III. RESEARCH METHOD

In this chapter the researcher discusses seven sub-titles; setting and the subject of the research, research design, data collecting technique, research procedures, data collection, data analysis and data reliability.

3.1 Subject of the Research

The population of this research is the second semester of grade five of SDN 2 Kampung Baru, Kedaton, Bandar Lampung in year 2012/2013. There are two classes in the fifth grade of SDN 2 Kampung Baru, Kedaton, Bandar Lampung. The researcher took the students of the fifth grade B. The class consists of 23 students. This was done with consideration that the class score in English was relatively good so that it can produce the data required.

3.2 Research Design

In relation to the formulation of research problems, a case study research design was used in finding the answer of the research problems. Tellis stated (1997a and 1998b) in Setiyadi, (2006:286) that case study is one of social research method that aimed to give contextual analysis about a condition of event in daily life. This method was used to analyze the students’ problem in learning English pronunciation.
3.3 Data Collecting Technique

In this research, recording was a technique in collecting the audio data of students’ pronunciation of English basic sounds (consonants, vowels, and diphthongs). The data was collected by conducting recording process by asking the students to read the sentences aloud.

3.4 Research Procedures

The research procedures are as follow:

1. Selecting and determining the subjects of the research.
2. Showing how the target sounds’ pronounced.
3. Conducting the recording process by doing the following steps:
   - Administrating the printed target sounds in form of sentences to the students
   - Asking the students to read the sentences aloud and recording the students' voice
4. Analyzing the target sounds.
5. Interpreting the result of the data analysis.
6. Reporting the result.

3.5 Data Collection

Reading Sentences Aloud

The data were obtained by giving printed sentences to the subjects. The subjects read the sentences loudly and the students’ voice was recorded by using digital recorder. Recording was done in order to collect the students’
pronunciation of English basic sounds. This audio data was the basic information to answer the research question.

3.6 Data Analysis

In analyzing and interpreting the data of this research the researcher did the following steps:

1. Listening to the audio data carefully in order to identify whether the sounds are produced correctly or incorrectly.

The following table was used to identify which sounds pronounced correctly or incorrectly. The sounds which pronounced correctly were signed by one (1) and zero (0) for the sounds that pronounced incorrectly.

Table 2. Sounds Identification

<table>
<thead>
<tr>
<th>No</th>
<th>sounds</th>
<th>position</th>
<th>Students’ code</th>
<th>Σcorrect</th>
<th>%</th>
<th>Σincorrect</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>/p/</td>
<td>initial</td>
<td>1 1 0 0 … … 1</td>
<td>9</td>
<td>39.2</td>
<td>14</td>
<td>60.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>middle</td>
<td>1 1 1 1 … … 1</td>
<td>23</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>final</td>
<td>1 1 1 1 … … 1</td>
<td>23</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>/b/</td>
<td>initial</td>
<td>1 1 1 1 … … 1</td>
<td>23</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>middle</td>
<td>1 1 1 1 … … 1</td>
<td>23</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>final</td>
<td>0 1 1 0 … … 1</td>
<td>10</td>
<td>0.43</td>
<td>13</td>
<td>0.37</td>
</tr>
<tr>
<td>3</td>
<td>/k/</td>
<td>initial</td>
<td>… … … … … … 1</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
</tr>
<tr>
<td></td>
<td></td>
<td>middle</td>
<td>… … … … … … 1</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
</tr>
<tr>
<td></td>
<td></td>
<td>final</td>
<td>… … … … … … 1</td>
<td>…</td>
<td>…</td>
<td>…</td>
<td>…</td>
</tr>
</tbody>
</table>

The percentage was counted by using the following formula:

\[ P = \frac{C}{T} \times 100\% \]

Notes:

\( P \): percentage of students who pronounced the English basic sounds correctly.

\( C \): Number of students’ who pronounced correctly.
T : Total number of the students.

2. Determining whether a sound was difficult to pronounce by the students or not.

In determining whether the English sound is difficult to utter by the students or not the researcher used “difficulty index” or “Facility Index” (Arikunto, 198:160). The range of difficulty index is from 0.00 to 1.00. 0.00 is the low index for difficult and 1.00 the high index means easy.

The formula of determining the difficulty index is:

\[ P = \frac{B}{JS} \]

\( P \) = difficulty index
\( JS \) = the number of students
\( B \) = the number of students who pronounce the sounds correctly

The item which has difficulty index less than 0.50 will be classified as difficult Sound, the sounds considered difficult concluded as the students’ problems in learning English pronunciation.

The following table was used to classify the English basic sounds and their difficulty index.

Table 3. Difficulty Index

<table>
<thead>
<tr>
<th>No</th>
<th>sounds</th>
<th>position</th>
<th>Number of the students who pronounced correctly</th>
<th>Number of the students who pronounced incorrectly</th>
<th>Difficulty index ( P )</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>/p/</td>
<td>initial</td>
<td>9</td>
<td>14</td>
<td>0.39</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>middle</td>
<td>23</td>
<td>0</td>
<td>1.00</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td></td>
<td>final</td>
<td>23</td>
<td>0</td>
<td>1.00</td>
<td>✔</td>
</tr>
<tr>
<td>2</td>
<td>/b/</td>
<td>Initial</td>
<td>…23</td>
<td>…0</td>
<td>…1</td>
<td>✔</td>
</tr>
<tr>
<td></td>
<td></td>
<td>middle</td>
<td>…23</td>
<td>…0</td>
<td>…1</td>
<td>✔</td>
</tr>
</tbody>
</table>
By filling the table of difficulty index, the raters were able to know which English sounds were difficult to pronounce by the students. If most of the students cannot pronounce a sound correctly, it means that the sound is difficult or the students found problem in pronouncing the sound. After finding the difficult English basic sounds, the researcher shows the students’ problem in learning English basic sounds by describing them one by one. By having the analysis above, the researcher can make conclusions and suggestions of which sounds that constitute problem to pronounce.

3. Drawing conclusion in line with what have been analyzed and interpreted after doing the two steps above.

3.7 Data Reliability

To keep the reliability of the data of this research, another rater was involved in analyzing and interpreting the audio data. The researcher as the first rater is stated as rater I and the other is rater II. The two raters of this research identified the students’ pronunciation whether it is correct or not in different table of sound identification. Then, the researcher used the tables in calculating the difficulty index.

Here are the qualifications of the other rater in this research: she graduated from S1 degree of English Department, FKIP of Yogyakarta Muhammadiyah
University in 2006. She began to teach English after graduating from university at some private courses. She has been teaching at SDN 2 Kampung Baru, Kedaton, Bandar Lampung in 2008. Her teaching experience is about eight years. In simply, her teaching experience qualifies her to be involved in identifying the research subjects’ pronunciation.