). THE EFFECT OF COOPERATIVE LEARNING METHOD TOWARDS STUDENTS ' WRITING ABILITY AT THE X GRADE OF SMAN 1 TUKKA Written by : TARBIYAH AND TEACHER TRAINING FACULTY STATE ISLAMIC UNIVERSITY METHOD TOWARDS STUDENTS ' WRITING.
Yulianawati, I., Saleh, M., Mujiyanto, J., & Sutopo, D. (2022). The Effectiveness of Writing Techniques in Improving Students' Writing Ability with Different Self-Esteem. Studies in English Language and Education, 9(1), 30–44. https://doi.org/10.24815/siele.v9i1.21725
Zaharani, H. (2022). the Effect of Word Wall Method on Students' Writing Ability. Journal MELT (Medium for English Language Teaching), 6(2), 107. https://doi.org/10.22303/melt.6.2.2021.107-121