Formosa Journal of Science and Technology (FJST)
Vol.3, No.6, 2024: 1329-1342

The Effect of Jigsaw Technique on Writing Ability of Grade Tenth Students at SMA Negeri 1 Siantar

Lidya Rospita Purba [1]*, Selviana Napitupulu[2], Bertaria Sohnata Hutauruk[3]
Program Studi Pendidikan Bahasa Inggris, Universitas HKBP Nommensen
Corresponding Author: Lidya Rospita Purba lidiapurba213@gmail.com

A R T I C L E I N F O

Keywords: Jigsaw Technique, Writing Ability, Recount Text

Received : 5, April
Revised : 14, May
Accepted: 28, June

A B S T R A C T

This research aims to determine if the jigsaw technique is effective for improving grammar mastery in writing recount texts compared to conventional methods. Using a quasi-experimental design, two classes of tenth-grade students at SMA Negeri 1 Siantar were studied. The experimental class was taught using the Jigsaw technique, while the control class used conventional methods. Both classes received pretests and posttests to assess their understanding. The experimental class's average scores increased from 54 to 80.46, whereas the control class's scores rose from 53.21 to 71.21. The results, with a t-value of 2.44 compared to a t-table value of 2.00, indicate that the Jigsaw technique significantly improves students' ability to write recount texts, rejecting the null hypothesis.

ISSN-E: 2964-6804
DOI: https://doi.org/10.55927/fjst.v3i6.9877
https://journal.formosapublisher.org/index.php/fjst

INTRODUCTION

Language is a fundamental tool for communication used by everyone, from children to adults, in various contexts such as work, worship, and play. Knapp and Watkins (2005) describe language as both culturally and socially inherent. This means it connects individuals in national, religious, and personal contexts. For students, writing well requires mastery of grammar, vocabulary, content, organization, and mechanics. These elements aren't innate and must be honed through practice.

The primary aim of learning English is to enhance communication skills, both orally and in writing. Harmer (2007) outlines four essential skills in English: listening, reading, speaking, and writing. Writing, in particular, demands proficiency in all aspects of the target language, including syntax, punctuation, spelling, and mechanics (Yulianawati, 2017).

English is an international language, and in Indonesia, it is taught from elementary school through university. High school English curricula focus on developing the four skills mentioned earlier, with this research emphasizing writing. According to the 2013 Indonesian National Curriculum (K-13), high school students should be able to communicate through various types of discourse and produce coherent written texts (Mohandas et al., 2014).

Writing is often perceived as a challenging skill compared to other language skills. Cahyono (1997) notes that writing involves rhetorical content, vocabulary choice, grammatical structures, and proper use of punctuation and capitalization. Horizon & Landmarks (2002) emphasize that writing is a continuous process, involving stages of development to articulate ideas effectively.

In the context of recount texts, which aim to narrate experiences, students often face difficulties. Despite being introduced to recount texts in junior high school, many students struggle with this form of writing. Erisda (2017) states that students find it challenging to generate ideas and connect them cohesively. Haris et al. (2018) add that vocabulary and grammar are critical yet problematic areas for students. Proper grammar enhances the clarity and quality of writing, while vocabulary is fundamental for effective communication (Mardiah, Richard, and Renandya).

Interviews with tenth-grade students at SMA Negeri 1 Siantar reveal that many students dislike writing and find it challenging. They often lack the skills to write recount texts, frequently misusing verb tenses and struggling with organizing their ideas. Observations confirm that these students face significant difficulties in writing recount texts, impacting their overall writing proficiency.

To address these challenges, the Jigsaw technique, a cooperative learning approach, can be beneficial. This technique divides the class into groups, each responsible for a portion of the assignment. Students then teach their assigned topic to their group members, fostering a collaborative learning environment (Maden, 2010). The Jigsaw technique encourages self-esteem, intrinsic motivation, cooperation, and communication among students.

The distinction between foreign and second languages is crucial. A foreign language is learned consciously through education, whereas a second

language is essential for daily communication and official functions. In multilingual countries, children often learn multiple languages from birth, making these languages natural rather than foreign to them.

The Jigsaw technique involves organizing class activities so students depend on each other. Groups are assigned different topics, and each member becomes an expert in their topic, later teaching it to their group. This method promotes a comprehensive understanding of the material through peer teaching and collaboration.

