CHAPTER 3
RESEARCH PROCEDURES

3.1. Research Method

This research employed the experimental method, a quantitative approach used to investigate the impact of an independent variable on a dependent variable (Sugiyono, 2021). In this study, the researcher aimed to examine the effect of the TTW learning model on students' writing skills.

3.2. Research Design

The method that the researcher used in this research is quasi-experimental research. According to Sugiyono (2017) a quasi-experiment is research that almost resembles a real experiment. This study aims to directly test the effect of a variable on other variables and test the hypothesis of a causal relationship. The quasi-experimental design has an experimental class and a control class, but the control class cannot fully function to control external variables that affect the implementation of the experiment.

The pretest and posttest could be represented based on Sugiyono's theory as follows :

O1 : Pretest of experimental group

O3 : Pretest of control group

X : Treatment which is given to the experimental group

O2 : Posttest of experimental group

O4 : Posttest of control group

2.3. Research Variables

This research included two types of variables namely independent and dependent. In this research, the independent variable is the TTW learning model, while the dependent variable is students' writing skills.

2.4. Population and Samples

3.4.1. Population

According to Sugiyono (2021) a population refers to a broad category that includes objects or subjects with specific qualities and characteristics chosen by researchers for study and drawing conclusions. In this research, the population

was the eighth grade students of *SMPN* 18 Tasikmalaya in the 2023/2024 academic year. To conduct research, the population in this study can be seen as in the table below:

Table 3. 1 *The number of populations*

No	Class	Male	Female	Total
1	VIII A	14	10	24
2	VIII B	15	14	29
3	VIII C	21	7	28
4	VIII D	17	10	27
Sum of population				108

3.4.2. Sample

In this study, the researcher used purposive sampling to determine the sample. The researcher selected the sample based on the teacher's recommendations, considering the average grades of the students in both classes. This is done to make sure that the research is conducted in two classes with similar average scores, so the results are fair and not biased. The sample consisted of class VIII-D as the experimental group and class VIII-A as the control group, with each class comprising 20 students.

The following is a table of sample demographics for the experimental and control classes:

Table 3. 2 *Sample Demographic Data (Control Class)*

No.	Aspect	Percentage (%)	Descriptions
1.	Male	55 %	11 students
2.	Female	45 %	9 students
3.	Age < 14 years old	30 %	6 students
4.	Age > 14 years old	70 %	14 students
5.	English Learning Experience	100%	<2 years

Table 3. 3 *Sample Demographic Data (Experimental Class)*

No.	Aspect	Percentage (%)	Descriptions
1.	Male	50 %	10 students
2.	Female	50 %	10 students
3.	Age < 14 years old	20 %	4 students
4.	Age > 14 years old	80 %	16 students
5.	English Learning Experience	100%	<2 years

3.5. Data Collection

The data collection techniques used in this study included pretest and posttest assessments. These tests were conducted to gather information about students' writing abilities. The research was carried out over four meetings. At the beginning, students take a pretest to assess their initial skills related to the material to be taught. Following this, students in the experimental class used the TTW model, while students in the control class used conventional methods.

In the first meeting, students learned about announcement texts, including their social function, structure, and language features. In meetings two through four, students in both classes wrote announcement texts with different themes in each meeting. The themes were chosen by the students themselves, allowing them to select topics of interest. After completing the entire learning process, students in both classes took a posttest to measure their learning outcomes after the instruction was carried out.

After the tests were collected, the researcher assessed each student's work using a predetermined assessment rubric. The scores were then tabulated into an Excel program. The researcher checked and ensured the accuracy of the assessment results by conducting several checks to ensure that the results were consistent and in accordance with the predetermined criteria. After the assessment was completed, the test results were analyzed using SPSS v.29 to check the hypothesis.

The following is a comparison table of learning models used in the experimental and control classes.

Table 3. 4 *Comparison of Teaching Models Used in the Experimental and Control Classes*

Aspect	Experimental Class	Control Class
Teaching Model	Think-Talk-Write (TTW)	Conventional
Teaching Approach	Interactive and collaborative	Lecture and presentation
Learning Stages	1. **Think**: Students individually reflect and	1. **Lecture**: Teacher explains the material

	gather ideas 2. **Talk**: Group discussion to share ideas and discuss text structure 3. **Write**: Writing texts based on discussion outcomes	2. **Class Discussion**: Students ask questions and the teacher clarifies 3. **Individual Practice**: Students write texts on their own
Teacher's Role	Facilitator, providing guidance during discussions and writing	Information provider, giving direct explanations and instructions
Students' Role	Active, involved in thinking, discussing, and writing	Passive, receiving information and instructions from the teacher
Student Engagement	High, students actively think, discuss, and write	Low, student engagement mostly involves listening and occasionally asking questions

3.6. Research Instrument

This research used an announcement text writing test as the instrument. The researcher made a test with 4 assessment criteria, namely: text structure, language features, vocabulary use, and spelling accuracy. Before the test was given to students, the researcher first checked the test to ensure its readability. This was done by using clear and simple language, providing clear instructions, and consulting the instrument with supervisors and colleagues to get feedback on clarity and readability.

After ensuring that the instrument was ready, the test was given to class VIII-C as a non-sample. After the tests were collected, the researcher assessed each student's work using a predetermined assessment rubric. After that, the test results were analyzed using SPSS v.29 to check the validity and reliability of the test.

