

### III. RESEARCH METHODS

#### A. Research Design

This research made use of descriptive-qualitative method and ex-post facto design. Qualitative research is concerned with process rather than simply outcomes or products; qualitative researchers tend to analyze their data inductively. This method was brought into play to examine the events or phenomena of students, particularly students' learning strategies in composing narrative text. The research was aimed at the learning strategies applied by poor and successful learners in composing narrative text.

Actually there are two types of descriptive study, namely *observational studies* and *field survey* (<http://www.nonexperimentresearchfall03.pdf>). Observational studies are studies which require the researcher to observe the participants directly, while field survey gathers the data by completing questionnaire or interview in a natural setting. Since this research was prepared to investigate students' learning strategies in composing narrative text, and as we know that strategy is difficult to observe, *field survey* was applied as the appropriate design.

For data collection, writing task was used to determine the poor and successful learners and the questionnaire administered for identifying the learning strategies employed by the students in composing narrative text. Afterwards, interview was conducted to explore students' learning strategies more deeply as sometimes students are not honest in answering a questionnaire.

Concerning the correlation between learning strategies and students' writing competence, ex-post facto design was applied. In this research, the two variables were formulated as follows:

$$X \quad Y$$

where:

**X** = questionnaire of learning strategies as the first variables

**Y** = writing test as the second variable

These two variables were then analyzed in terms of Spearman's correlation using SPSS to find the coefficient correlation number ( $r$ ).

## **B. Participants of the Research**

The participants of the research were the first-year students of SMAN 5 Bandar Lampung of 2009/2010 school year. There were seven first-year classes in the school, each consisting of 37 – 40 students. Purposive random sampling was used to choose which class would be taken as the participants. The name of each class was written on a piece of paper, and then the pieces were rolled and put in a box, the box was shaken and the piece that came out indicated the name of the class that would be taken as the sample.

### **C. Data**

The data of this research were in the form of:

1. Description of students' learning strategies in composing narrative text, obtained from the questionnaire and interview.
2. Students' writing scores, gathered from the writing test.

### **D. Data Collection Technique**

The following instruments were deployed for data collection:

#### **1. Questionnaire**

The questionnaire is arranged based on the scope of learning strategies in this research, i.e. learning strategies that directly construct and affect writing (metacognitive and cognitive strategy), and those that indirectly construct and affect writing (social strategy).

The items in the questionnaire develop from learning strategies stated by Chamot in Wenden and Rubin (1987) and Setiyadi (2004). The questionnaire consists of 25 items, which were translated into and responded in Indonesian. Those questionnaire items measure learning strategies under three categories: cognitive, metacognitive, and social strategies. The item classification of the questionnaire is shown in the following table:

Table 1. Item classification of learning strategy questionnaire

<b>Number of Questionnaire</b>	<b>Strategy Measured</b>
1-11	Cognitive strategy
12-21	Metacognitive strategy
22-25	Social strategy

Students' responses were interpreted based on the Likert scale (Setiyadi, 2006: 58). Likert rating scale is employed to indicate the participants' responses to these statements: (1) Never or almost never true of me, (2) Usually not true of me, (3) Somewhat true of me, (4) Usually true of me, and (5) Always or almost true of me. In this case, if the students choose either response 3, 4 or 5, they exhibit an indication that they use the learning strategy.

## 2. Interview guide

The interview was used to gather the data from the students. Besides, it was aimed at reinforcing the validity of the data gained from the questionnaire about learning strategies employed by the students in writing. The interview was based on the students' experiences in narrative-writing activities.

The interview was administered in a warm situation so as to make the students feel more comfortable in expressing their effort in writing and completing the tasks. Formal interview was conducted with some questions that have been stated before.

### 3. Writing task

The writing task (essay form) was used to elicit students' compositions based on the given topic. In the writing task, the students focused only on narrative paragraph. There were five aspects based on which the students' narrative compositions were assessed: content, organization, vocabulary, grammar, and mechanic.

The topic of the writing task was "My Experience". The paragraphs should comprise 100 – 150 words, or around 10 – 15 sentences. The direction of the test was set as follows: "Write a narrative text, at least two paragraphs, about your experience. Don't forget about orientation, complication, and resolution of your text. The text should consist of 100 – 150 words or 10 – 15 sentences". The time allocation for the test was 50 minutes.

