



1. Dilarang memperbanyak atau mendistribusikan dokumen ini untuk tujuan komersial tanpa izin tertulis dari penulis atau pihak berwenang. Penggunaan untuk kepentingan akademik, penelitian, dan pendidikan diperbolehkan dengan mencantumkan sumber.
2. Penggunaan tanpa izin untuk kepentingan komersial atau pelanggaran hak cipta dapat dikenakan sanksi sesuai dengan UU Hak Cipta di Indonesia. Plagiarisme juga dilarang dan dapat dikenakan sanksi.
3. Universitas hanya berhak menyimpan dan mendistribusikan dokumen ini di repositori akademik, tanpa mengalihkan hak cipta penulis, sesuai dengan peraturan yang berlaku di Indonesia.

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

This research adopted a descriptive quantitative research design to examine X grade students' understanding of the use of the simple present tense on descriptive texts at SMK Negeri 1 Tembilahan. A descriptive approach was considered appropriate because the research sought to describe students' actual level of grammatical understanding based on numerical data without implementing any instructional treatment or experimental procedures.

Creswell (2018: 155) explains that descriptive research is appropriate for studies intended to systematically describe the characteristics or abilities of a particular population. Similarly, Sugiyono (2019: 11–12) states that quantitative research is suitable when the collected data are numerical and analyzed through statistical techniques. Referring to these views, this research adopted a descriptive quantitative design because it was consistent with the research objective of describing students' understanding of the simple present tense as demonstrated by their test performance.

A quantitative approach was selected because it enabled the researcher to obtain numerical data in a systematic manner and analyze them statistically to describe the phenomenon being investigated. Through this approach, the research was expected to provide a comprehensive description of students' understanding of the grammatical forms and use of the simple present tense on descriptive texts.

B. Location and Time

The research was conducted at SMK Negeri 1 Tembilahan, located on Baharuddin Yusuf Street, Tembilahan, Indragiri Hilir Regency. The research was carried out from May until June 2026.

C. Population and Sample

1. Population

According to Smith (2015: 98), a population represents the complete collection of individuals or objects that share certain observable characteristics. Accordingly, the population of this research consisted of all students from the selected classes listed below:

Table III. 1 Population

No.	Class	Number of students
1.	X Accounting 1	35
2.	X Accounting 2	33
3.	X Accounting 3	35
4.	X Fashion	33
5.	X Computer and Network Engineering 1	35
6.	X Computer and Network Engineering 2	34
7.	X Marketing 1	36
8.	X Marketing 2	35
9.	X Office Management and Business Services 1	36
10.	X Office Management and Business Services 2	34
11.	X Visual Communication Design 1	28
12.	X Visual Communication Design 2	27
13.	X Culinary	35
	Total	436



2. Sample

The sample was a subset of the population selected to represent the characteristics of the population. According to Jones (2018: 42), a sample is selected to represent the population and provide information about the group being studied. In this research, the sample consisted of 44 students taken from the population of X grade students at SMK Negeri 1 Tembilahan, which totaled 436 students. To determine the sample size, this research adopted the guideline provided by Arikunto (2010: 134). The guideline explained that when a population consists of more than 100 individuals, the sample may be selected from 10%–15%, 20%–25%, or an even larger proportion of the population. Based on this theory, the researcher took 10% of the total population of 436 students, resulting in 44 students as the sample. The calculation of the sample size was as follows:

$$436 \times 10 : 100 = 43,6, \text{ which was rounded up to 44 students.}$$

This number was considered representative because it could adequately represent the characteristics of the population and was also appropriate for the research limitations, especially since the instrument used in this research was a written test that required careful and detailed scoring.

The sample in this research was selected using a random sampling technique, in which every member of the population had an equal chance of being chosen as a sample. This technique was used to minimize bias in selecting respondents. In the process, the sample selection was carried out





1. Dilarang memperbanyak atau mendistribusikan dokumen ini untuk tujuan komersial tanpa izin tertulis dari penulis atau pihak berwenang.
2. Penggunaan untuk kepentingan akademik, penelitian, dan pendidikan diperbolehkan dengan mencantumkan sumber.
3. Penggunaan tanpa izin untuk kepentingan komersial atau pelanggaran hak cipta dapat dikenakan sanksi sesuai dengan UU Hak Cipta di Indonesia.
4. Plagiarisme juga dilarang dan dapat dikenakan sanksi.
5. Universitas hanya berhak menyimpan dan mendistribusikan dokumen ini di repositori akademik, tanpa mengalihkan hak cipta penulis, sesuai dengan peraturan yang berlaku di Indonesia.

using Microsoft Excel. All students' names in the population were listed in an Excel sheet and assigned numbers. Then, the researcher used the RAND function to randomly arrange the data, and 44 students were selected as the research sample. Therefore, the use of random sampling with the help of Microsoft Excel was expected to produce an objective and representative sample in accordance with the research objectives.