Practical learning experiences, like those from PPL activities, help students develop into professional educators. This research aims to identify the grammatical and structural problems students face in writing recount texts. The text's structure typically includes an introduction, body, and conclusion, essential for coherent writing. Assignments are often managed through Learning System Management (NGO) platforms like Sikuli.

In schools, teachers often rely on unengaging textbooks, leading to suboptimal learning outcomes. This research explores the effectiveness of the Jigsaw technique in teaching vocabulary and writing, aiming to make learning more engaging and memorable for students. The study focuses on analysing writing errors and difficulties students encounter, particularly in the generic structure of recount texts.

Based on these insights, the research investigates "The Effect of the Jigsaw Technique on Writing Skills of Tenth Grade Students of SMA Negeri 1 Siantar." The goal is to identify common mistakes and challenges in student writing, providing a basis for improving teaching strategies and student outcomes in writing recount texts. The objective of this research is to determine if the application of the jigsaw technique significantly impacts the writing abilities of tenth-grade students at SMA Negeri 1 Siantar. The research findings will provide valuable insights into learning English, particularly in mastering vocabulary for writing. This will enhance researchers' knowledge and help in finding solutions for vocabulary mastery at the high school level. For teachers, the research findings will offer an alternative method for teachers to address students' difficulties in writing. For other researchers, the study can serve as a reference and provide information for researchers interested in conducting similar studies and exploring other motivational techniques in this field.

THEORETICAL REVIEW

Definition of Writing

Writing, as defined by Brown and Lee (2015), is a thought process. This idea is further supported by Nunan (2015), who describes writing as a mental process involving the generation of ideas and the consideration of how to present them effectively in written form. Writing is an ordinary activity where one shares thoughts and conveys them to the reader in an understandable format. Through writing, students should be able to spell English words, understand English grammar, and apply rules of punctuation. They must construct sentences, compile them into paragraphs, and ensure that their ideas and facts are clearly understood by readers. As stated by Oshima and Hogue

(1996), writing is a progressive activity, meaning it helps students articulate their thoughts and convey them clearly to others. The forms of writing include descriptions of things, individuals, thoughts, conditions, events, stories, actions, images, and objects.

Writing skills are special abilities that help writers express their thoughts meaningfully and interact mentally with their message. Harmer (2004:31) notes that writing is a way to produce language and express ideas, feelings, and opinions. Similarly, Abbas (2006:125) emphasizes that writing is the ability to convey ideas, opinions, and feelings through written language. Writing involves expressing ideas, information, knowledge, or experiences and understanding writing to acquire and share knowledge or information.

Writing is one of the fundamental language skills, alongside listening, speaking, and reading. Celce-Murcia (2001:94) defines writing as the ability to express one's ideas in a second or foreign language with reasonable coherence and accuracy. In writing, individuals' express ideas, opinions, feelings, or experiences they have read or heard about to develop their writing skills. This involves organizing ideas into words, phrases, clauses, and paragraphs to ensure clarity and readability (MUAFIAH, 2019).

Rosa (2014:79) describes writing as the process of exploring thoughts and expressing them through the graphology and grammatical system of language using a visual medium. From these definitions, it can be concluded that writing is a process of expressing thoughts and feelings deeply to convey a message to the reader, producing a sequence of sentences arranged and linked in a coherent manner.

Function of Writing

Writing is an essential part of life, particularly in teaching and learning. Humans communicate significantly through writing, whether it is writing letters to friends, recording schedules, or drafting reports. Writing is a logical and meaningful activity (Kane, 2000), requiring mental effort and mastery of techniques that anyone can learn. It is worth learning because it has benefits in almost any job or career. Writing helps individuals develop their thoughts, as it is a tool for effective communication. Writing activities go beyond merely putting ink on paper; they involve convincing, persuading, inspiring, entertaining, and teaching readers through effective communication (Haven, 2015).

Writing involves creating signs or symbols, such as letters, that form words and are structured into sentences. Writers use graphic symbols, like letters or combinations of letters associated with spoken language, to communicate in writing. Even simple tasks like making a grocery list involve writing (Byrne, 1989).

