III. RESEARCH METHODS

A. Research Design

This research was intended to find out whether Community Language Learning can improve students’ conditional sentences (present-unreal) mastery or not. In order to know the effectiveness of Community Language Learning for improve students’ conditional present-unreal mastery, the researcher conducted quantitative research based on the experimental method. She used one group pretest-posttest design. She used one class as the experimental class. The researcher conducted pretest, treatments, and posttest. The design is presented as follows:

\[ T_1 \times X \to T_2 \]

Where,

\[ T_1 = \text{Pre-test} \]
\[ X = \text{Treatment (By using CLL)} \]
\[ T_2 = \text{Post-test} \]

(Hatch and Farhady, 1982:22)
B. Population of the Research

The population of this research was the third year students of SMK Taruna Bandar Lampung in odd semester of 2010/2011 learning year. There were 3 classes at 3rd grade of SMK Taruna Bandar Lampung which consisted of 30 - 32 students for each class (3 AK1, 3 AK 2 and 3 AP). The sample was one class as experimental class, which was selected using simple random sampling. The class was selected randomly by using lottery, since the 3rd grade in SMK Taruna Bandar Lampung was not stratified class. There was no priority class. It was applied based on the consideration that every student in the population had the same chance to be chosen and also in order to avoid the subjectivity in the research (Setiyadi, 2006: 39). The experimental class had pre-test, post-test, and four treatments.

C. Data Collecting Technique

In collecting the data, the writer used the following techniques:

1. Pretest

The pre-test was given before the researcher presenting the treatment to know how far the student mastery about present-unreal conditional. The type of the test that the researcher giving was objective test (multiple choice test) and completion test. The total number of the pretest were 30 items, it was conducted for 60 minutes.
2. Treatment

   Treatment was the process of teaching conditional sentences by using community Language Learning. In this treatment the researcher applied counseling- learning in improving students’ conditional mastery, the treatments were conducted three times.

3. Post – test

   The posttest was given after conducting the treatment to know Community Language Learning can improve students’ mastery of conditional sentences. The posttest was same as the pretest, the researcher gave multiple choices item and completions. The total number of the pretest were 30 items, it was conducted for 60 minutes. From this test the researcher knows the result of Community Language Learning method in improving students’ mastery of conditional sentences.

D. Research Procedures

1. Deciding population and samples

   The sample of this research was the third grade students of SMK Taruna Bandar Lampung. The researcher chose the third year students because, based on the 2006 English curriculum, conditional sentences (conditional sentence type 2) learned by them in the first semester. The researcher took 3rd Secretary 1 class as the sample.
2. Administering Try out

The researcher administered the try out test in order to find out whether the test item were good or not in validity, reliability, level of difficulty and discrimination power to be used to get the correct data. There were 40 items for try out, 20 items were multiple choices consisted of five alternative answers for each number of test (A, B, C, D and E), one choice was the correct answer and the other were distracters. Other 20 items consisted of sentence completion. The maximal score was 100. It was conducted for 60 minutes.

3. Administering the Pretest

The pretest items were given after choosing the population of the research. There were 30 items, 15 items were multiple choices consist of five alternative answers for each number of test (A, B, C, D and E), one choice was the correct answer and the other were distracters. Other 15 items consisted of sentence completion. It was conducted for 60 minutes.

4. Conducting the Treatment

There were three times treatments conducted in this research, each treatment conducted for 90 minutes, by using Community Language Learning (CLL). The material given was conditional sentences type 2 (conditional present unreal), it was based on competition standard and standard competition 2006 for third grade Vocational High school students.
5. Administering the Posttest

After the teaching learning processes, the posttest was conducted. The posttest was conducted to measure students’ conditional sentences mastery after being taught by using Community Language Learning. There were 30 items, 15 items of multiple choices for the posttest with five alternative choices for each number (A, B, C, D, and E) and the other 15 items of completion item test. The posttest was administered in 60 minutes and the maximal score was 100. The aim of the posttest was to find out the result of students’ conditional sentences Present-unreal.

6. Analyzing the result

The researcher analyzed the result of pretest and posttest by scoring the test result. The data was examined by using independent group T- Test. Pretest and posttest were administered to know whether Community Language Learning (CLL) could improve student’s conditional sentence mastery or not.

7. Reporting the Results

In the end, the researcher arranged the data of the research systematically based on the result of average score (mean) of pretest and posttest. It was aimed to see whether Community Language Learning could improve students’ conditional present-unreal mastery or not.
E. Scoring System

In scoring the result of the pretest and posttest, the writer used the range of 1 – 100, meaning that the highest score is 100. To determine the score, the formula below was used.

\[ S = \frac{R}{N} \times 100 \]

where:

\( S \) = Score  
\( R \) = The right answer  
\( N \) = number of items  

(Arikunto, 2005: 236)

F. Criteria of Good Test

Test was the main technique to get the data of this research. Consequently, before it was used to measure the students’ ability of English tenses, it should have the characteristics of good test namely validity and reliability.