Table III. 2 Sample

No.	Class	Total	Sample
1.	X Accounting 2	33	4
2.	X Accounting 3	35	3
3.	X Fashion	33	2
4.	X Computer and Network Engineering 1	35	2
5.	X Computer and Network Engineering 2	34	5
6.	X Marketing 1	36	5
7.	X Marketing 2	35	7
8.	X Office Management and Business Services 1	36	2
9.	X Office Management and Business Services 2	34	4
10.	X Visual Communication Design 2	27	6
11.	X Culinary	35	4
Total			44

D. Research Instrument

The instrument employed in this research was a written test designed to evaluate students' understanding of the use of simple present tense verbs on descriptive texts. This type of instrument was selected because it enabled the researcher to assess students' ability to apply appropriate verb forms in simple present tense sentences through their written responses. Brown (2015: 286) states that written tests are suitable for assessing grammatical competence since they provide clear evidence of students' knowledge of grammatical

forms and language structures. Therefore, this study utilized a completion test containing items related to the use of simple present tense verbs on descriptive texts.

The construction of the research instrument was based on Freeman (2015: 28–31), which explains that grammar consists of three aspects: form, meaning, and use. However, the present research concentrated only on the form aspect, particularly the correct application of simple present tense verbs on descriptive texts. Consequently, the instrument was developed to measure students' understanding of the correct use of verb forms on descriptive sentences according to the predetermined research indicators. Hughes (2017: 59) also explains that a test blueprint functions as an essential guide in developing a research instrument because it helps ensure that every test item represents the research objectives and indicators appropriately. Following this principle, the researcher prepared the blueprint before constructing the test items. It served as a reference for developing the try-out questions so that each research indicator was represented proportionally. Initially, the researcher prepared 30 completion-test items based on descriptive texts. These items were designed according to the two research indicators related to the use of simple present tense verbs on descriptive texts.

Afterward, the try-out items were analyzed using the Product Moment formula to examine their empirical validity and determine which items were appropriate for use in the main research. Hughes (2017: 36) further states that objective tests can be scored objectively by assigning 1 to each correct answer





1. Dilarang memperbanyak atau mendistribusikan dokumen ini untuk tujuan komersial tanpa izin tertulis dari penulis atau pihak berwenang.
2. Penggunaan untuk kepentingan akademik, penelitian, dan pendidikan diperbolehkan dengan mencantumkan sumber.
3. Penggunaan tanpa izin untuk kepentingan komersial atau pelanggaran hak cipta dapat dikenakan sanksi sesuai dengan UU Hak Cipta di Indonesia.
4. Plagiarisme juga dilarang dan dapat dikenakan sanksi.
5. Universitas hanya berhak menyimpan dan mendistribusikan dokumen ini di repositori akademik, tanpa mengalihkan hak cipta penulis, sesuai dengan peraturan yang berlaku di Indonesia.

and 0 to each incorrect answer, thereby reducing subjectivity during the scoring process. Following this guideline, every correct response in this research received a score of 1, whereas incorrect responses received a score of 0. The total score obtained by each student was subsequently converted into a percentage to identify the student's level of understanding. Arikunto (2013: 281) explains that converting test scores into percentages facilitates the interpretation of results and the classification of students' achievement levels.

Table III. 3 Blueprint of the Test

No.	Indicators	Item Types	Item Numbers	Number of Items
1.	Accuracy in Using Base Verb Forms (V1)	Completion Test	1, 2, 3, 4, 5, 11, 13, 14, 15, 16	10
2.	Accuracy in Using Verbs with -s/-es/-ies (Third Person Singular)	Completion Test	6, 7, 8, 9, 10, 12, 17	7
	Total			17

E. Data Collection Technique

This research collected the data through a written test designed to assess students' understanding of the use of simple present tense verbs on descriptive texts. The instrument was prepared according to two research indicators: the accuracy in using base verb forms (V1) and the accuracy in using verbs with -s/-es/-ies for third person singular subjects. Based on these indicators, a completion test was constructed by referring to the research blueprint. The participants were 44 X grade students of SMK Negeri 1 Tembilahan who had been selected through a random sampling technique.

Prior to the test administration, the researcher explained the purpose of the research and provided clear instructions on how to answer the test items. The students then completed the test within the allocated time, after which all answer sheets were collected for analysis. Each correct response received 1 point, whereas incorrect responses received 0 points. The total score obtained by each student was converted into a percentage to simplify the interpretation of the findings. Finally, the percentage scores were grouped into five levels: Very High, High, Moderate, Low, and Very Low to identify the students' level of understanding in a more systematic manner.