Teaching Writing

Teaching writing involves guiding students on how to write and helping them learn to write effectively. Zamel (1982:206) emphasizes that teaching writing as a process of discovery implies that revision becomes the course's main focus. Teachers intervene to guide students through the writing process

rather than providing feedback after the fact. Subekti (2017:11-12) explains that students do not mind their writing being analysed if they are informed beforehand. This means teachers should respect and guide their students rather than forcing them to achieve good grades. According to Brown (2000:7), teaching involves helping someone learn how to do something by imparting knowledge and understanding. Therefore, teaching writing is not just a school assignment but an important tool for learning a discipline and helping students improve their writing skills.

Recount Text

Recount text is a type of text that retells past events, experiences, and behaviours (Tulak et al., 2014). It involves reconstructing past experiences by retelling events in a sequential order (Hyland, 2003). Derewianka and Jones (2016) identify six types of recount text: personal retellings, factual retellings, autobiographical recounts, biographical recounts, historical recounts, and literary recounts.

The social purpose of personal recounts is to present information about incidents related to personal experiences. Factual recounts report events or happenings not personally experienced by the writer. Autobiographical recounts involve retelling episodes from an individual's life, while biographical recounts involve episodes from another person's life. Historical recounts record, explain, and interpret significant events from a society's past, and literary recounts retell real or imaginary events, often with aesthetic qualities.

Recount texts aim to inform or entertain readers by retelling past experiences. The generic structure of recount text includes orientation, record of events, and reorientation (Hyland, 2003). Orientation provides background information, record of events describes the main points in chronological order, and reorientation summarizes the outcomes or results and may offer personal comments or future speculations.

Language Features of Recount Text

The language features of recount text play a significant role in helping readers understand the story. According to Derewianka (2004) in Alfayed (2017), recount text generally includes proper nouns to identify characters, descriptive words to provide detailed information, past tense to indicate events that happened in the past, and words that show the sequence of events.

Jigsaw Technique

The jigsaw technique, a form of cooperative learning, was developed by Elliot Aronson and colleagues at the University of Texas and later adopted by Slavin and his colleague at John Hopkins. According to Slavin (1995), the jigsaw technique involves students gathering and sharing information with their group mates during the learning process (Wibowo, 2020:130).

There are three variations of the jigsaw technique: Aronson's original jigsaw, Slavin's Jigsaw II, and Kagan's variation. This study focuses on Slavin's

Jigsaw II, which adapts the original method to use existing curriculum mterials and incorporates additional features (Slavin, 1994:71).

Slavin (2014:249) describes Jigsaw II as a model where students are divided into teams of four or five. Instead of each student being assigned a unique section, all students read the same general text, such as a book chapter or short story. Each student then becomes an expert on a specific topic within the text. Expert groups, composed of students with the same topic, discuss and learn about their topic in depth. Afterward, they return to their teams to teach their teammates. The learning process culminates in individual quizzes that contribute to team scores. A unique feature of the jigsaw technique is that each student masters a portion of the learning task and teaches it to their team (Slavin, 1994:175). This method encourages interaction and communication among students, with the teacher facilitating and motivating throughout the process.

Purpose of Jigsaw Technique

Helmiati (2012:85) outlines the purpose of the jigsaw technique in "Learning Models." The technique aims to develop teamwork, cooperative learning skills, and in-depth knowledge. Students benefit from working together, discussing, and resolving different opinions on the material, which they might struggle to learn alone. This study focuses on Slavin's Jigsaw II, which includes the following steps (Slavin, 2014:248):

1. Students form teams of four or five.
2. All students read the same general text.
3. Each student is assigned a topic to become an expert on.
4. Students meet in expert groups to discuss their topic.
5. They return to their teams to teach their teammates.
6. Students take individual quizzes, contributing to team scores.

Advantages of Jigsaw Technique

According to Aronson (2000), cited in Mufida (2019:18), the advantages include:

1. Increased student motivation to learn English.
2. Enhanced enjoyment of the learning experience.
3. Improved positive educational outcomes.
4. Development of individual skills, with each student contributing something important.
5. Easy adoption by teachers.
6. Compatibility with other strategies.

Disadvantages of Jigsaw Technique

Johnson & Johnson, cited in Septiyana (2012) and Mufida (2019:18), note the following disadvantages:

1. Significant time required for teachers to prepare students for group work.
2. Time-consuming process of forming heterogeneous groups.

