

III. RESEARCH METHOD

3.1 Research Design

The aim of this research is to find out the effect of teacher error feedback on the accuracy of the students' descriptive writing of class X SMA Negeri 1 Pringsewu.

The appropriate research method corresponded to the objectives of the research is associative research with *pre-post non-equivalent groups* design. It is structured like a pretest-posttest randomized experiment, but it lacks the key feature of the randomized designs -- random assignment. Here, by non-equivalent, means that assignment to group was not random. In other words, the researcher did not control the assignment to groups through the mechanism of random assignment.

The design can be visualized as follow:

NE G1 X T1

NE G2 0 T1

Where:

NE : Symbol stating the design is with *non-equivalent* groups

G1 : Experimental group

G2 : Control group

X: Treatment

T1 : Test given

3.2 Population and Sample

The population of the research was all of class X students in SMA Negeri 1 Pringsewu in 2011/2012 academic year. The researcher chose class X because it is assumed that they had just graduated from junior high school so that they had not been given many writing exposures just yet. There were four classes of class X with 28-30 students in each class. Two groups of senior high-school students in class X.1 and X.2 each of which consisting of thirty students were taken as the sample out of the student population in school.

The sampling technique used in this research was *purposive sampling*. The researcher considers this technique as the technique of sampling that gives similar opportunity for every members of the population to be selected to become the samples. Ideally, random sampling should be used yet since it was almost impossible to do in the research at this particular condition because it was so hard to pick certain students and mix them with other samples, so the random sampling was not used.

3.3 Research Procedure

1. Determining the Population and Selecting the Samples

The population of this research was the first year of SMAN 1 Pringsewu in the 2011/2012 academic year consisted of four classes. Two classes were taken as the sample. The sample class was selected using purposive random sampling.

2. Administering Writing Task

The next step taken was conducting the writing assessment to the students to see their accuracy score or error-free T-units ratio. The students in both classes then made revision of their first draft then revise again up to the third draft. The difference of the accuracy from first draft to the third draft was seen as the effect of the treatment, i.e., the teacher error feedback.

3. Analyzing, Interpreting, and Concluding the Data

After collecting the data of the accuracy of the students' writing, then analyzing, interpreting, and concluding the data was performed.

First, the data obtained from the task were tabulated and calculated. Independent t-test was then used to see if the hypothesis are accepted or rejected.

3.4 Instrument

The instrument used in this research was writing task. The task consisted of a picture that students should describe into relatively short descriptive writing (200 – 400 words). Students' writings then were checked in terms of grammatical errors for its accuracy. The errors or inaccuracy then were counted. After being checked then the students revised their writings based on teacher's suggestion, except for control group where there was no written feedback given.

3.5 Measuring Writing Accuracy

Wolfe-Quintero et al. (1998) define accuracy simply as “the ability to be free from errors while using language to communicate”. Since the primary question in this study deals with the effect of the treatment on linguistic accuracy, the measure favored most by Wolfe-Quintero et al. was used with the hope that it would present a complementary picture of students’ writing performance. The measure of accuracy they favor most and recommend is the error-free T-unit ratio (EFT/T), or the total number of error-free T-units per total number of T-units in a given piece of writing. For convenience and uniformity in this study, this measure is converted to a 100-point scale. Thus, this measure of overall accuracy is calculated as (EFT/T) multiplied by 100. Since this measure utilizes the T-unit, a brief discussion of the T-unit may be useful.

The T-unit ratio was originally developed by Hunt (1965) as a way of measuring writing maturity to overcome problems associated with using sentences as units of production. Hunt defines a T-unit as “one main clause plus the subordinate clauses attached to or embedded within it”. For example, the two-word sentence *Bill went* contains one main or independent clause and would be considered one T-unit. On the other hand, consider an expanded version of this sentence: *Before coming home, Bill went to the library.* Though this sentence also contains a subordinate or dependent clause, it would still be counted as only one T-unit.

However, consider one additional expansion, although erroneously punctuated: *Before coming home, Bill went to the library and he checked out several books*

and he went to his apartment and he studied most of the night. Though punctuated as one sentence by the writer, it actually contains four T-units as identified in the following breakdown: (a) *Before coming home, Bill went to the library,* (b) *he checked out several books,* (c) *he went to his apartment,* and (d) *he studied most of the night.* Thus, analyzing T-units rather than sentences provides the researcher with a more stable measure of writing development.

For the purposes of this study, run-on sentences were analyzed according to the number of T-units they contained. However, each T-unit needed to have an appropriate form of punctuation preceding and following it before it could be considered error free. For example, if a run-on sentence contained three T-units but lacked appropriate punctuation that would have correctly separated the T-units, then the run-on would be counted as three T-units with no error-free T-units. Of course, it should be remembered that the presence of any type of error would make a particular T-unit ineligible to be counted as an EFT. Where multiple T-units were strung together with coordinating conjunctions (i.e. and, or, but), the conjunctions were counted in the T-unit that followed it. Using the EFT/T in this way provided one consistent, objective measure of overall accuracy of student writing.

In this research, as previously stated in limitation of the research, only grammatical error family was used to analyze students' writing accuracy, including but not limited to, sentence structure errors; determiner errors; verb errors; and semantic errors. Sentence structure errors deals with sentence-surface

errors, namely, run on sentences (sentences which too long and may need to be fragmented), incomplete sentences, and sentence-level punctuation (comma, period, etc). Determiner errors are related to the misuses of articles (a, an, the), possessive pronouns (my, your, his, her, their, our), numbers, indefinite pronouns, and demonstrative pronouns. Verb errors are concurrent with subject-verb agreement, and verb tense. Semantic errors are in accordance to unclear meaning, awkwardness, word order, and insertion/omission.

3.6 Statistical and Hypothesis Testing

Associative research was performed to obtain necessary data, including the coefficient correlation. The writing instruction was given as to obtain the students' writing accuracy level and to notice the improvement of the accuracy level after being given the feedback (in experimental class).

As stated previously, the researcher used Hunt's T-Units to measure students' overall accuracy in their writings, as suggested by Quintero et al. The measure was used with the hope that it would give a picture of students' overall accuracy.

The research has one hypothesis, as stated below in the null form:

There is no effect of teacher error feedback on students' writing accuracy

This hypothesis was tested using *Independent Groups T-Test*.

The research employed two groups: control and experimental class. Thus, *independent groups T-Test* will be used to compare *mean* from these two different groups both of which taken in different situation. In control class there will be no feedback given, while in experimental class teacher error feedback will be given.

In *T-Test*, there are some basic assumptions need to be fulfilled, they are:

1. The data must be interval or ratio data (or changing ordinal data to interval data)
2. The data comes from random sample from a population
3. The data has normal distribution