F. Data Analysis Technique

1. Validity of the Instrument

Validity indicates the extent to which a research instrument accurately measures the construct or variable it is designed to assess. Brown (2010: 3) explains that a valid test is one that effectively measures the intended construct or ability. Likewise, Creswell (2012: 159) emphasizes that an instrument is considered valid when it accurately reflects the concept that the researcher aims to investigate. In this research, empirical validity was employed to evaluate the research instrument. This procedure involved administering the test to students who were not included in the research sample, and the resulting data were analyzed to determine the quality of each test item. The validity of every item was calculated using the Product Moment correlation formula. An item was regarded as valid when its r-



count value exceeded the r-table value, whereas items with an r-count lower than the r-table were classified as invalid.

Prior to the empirical validity testing, the instrument was developed based on a test blueprint derived from the learning indicators, with particular emphasis on the use of simple present tense verbs on descriptive texts. The blueprint specified the aspect to be measured, namely the form aspect, and determined the number of test items according to the objectives of the research. The completed instrument was then piloted in a class that belonged to the population but was excluded from the research sample. The findings from the pilot test were used to identify the items that fulfilled the validity requirements. Only the valid items were retained and subsequently used as the final research instrument for the main data collection.

2. Reliability of the Instrument

Reliability indicates the consistency of a research instrument in measuring students' abilities. An instrument is regarded as reliable when it produces stable and consistent results under similar conditions. Brown (2015: 234) explains that, in language assessment, reliability is supported by the use of clear scoring criteria and the consistent implementation of scoring procedures. Accordingly, this research assessed the reliability of the research instrument by applying Cronbach's Alpha through SPSS to examine the consistency of the test items.

Sugiyono (2017: 184) further explains that a research instrument is considered reliable when its Cronbach's Alpha coefficient exceeds 0.60.



Based on this criterion, an Alpha value greater than 0.60 indicated that the instrument had acceptable reliability, whereas a value below 0.60 suggested that the instrument was not sufficiently reliable. Therefore, the reliability analysis was carried out to confirm that the instrument consistently measured students' understanding of the use of simple present tense verbs on descriptive texts.

3. Written Test Data Analysis

The data collected from the written test were analyzed by applying a descriptive quantitative analysis technique. This method was selected because it enabled the researcher to describe students' level of understanding of the use of simple present tense verbs on descriptive texts based on the numerical results of the test. Sugiyono (2019: 147) explains that descriptive quantitative analysis aims to describe a phenomenon through numerical data without involving hypothesis testing. Based on this explanation, the technique was considered suitable for achieving the objective of this research.

The analysis of the data was completed through several procedures. First, the students' responses were scored objectively, with 1 point awarded for each correct answer and 0 points assigned to each incorrect answer. After all responses had been assessed, the total score for each student was calculated by adding the number of correct answers. Next, the total scores were converted into percentages by using the following formula:





1. Dilarang memperbanyak atau mendistribusikan dokumen ini untuk tujuan komersial tanpa izin tertulis dari penulis atau pihak berwenang.
2. Penggunaan untuk kepentingan akademik, penelitian, dan pendidikan diperbolehkan dengan mencantumkan sumber.
3. Penggunaan tanpa izin untuk kepentingan komersial atau pelanggaran hak cipta dapat dikenakan sanksi sesuai dengan UU Hak Cipta di Indonesia.
4. Plagiarisme juga dilarang dan dapat dikenakan sanksi.
5. Universitas hanya berhak menyimpan dan mendistribusikan dokumen ini di repositori akademik, tanpa mengalihkan hak cipta penulis, sesuai dengan peraturan yang berlaku di Indonesia.

$$\text{Score} = \frac{\text{Correct Answers}}{\text{Total Items}} \times 100$$

Where:

Score = students' final score

Correct Answers = total correct answers obtained by the students

Total Items = total number of test items

Then, the results expressed in percentages were used to identify students' level of understanding based on certain categories.

To facilitate the interpretation of the research results, the students' scores were classified into five categories based on Arikunto in Raupu et al. (2023:16), namely very high, high, moderate, low, and very low.

The indicators analyzed in this research consisted of two aspects, namely:

- a. the accuracy in using base verb forms (V1).
- b. the accuracy in using -s/-es/-ies verbs for third person singular subjects.

Furthermore, the researcher calculated the frequency and percentage of students in each category of understanding. The calculation was used to determine the distribution of students across each category.

The percentage was calculated using the following formula:

$$P = \frac{F}{N} \times 100\%$$

Where:

P = Percentage

F = Frequency of students in each category

N = Total Number of students

To facilitate the interpretation of the research results, the students' scores were classified into several categories of understanding as shown in the following table:

Table III. 4 Classification of Students' Scores

Percentage	Category
81 – 100	Very High
61 – 80	High
41 – 60	Moderate
21 – 40	Low
0 – 20	Very Low

Arikunto in Raupu et. al (2023: 16)

The results of the data analysis were presented in the form of tables, percentages, and descriptive explanations. This analysis aimed to describe students' level of understanding in using simple present tense verbs on descriptive texts systematically and clearly based on the data obtained from the written test.