3. Need for special preparation by teachers, including various types of media.

The jigsaw technique, while beneficial in fostering cooperative learning and improving educational outcomes, requires careful planning and preparation by educators.

METHODOLOGY

The writer used a quasi experimental design in conducting this research. This quasi experimental design terms of using one experimental group and one control group, where the independent variable is the teaching technique, namely the jigsaw technique, and the dependent variable is students' reading comprehension, Abusa'aleek and Baniabdelrahman (2020:5). The aims of this research is to know what extent the jigsaw techique affects the students' writing ability.

Table 1. Research Design

Class	Pretest	Treatment	Posttest
Experimental	X^1	E	X^2
Control	Y^1	C	Y^2

Where :
X^1 and X^2 : Pre-test and Post-test counducted in Experimental Class
Y^1 and Y^2 : Pre-test and Post-test conducted in Control class
E : Applying jigsaw technique in experimental class
C : Applying conventional technique in control class

The research was conducted at SMA Negeri 1 Siantar, located at Jalan Mahoni, Raya No. 4 Sejahtera, Kec. Siantar, Kabupaten Simalungun, Sumatera Utara. According to Creswell (2015:140), a population is a group of individuals with the same characteristics. The population for this research comprised all tenth-grade students at SMA Negeri 1 Siantar in the 2022/2023 academic year, totaling 192 students across six classes, each with 32 students.

Creswell (2012:142) defines a population as a group of individuals sharing common characteristics. The population for this research included all tenth-grade students at SMA Negeri 1 Siantar, totaling about 64 students.

According to Creswell (2002:381), a sample is a group of research participants selected from the target population and generalized to the target population. In this study, the researchers employed cluster sampling to select the research samples. The sample included two classes: class X1, serving as the experimental group with 28 students, and class X2, serving as the control group with 28 students.

The written test serves as the primary instrument for data collection in this research. Students are tasked with writing a recount text that adheres to the correct generic structure. The scoring rubric used to assess the students' writing ability in recount texts is detailed in Table 2 below:

Table 2. Technique of Collecting Data

The aspect of Scoring Generic Structure of Recount Text	Score	Level	Criteria
Orientation	24 – 28	Excellent	Relevant orientation in detail
	19 – 23	Good	Rather less relevant detail of orientation
	14 – 18	Average	Less relevant detail of orientation
	9 – 13	Poor	Unrelated orientation Error
Event	56 – 60	Excellent	Relevant event in detail Clearly ideas
	51 – 55	Good	Rather less relevant detail of Event logical idea but incomplete sequence
	46 – 50	Average	Less relevant detail of event Ideas
	41 – 45	Poor	Unrelated event Lack of idea
Reorientation	10 – 12	Excellent	Relevant reorientation in detail
	7 – 9	Good	Rather less detail of reorientation
	4 – 6	Average	Less relevant detail of reorientation
	1 – 3	Poor	Unrelated reorientation

Data collection involves three main activities: pretest, treatment, and posttest.

a) Pretest

The pretest is administered to both the experimental and control classes before any treatment to assess students' initial ability to write recount texts. The pretest involves a multiple-choice format to gauge students' understanding of recount texts. This initial test helps determine the baseline average scores for both classes.

b) Treatment

During the treatment phase, both groups are taught the same material but with different techniques. The experimental group is taught using the Jigsaw technique, while the control group is taught using conventional methods.

c) Post-test

The post-test, similar to the pretest, is administered after the treatment to evaluate the effectiveness of the teaching methods. The post-test results help determine any differences in achievement between the experimental and control classes.

The analysis involves calculating the average scores and standard deviations for both classes.

1) Determining the Average Test Score
2) Standard Deviation of Experimental Class in Pre-test and Post-test
3) Determining Standard Deviation Score

This systematic approach ensures a comprehensive evaluation of the students' writing abilities and the effectiveness of the teaching methods applied.