3.6.1. Validity Test

Before the test was given to the students who were the research sample, an instrument validity test was conducted to ensure that the instrument was valid. To determine the validity of the questions, the researcher used the SPSS v. 29.0 for Windows program. If the r-count is greater than the r-table value, the data is considered valid. The r-table value can be found in the r product moment table. The instrument trial results consisted of one essay question with four assessment criteria. The validity test calculation results can be seen as follows:

Table 3. 5 *The Result of Validity Test*

No	Validation Numbers	r-table	Description
1	0.569	0.433	Valid
2	0.770	0.433	Valid
3	0.806	0.433	Valid
4	0.761	0.433	Valid

The number of respondents for the instrument test trial was 21 students, therefore N=21. The r-table for N=21 is 0.433. Based on Table 3.4 above, it can be seen from the pearson correlation value or r-count for items 1 to 4 that all r-count values are greater than the r-table (0.433). Therefore, all items are declared valid.

3.6.2. Reliability Test

Reliability is a measure that demonstrates how dependable or consistent a measuring tool. Data for the reliability test is derived from the previous validity test data. A test item is considered reliable if the r-count > r-table. The reliability criteria are as follows:

1) If alpha > 0.90, then the reliability is perfect.
2) If alpha is between 0.70 and 0.90, then the reliability is high.
3) If alpha is between 0.50 and 0.70, then the reliability is moderate.
4) If alpha < 0.05, then the reliability is low.

Table 3. 6 *The Result of Reliability Test*

Reliability Statistics	
Cronbach's Alpha	N of Items
0.696	4

Based on Table 3.6 above, it can be concluded that the Cronbach's Alpha value or the r-count is greater than the r-table value, specifically 0.696 > 0.433. Therefore, all four test items are considered reliable with a moderate level of reliability criteria.

3.7. Data Analysis

Data analysis was carried out after the pretest and posttest. Pretest and posttest scores were tested and analyzed using descriptive statistics and inferential statistics. Following are the steps to analyze data:

1) Descriptive Statistical Analysis

   Descriptive statistical analysis consists of mean, median, maximum, minimum and standard deviation values. Descriptive statistical analysis was carried out to describe the data based on the results obtained from both the experimental class and the control class for each variable measurement indicator.

2) Normality Test

   The researcher used a normality test to determine whether the post test scores of the experimental group and control group were normally distributed or not. The normality test in this study was measured using the SPSS v.29 program. The goal is to find out whether the two variables X (independent variable) and Y (dependent variable) are normally distributed or not.

3) Homogeneity Test

   The homogeneity test is used to evaluate whether the posttest score variance between the experimental group and the control group is the same or different. The homogeneity test was carried out using SPSS v.29. The aim is to assess the similarity of the Y variable score which is associated with the X variable score.

4) T-test

The t test is used to determine the impact of the TTW learning model. The pretest and posttest results were analyzed using the t-test formula. Conditions for using the t-test include normal distribution and homogeneous variance. In this study, the researcher used the Independent Sample T-test to find out whether the two test groups had significantly different average values or not.

3.8. Steps of the Research

Table 3. 7 *Steps of the Research*

Steps	Descriptions
Identifying the Problem	First, the researcher became concerned about students' poor English skills, especially in writing. The researcher observed that many junior high school students struggled to express their thoughts in writing. Many students stated that writing in English was challenging and they felt unmotivated to improve their skills. This was seen when the researcher carried out school based internships. At the school, the researcher found that teachers often used the same traditional teaching methods. Currently, traditional teaching methods appear to be less effective in engaging students in writing activities. This has resulted in students having limited opportunities to practice and develop their writing abilities. The researcher noticed that most students lacked confidence in writing and often avoided writing tasks. In addition, the researcher discovered the Think Talk Write (TTW) learning model and considered it promising. The TTW model encourages students to think critically, discuss their ideas with peers, and

	then write their thoughts coherently. This approach seemed to be a dynamic and interactive way to enhance students' writing skills. Therefore, the researcher was interested in investigating the influence of the Think Talk Write learning model on students' writing skills. The goal was to introduce this model to create a more engaging and effective writing learning environment, helping students enjoy writing and improve their writing abilities.
Literature Review	The researcher searched for information according to the topic. The researcher obtained references from Google Scholar and the internet.
Identifying Hypothesis	1) Ha: There is a significant influence of using the Think Talk Write model on students' writing skills. 2) Ho: There is no significant influence of using the Think Talk Write model on students' writing skills.
Collecting the Data	The researcher gave a pretest to the experimental class and control class to determine their initial knowledge. After that, the researcher gave treatment to the experimental class using the TTW model and the conventional model to the control class. After providing treatment, the researcher gave a posttest to determine students' writing abilities.
Analyzing the Data	To analyze the data, the researcher used IBM SPSS Statistics version 29. First, the researcher carried out a normality test on the pretest and posttest scores for both classes, namely the experimental and control

	classes. After that, the researchers carried out a homogeneity test. Finally, the researcher conducted an independent sample t-test to test the hypothesis.
Conclusion	The Think Talk Write learning model influences junior high school students' writing abilities.

3.9. Research Schedule

The research schedule that the writer was carried out can be seen in the following table:

Table 3. 8 *Research Schedule*

No	Description	Sept-Nov/ 2023	Dec 2023	Jan-May/ 2024	June/ 2024	July/ 2024
1	Research proposal writing					
2	Research proposal examination					
3	Revision					
4	Data collection					
5	Data analysis					
6	Report					
7	Thesis examination					