To determine whether the test was a good instrument, the validity and the reliability must be identified. Validity is concerned with the content, and the construct validity with the theme 'My Experience'. To achieve reliability, two raters scored the students' compositions (also called inter-rater reliability) so as to avoid subjectivity. Further explanation is presented as follows:

#### a. Validity

According to Heaton (1991: 159) "the validity of a test is the extent to which it measures what it is supposed to measure and nothing else". It clearly states that a test must measure what is supposed to be measured.

Since this research analyzed students' writing competence, the writing test took on a topic that referred to the curriculum.

The test was analyzed in terms of its content and construct validities.

Content validity concerns whether the test is sufficiently representative and comprehensive for the test. In terms of this research, content validity was indicated by the consistency between the material and the curriculum.

Construct validity focuses on the kind of test that is used to measure the ability. In this research, writing test was used and the scoring was based on the five aspects of writing: content, organization, vocabulary, grammar, and mechanic.

b. Reliability

Inter-rater reliability was used as the standard for measuring the writing test's reliability. Two raters scored the students' compositions. To measure the reliability, Pearson product moment formula was used as the means for calculation. The formula is:

$$r = \frac{N \sum xy - (\sum x)(\sum y)}{\sqrt{[N \sum x^2 - (\sum x)^2][N \sum y^2 - (\sum y)^2]}}$$

where:

$N$  : number of pairs of scores

$\sum xy$  : sum of the products of paired scores

$\sum x$  : sum of  $x$  scores

$\sum y$  : sum of  $y$  scores

$\sum x^2$  : sum of squared  $x$  scores

$\sum y^2$  : sum of squared  $y$  scores

In order to verify that the data obtained are valid, triangulation is used in this study. Triangulation is described as a way of collecting the data by combining two or more methods. According to Setiyadi (2006: 246), the use of triangulation is to describe the participants in a complete description. Actually, there are many kinds of triangulation but this research used methodological triangulation. Three methods were applied for data collection, i.e. questionnaire, interview, and writing task.

There are two groups of data that were gathered in this research: (1) the description of the students' learning strategies mostly used in composing narrative text and (2) the students' writing score. The questionnaire and the interview were used to elicit the description of students' learning strategies. On the other hand, the scores of writing task were used to classify the good and poor students.

### **E. Research Procedure**

The procedure of this research was carried out through several steps as follows:

1. Determining the participants

Since the first-year students of SMAN 5 Bandar Lampung consisted of seven classes, purposive random sampling was used to determine the class that would be taken as the participants for this research. This technique was applied because each of the first-year students at the school had the same opportunity to be a participant.

2. Distributing questionnaire to the participants

Questionnaire of learning strategy was used to analyze the most frequent strategies employed by the students and their correlation with students' writing competence.

3. Interviewing the participants

4. Collecting students' writing scores from the writing test

Writing test was used to obtain the data of learners' writing competence.

5. Analyzing the data

Determining the most frequent strategies used and their correlation with learners' writing competence by using the data from the questionnaire, the interview and the writing test.

6. Making the report of the findings

## **F. Scoring Criteria of the Writing Test**

There are five aspects evaluated for a writing test: content, organization, vocabulary, grammar, and mechanic (Harris, 1974: 68-69).

- Content—scored 20% from the total sentences supporting the main idea.
- Organization—scored 20% from the total sentences written in chronological order.
- Vocabulary—scored 20% from vocabulary used correctly.
- Grammar—scored 20% from sentences with correct grammar.

- Mechanic—scored 20% from punctuation, spelling, and capitalization used correctly.

The scoring criteria are as follows:

1. Content

The score of content ranges as the followings:

20 = Excellent, all developing sentences support the main idea;

15 = Good, 75% of developing sentences support the main idea;

10 = fair, 50% of developing sentences support the main idea;

5 = poor, 25% of developing sentences support the main idea;

0 = very poor, no developing sentence supports the main idea.