RESULTS

Findings

Table 3. The Variance and Standard Deviation in Post-test of Experimental Class

Students	Experimental Class			Difference
	Score (x)	Mean (X)	Difference (x-X)	Squared $(x-X)^2$
1	80	80.46	-0.46	0.2116
2	83	80.46	0.46	0.2116
3	77	80.46	-3.46	11.9716
4	90	80.46	9.54	91.0116
5	73	80.46	-7.46	55.6516
6	83	80.46	2.54	6.4516
7	73	80.46	-7.46	55.6516
8	77	80.46	-3.46	11.9716
9	83	80.46	2.54	6.4516
10	80	80.46	-0.46	0.2116
11	83	80.46	2.54	6.4516
12	80	80.46	-0.46	0.2116
13	87	80.46	6.54	42.7716
14	77	80.46	-3.46	11.9716
15	87	80.46	6.54	42.7716
16	80	80.46	-0.46	0.2116
17	80	80.46	-0.46	0.2116
18	83	80.46	2.54	6.4516
19	77	80.46	-3.46	11.9716
20	80	80.46	-0.46	0.2116
21	87	80.46	6.54	42.7716
22	83	80.46	2.54	6.4516
23	73	80.46	-7.46	55.6516
24	77	80.46	-3.46	11.9716
25	87	80.46	6.54	42.7716
26	83	80.46	2.54	6.4516
27	80	80.46	-0.46	0.2116
28	70	80.46	-10.46	109.4116
$(x-X)^2$				$=d^2$ 638.725

Based on the data in Table 3, it can be seen that the total squared difference in the experimental class posttest is 638.725. This number is needed to determine the posttest standard deviation in the experimental class and will be compared with the posttest in the control class.

$$S^{e\ e} = \sqrt{\frac{\Sigma d^2}{N-1}}$$

$$S^e = \sqrt{\frac{638.725}{28-1}}$$

$$S^e = \sqrt{\frac{638.725}{27}}$$

$$S^e = \sqrt{23.65}$$

$$S^e = 4.86$$

Table 4. The Variance and Standard Deviation in Post-test of post-test in Control Class

Students	Experimental Class			Difference
	Score (x)	Mean (X)	Difference (x-X)	Squared $(x-X)^2$
1	60	71.21	-11.21	125.6641
2	67	71.21	-4.21	17.7241
3	70	71.21	-1.21	1.4641
4	83	71.21	11.79	139.0041
5	63	71.21	-8.21	67.4041
6	67	71.21	4.21	17.7241
7	80	71.21	8.79	77.26.41
8	63	71.21	-8.21	67.4041
9	67	71.21	-4.21	17.7241
10	87	71.21	15.79	249.3241
11	80	71.21	8.79	77.2641
12	60	71.21	-11.21	125.6641
13	70	71.21	-1.21	1.4641
14	63	71.21	-8.21	67.4041
15	60	71.21	-11.21	125.6641
16	73	71.21	1.79	3.2041
17	77	71.21	5.79	33.5241
18	70	71.21	-1.21	1.4641
19	73	71.21	1.79	3.2041
20	67	71.21	-4.21	17.7241
21	77	71.21	5.79	33.5241
22	80	71.21	8.79	77.2641
23	77	71.21	5.79	33.5241
24	70	71.21	-1.21	1.4641
25	73	71.21	1.79	3.2041
26	77	71.72	5.79	33.5241
27	70	71.21	-1.21	1.4641
28	70	71.21	-1.21	1.4641

Students	Experimental Class			Difference
	Score (x)	Mean (X)	Difference (x-X)	Squared $(x-X)^2$
	$(x-X)^2$			$=d^2$1422.7148

Based on the data in Table 4, it can be seen that the total squared difference in the control class posttest is 1422.7148. This number is needed to determine the posttest standard deviation in the control class and will be compared

The standard deviation of post-test in control class as follows below:

$$S^e = \sqrt{\frac{\Sigma d^2}{N-1}}$$

$$S^e = \sqrt{\frac{1422.7148}{28-1}}$$

$$S^e = \sqrt{\frac{1422.7148}{27}}$$

$$S^e = \sqrt{52.69}$$

$$S^e = 7.25$$

Hypothesis Testing

The Standard Error of the difference of Mean, namely:

$$SE(Xe\text{-}Xc) = \sqrt{\left(\frac{SE}{\sqrt{N1}}\right)^2 + \left(\frac{Sc}{\sqrt{N1}}\right)^2}$$

$$SE(Xe\text{-}Xc) = \sqrt{\left(\frac{4,86}{\sqrt{28}}\right)^2 + \left(\frac{7,25}{\sqrt{28}}\right)^2}$$

$$SE(Xe\text{-}Xc) = \sqrt{\left(\frac{23,23}{\sqrt{28}}\right) + \left(\frac{52,56}{\sqrt{28}}\right)}$$