1. Validity

To know the validity of the test, the writer used content validity and construct validity. Heaton (1991: 159) says that the validity of the test is the extent to which it measures what it is supposed to measure and nothing else. It means that the test must measure certain skills that the students
have already learnt in their learning activity, in this case was conditional present-unreal (conditional type 2).

Content validity depends on a careful analysis of the language being tested of the particular objective. The test should be constructed as to contain a representative sample of the course. In the content validity the material given should be suitable with the curriculum. The test of conditional sentences type 2 (conditional present unreal) consisted of structure ability, they were simple present tense (If clause) and past future tense (main clause). The content of the try out test was presented in the table of specification below:

Table of validity test

<table>
<thead>
<tr>
<th>No</th>
<th>Application of structure ability</th>
<th>The spread of the items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Simple past tense</td>
<td>2, 3, 6, 7, 8, 9, 10, 12, 17,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22, 24, 26, 27, 28, 30, 31,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>33, 36, 37, 39, 40.</td>
</tr>
<tr>
<td>2</td>
<td>Past future tense</td>
<td>1, 3, 4, 5, 10, 11, 12, 13,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14, 15, 16, 18, 19, 20, 21,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23, 25, 27, 29, 32, 34, 35,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38.</td>
</tr>
</tbody>
</table>
2. Reliability

Hatch and Farhady (1982: 243) says that reliability of a test can be defined as the extent to which a test produces consistent result when administered under similar conditions. To avoid the subjectivity, the researcher asked the teacher as a rater. The first and second raters used scoring criteria devised by Harris. To measure the coefficient of the reliability between odd and even group, this research used the Pearson Product Moment Formula as follows:

$$r_{xy} = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{(n \sum x^2 - (\sum x)^2)(n \sum y^2 - (\sum y)^2)}}$$

Where:

- $r$ : coefficient of reliability between odd and even groups
- $x$ : total numbers of odd groups
- $y$ : total number of even group
- $x^2$ : square of X
- $y^2$ : square of Y
- $\Sigma x$ : total score of odd numbers items
- $\Sigma y$ : total score of even numbers items

(Lado (1961) in Hughes, 1991:32)

To find out the reliability of the test, the researcher employed Spearman Brown Formula which is presented as follow:
\[ r = \frac{2 \cdot r}{1 + r} \]

In this case the writer also used the standard of reliability (Arikunto, 1998: 260) below:

- \( r = 0.81-1.00 = \text{very high} \)
- \( 0.61-0.80 = \text{high} \)
- \( 0.41-0.60 = \text{sufficient} \)
- \( 0.21-0.40 = \text{low} \)
- \( 0.00-0.20 = \text{very low} \)

3. Level of Difficulty

To find out the level of difficulty, this research used the following formula:

\[ LD = \frac{R}{N} \]

where:

- LD: level of difficulty
- R: the number of students who answer correctly
- N: the total number of students following the test
The criteria are:

- $< 0.30$ = difficult
- $0.30 – 0.70$ = average or appropriate
- $> 0.70$ = easy

(Shohamy, 1985: 79)

4. Discrimination Power

Discrimination power was used to indicate the discrimination of the failure and the success of the students. To find out the discrimination power, this research used the following formula:

\[
DP = \frac{U - L}{\frac{1}{2} N}
\]

where:

- $DP$ : discrimination power
- $U$ : the proportion of upper group students
- $L$ : the proportion of lower group students
- $N$ : total number of students

The criteria are:

1. If the value is positive discrimination a larger number of more knowledgeable students then poor students got the item correct. If the value is zero, no discrimination.
2. If the value is negative, means that more low students than high level students got the items correct.

3. In general, the higher the discrimination index, the better. In the classroom situation most items should be higher than 0, 20 indexes.

(Shohamy, 1985:81)

G. Data Analysis

To find out whether Community Language Learning could improved students’ conditional sentences (present-unreal) mastery or not, the data was examined by using independent group T-Test. Independent T-Test was used to compare the two different groups (experimental and control groups). The data was statistically computed through the statistical program for Social Science (SPSS) version 16.0.

H. Hypothesis Testing

The hypothesis was used to prove whether the hypothesis proposes in this research is accepted or not. The hypothesis of this research was: There is improvement of students conditional sentences (present-unreal) mastery after they are taught through Community Language Learning (CLL).

The hypothesis was tested by using Matched T-Test with Statistically Package for Social Science (SPSS) version 16.0. The level of significance was 0.05, and the probability of error in the hypotheses was 5 %.