2. Organization

The score of organization ranges as the followings:

20 = Excellent, all supporting sentences are written in chronological order;

15 = Good, 75% of supporting sentences are written in chronological order;

10 = fair, 50% of supporting sentences are written in chronological order;

5 = poor, 25% of supporting sentences are written in chronological order;

0 = very poor, no supporting sentence is written in chronological order.

3. Vocabulary

The score of vocabulary ranges as the followings:

20 = Excellent, all vocabularies used are correct;

15 = Good, 75% of vocabulary used are correct;

10 = fair, 50% of vocabulary used are correct;

5 = poor, 25% of vocabulary used are correct;

0 = very poor, no vocabulary used is correct.

#### 4. Grammar

The score of grammar ranges as the followings:

20 = Excellent, all sentences use correct grammar;

15 = Good, 75% of sentences use correct grammar;

10 = fair, 50% of sentences use correct grammar;

5 = poor, 25% of sentences use correct grammar;

0 = very poor, no sentence uses correct grammar.

#### 5. Mechanic

The score of mechanic ranges as the followings:

20 = Excellent, all punctuations, spelling, and capitalization are used correctly;

15 = Good, 75% of punctuations, spelling, and capitalization are used correctly;

10 = fair, 50% of punctuations, spelling, and capitalization are used correctly;

5 = poor, 25% of punctuations, spelling, and capitalization are used correctly;

0 = very poor, no punctuation, spelling, nor capitalization is used correctly.

Marking composition was also adapted from Hedge (1988: 153) as an aid in the assessment of students' writing, as shown in the following table:

Table 2: Marking Composition

Meaning	Marking	Example
1. Wrong Form	<b>WF</b>	The <i>beautiful</i> <sup>WF</sup> is there
2. Wrong Word	<b>WW</b>	Slim, tall, and <i>beautifully</i> <sup>WW</sup>
3. Wrong tenses	_____	I <i>don't understood</i> the meaning
4. Something is missing	√	She lives √ bandung
5. Wrong spelling	<b>Sp</b>	<i>discusing</i> <sup>Sp</sup>
6. Wrong word order	<b>Wo</b>	I haven't seen <i>yet</i> <sup>Wo</sup> London
7. Wrong punctuation	<b>P</b>	Watch out. <sup>P</sup>
8. Wrong verb form	<b>V</b>	You <i>goes</i> <sup>V</sup> to school
9. Not necessary	<b>Ø</b>	Joe read and <del>he</del> wrote a letter
10. Incomplete sentence or I don't understand what you are trying to say	<b>?</b>	While she is speaking.?

### G. Data Analysis

The data were then analyzed using qualitative description. First, the questionnaire was scored based on the Likert Scale (Setiyadi, 2006: 58), in which the scores range from 1 to 5. Then, they were analyzed using *Cronbach's alpha coefficient*. The Cronbach's alpha coefficient is the most common standard used to measure the consistency of the items in a questionnaire. The alpha ranges between 0 and 1. The higher the alpha, the more reliable the questionnaire is (Setiyadi, 2006: 189).

Then, in scoring the writing test, impression method was applied with multiple marking (Heaton, 1991: 147). Two raters took part in scoring students' compositions. This method is meant to minimize subjectivity. The scores

given by the raters on each composition were summed up and divided by two to obtain the final score, as described by the following formula:

$$fS = \frac{S_1 + S_2}{2}$$

where:

$fS$  = students' final score

$S_1$  = score from the first rater

$S_2$  = score from the second rater

The scores from the writing test were sorted from the highest to the lowest one. The students were then classified, based on their writing scores, into three groups: the top, the middle, and the bottom groups. The top and the bottom groups were taken from 27 percent of the students, respectively (Harrison, 1983: 128). It was estimated that there were 40 students in the class; therefore, there were 11 students from the top group categorized as the good learners, and 11 students from the bottom group categorized as the poor ones.

Afterwards, the learning strategies used by the good and poor learners were described by consulting the data obtained from the questionnaire and the interview records.

## **H. Identifying the Correlation between Learning Strategies and Writing Competence**

After data analysis, correlation test was administered. The correlation between students' writing scores and their learning strategies was calculated using Spearman's correlation on SPSS to find out whether there is a significant correlation between the two variables.