$$SE(Xe\text{-}Xc) = \sqrt{\frac{75,79}{5,29}}$$

$$SE(Xe\text{-}Xc) = \sqrt{14,32}$$

$$SE(Xe\text{-}Xc) = 3,78$$

The result of T-test as follows below:

$$\text{T-test} = \frac{Xe-Xc}{Se(xe-xc)}$$

$$\text{T-test} = \frac{80.46-71.21}{3.78}$$

$$\text{T-test} = \frac{9.25}{3.78}$$

$$\text{T-test} = 2.44$$

Based on the data analysis, it is concluded that the jigsaw technique significantly enhances the writing abilities of students. In the study involving 28 students in both the experimental and control classes, the experimental group showed marked improvement. The experimental class's pretest scores ranged from 40 to 73, and posttest scores from 70 to 90, with average scores of 54 and 80.46, respectively. In contrast, the control class had pretest scores between 40 and 70, and posttest scores between 60 and 87, with average scores of 53.21 and

71.21. The posttest standard deviation was 4.86 for the experimental class and 7.25 for the control class. The standard error of the mean difference was 3.78, with a degree of freedom of 54 and a t-table value of 2.00. The t-test value calculated was 2.44, indicating a significant difference. Therefore, the jigsaw technique was effectively applied to improve the writing abilities of tenth-grade students at SMA Negeri 1 Siantar.

DISCUSSION

The purpose of this research was to determine the impact of using the jigsaw technique on the writing abilities of tenth-grade students at SMA Negeri 1 Siantar. The jigsaw technique involves students collaborating in groups to gather and share information, enhancing their learning experience. In writing, this technique requires students to retell and paraphrase texts, which improves their writing competence. The study's findings indicate a significant positive effect of the jigsaw technique on students' writing skills. The experimental class, which used the jigsaw technique, had an average posttest score of 80.46, while the control class had an average score of 71.21. The highest score in the experimental class was 90, compared to 87 in the control class. Using Hatch and Farhady's (1982) theory and formula, the data analysis included calculating the average scores, standard deviations, degrees of freedom, and t-test values. The t-test result was 2.44, with a degrees of freedom (df) of 54 and a t-table value of 2.00 at a significance level of 0.05. The higher t-test result compared to the t-table value confirms that the jigsaw technique significantly improves students' writing abilities.

CONCLUSIONS AND RECOMMENDATIONS

After conducting research on the influence of the Jigsaw technique on the understanding of recount text writing abilities of tenth-grade students at SMA Negeri 1 Siantar, the researchers concluded that applying the Jigsaw technique during the teaching and learning process significantly enhanced students' comprehension and writing skills. In the experimental class, students could effectively determine the main idea of each paragraph, record detailed information, draw conclusions, and identify references within the text. This engagement and improved understanding were reflected in their scores: the average pretest score in the experimental class was 54, which increased to 80.46 in the posttest. Conversely, the control class, which did not use the Jigsaw technique, had average pretest and posttest scores of 53.21 and 71.21, respectively. The statistical analysis supported these findings, with a t-test value of 2.44 exceeding the t-table value of 2.00 at a 0.05 significance level, confirming the significant positive impact of the Jigsaw technique on students' writing abilities. Consequently, the researchers recommend that English teachers incorporate the Jigsaw technique to enhance student engagement and comprehension. Students are encouraged to use this technique to practice and improve their writing skills, while other researchers might find this study a valuable reference for similar investigations. Therefore, this research suggests English teachers apply the Jigsaw technique to enhance students' writing abilities and engagement in learning English. Then, students should utilize the Jigsaw

technique to practice and improve their writing skills, and seek assistance from teachers when needed. Future researchers are encouraged to explore the Jigsaw technique further, using this study as a reference to address similar challenges in teaching writing.

FURTHER STUDY

While the study demonstrated the positive impact of the Jigsaw technique on enhancing tenth-grade students' recount text writing abilities at SMA Negeri 1 Siantar, several limitations should be noted. Firstly, the research was conducted within a single school and focused solely on tenth-grade students, limiting its generalizability to broader educational settings and different student populations. Additionally, the study primarily relied on quantitative methods, potentially overlooking qualitative insights into students' perceptions and experiences with the Jigsaw technique. Future research could address these limitations by expanding the study to include diverse schools and grades, employing mixed-methods approaches to capture both quantitative outcomes and qualitative feedback from students and teachers. Exploring variations in implementation strategies and long-term effects of the Jigsaw technique would further enrich understanding of its efficacy in enhancing writing skills across various educational contexts.

REFERENCES

Abbas. (2006). Effective Indonesian Language Learning in Primary Schools. Ministry of National Education Director General of Higher Education Directorate of Manpower

Alice Oshima and Ann Hogue. (1996). Introduction to Academic Writing. New York: Longman.

Bak, Nelleke. (2013). Guide to Academic Writing, University of the Western Cape.

Brown, A. (2001). Developing language and literacy 3-8 (2rd ed.). London: Paul Chapman Publishing.

Brown, (2001). Teaching by Principles: An Interactive Approach to Language Pedagogy 2nd Edition. New York: Addison Wesley Longman, Inc.

Brown, D. (2007). Teaching by Principles an Interactive Approach to Language Pedagogy. London: Addison Wesley Longman.

Brown, D. H. (2004). Language Assessment Principle and Classroom Practice. San Francisco: Longman.

Brown, H. Douglas.2004. Language Assessment: Principles and Language Practices. New York: Pearson Education Inc

Byrne, Donn. 1988. Teaching Writing Skills. London and New York: Longman.

Cahyono, Bambang Y. "Effectiveness of Journal Writing in Supporting Skills in Writing English Essay." Jurnal Ilmu Pendidikan Universitas Negeri Malang, vol. 4, 1997, doi:10.17977/jip.v4i0.1314.

Creswell, John W. 2015. Penelitian Kualitatif & Desain Riset. Yogyakarta : Pustaka Pelajar.

Derewianka, B. M., & Jones, P. T. (2016). Teaching Language in Context. Oxford University Press.

Derewianka, Beverly. (2004). Exploring How Texts Work. Australia: Primary English Teaching Associatio.

Derewianka, Beverly. 2004. Exploring How Text Works. Australia: Primary English Language Teaching Association.

Harmer, Jeremy, How to Teach Writing, (Harlow: Person Education Limited, 2004)

Harmer, Jeremy. 2004. How To Teach Writing. England. Oxford: Person Education Limited.

Hyland, K. (2005). Second Language Writing. Melbourne, Cambridge University Press

Hyland, Ken. 2003. Second Language Writing. New York: Cambridge University Press.

Hyland, Ken. 2003. Second Language Writing. New York: Cambridge University

Hyland, Ken. 2004. Genre and Second Language Writing. London: The University of Michigan Press.

Johnson, K. (2001). An Introduction to Foreign Language Learning and Teaching. Harlow: Pearson Education Limited.

Knapp, P., & Watkins, M. (2005). Genre, Text, Grammar: Technologies for Teaching and Assessing Writing. Sydney: University of New South Wales Press Ltd.

Knapp, P., & Watkins, M. 2005. Genre, Text, Grammar: Technologies for Teaching and Assessing Writing. Sydney: University of New South Wales Press Ltd.

McDonald, Christina R. and Robert L. McDonald. 2002. Teaching Writing. Carbondale: Southern Illinois University Press.

Nunan, D. 2003. Practical English Language Teaching. Singapore: Mc Graw Hill.

Oshima, A. and A. Hogue (1999). Writing Academic English. . New York Longman.

Oshima, A., & Hogue, A. 2007. Introduction to Academic Writing (3rd Edition). New York: Pearson Education.

Saragih, N. et. al.2014. The Effectiveness of Using Recount Text to Improve Writing Skill For Grade III Students of Kalam Kudus Elementary School 2 Pematang Siantar.IOSR Journal of Humanities and Social Science, Volume 19, Number 1. (Retrieved on December, 9, 2018).

Slavin, R. E. 1995. Cooperatif Learning, Theory, Research, and Practice (Second Edition). Boston: Ally Mand Bacon Publisher.

Slavin, Robert E. 1994. Cooperative Learning, Teori, Riset Dan Praktik [Terjemahan]. Bandung: Nusa Media.

Whitaker, Anne. (2009). Academic Writing Guide, Slovakia: City University of Seattle

Zamel. V. 1982. Writing: The process of finding meaning. TESOL Quarterly 16.