CHAPTER III
RESEARCH METHODOLOGY

This chapter presents methodological aspects of the present study to answer the two questions previously stated in Chapter I. It includes a collective term for the structured process of conducting research which deals with how to design, collect, and analyze data to answer the problems of the study. Therefore, research design, research context, data collection techniques, and data analysis will be discussed below.

3.1 Research Design

In order to answer the research questions previously stated in Chapter I; how do collaborative dialogues help the students to acquire language and create the digital story and the students’ responses of digital storytelling project, the present study used qualitative method. As stated by Creswell (2003), the qualitative method makes the researcher seek for creating the significance of a phenomenon from the participants' views, or attitude of past event which means identifying a culture-sharing group and studying how it expands shared patterns of behavior over time. The purpose of qualitative research is to gain a rich and complex understanding of a specific context or phenomenon in depth rather than generalization to other geographical areas or population (Malik and Hamied, 2016: p.172).

Alwasilah (2008) explains several characteristics of qualitative research that is similar to this research. First, the focus of the research is the quality. Second, the aim of the research is describing, finding, and understanding. Third, the setting is natural; the research only captures the activities in the classroom without changing or interfering teacher's way to teach. Fourth, the participant involved is small and purposes. In this research, two groups have been chosen to be observed. The last, the data collections consist of researchers as the main instrument as participant observer.
Furthermore, the research was conducted in a case study design which provides detailed description of defined individual or entity such as students, program, school, or institution (Merriam in Heigham & Croker, 2009). A case study is also carried out to the design of this research in order to allow generalizations about an instance, recognize the complexity of social truths, to form an archive of descriptive material available for reinterpretation by others (Nunan, 1992). He further states that case study is teacher friendly. Nunan (1992) also adds that a major strength of a case study design is often done by teachers because it suits for small-scale research such as individual students, group of students or classes.

As this study is purposed to investigate how the students work together during the collaborative writing project, it is necessary for the researcher to participate in the study to observe participants’ activities within the classroom; it is called participant observation (Malik and Hamied, 2016). This study also needs a deep understanding regarding students’ perspectives on digital storytelling as a collaborative writing project. Considering the reason above, a case study is suitable to be applied in this research.

3.2 Site and Participants

This study involved English as Foreign Language Students in eight grade at public Junior High School in Bandung. They are considered as EFL learners since they learn English from educational institutions where it is not used for daily communication (Saville-Troike, 2006). Furthermore, the participants were approximately one class of 39 students in the eighth grade. As suggested by Storch (2011), in any collaborative task, lower proficiency EFL learners should be paired with higher proficiency learners. So, in this study, the students further were grouped into six groups consisted of students which ranged from low until high achievement students. It was done to balance the students’ proficiency level in order to make the collaborative dialogue in each group working successfully. In the context of this study, since the researcher’s role was as participant observer, it was hard to monitor the collaboration in each group. Therefore, the researcher only focused on two groups with the help of external observer.
Eight grade students were purposely chosen for this study since the writer has been familiar with them when she was participating in the pre-service teaching program in that school. It is in line with the Creswell’s (2007) principle that in conducting a qualitative research, the researcher should know the participants well in order to get a better understanding of the occurrence. Moreover, they suited the need of the study because as stated in 2013 Curriculum, narrative text is first introduced in the eighth grade and it is included as one of the basic competencies in K13 “Menangkap makna teks naratif lisan dan tulis sangat pendek dan sederhana dengan memperhatikan fungsi sosial, struktur teks, dan unsur kebahasaan, secara benar dan sesuai konteks.” As stated in K13, the basic competency for the eighth grade students is to comprehend and not to write a narrative text. Therefore, in the context of this study, instead of writing their own narrative text, the students were only asked to simplify and rewrite it using their own language.

3.3 Data Collection

The data for main study was collected through triangulation method. Specifically, it employs methodological triangulation as it utilized three techniques in collecting the data (Creswell, 2007), namely participant observation, student documents, and questionnaire. Furthermore, data triangulation was also taken into consideration in this research by gaining more than one sources to construct one body of data. Specifically, these sources include students’ point of view through a questionnaire, and the researcher who acted as an observer as well as participant. Moreover, conducting more than one session in gaining the data makes this research employ time triangulation (Creswell, 2007). The process of data collection for each meeting is elaborated as follow.

3.3.1 Data from Classroom Observation

Regarding the aim of study in finding out how the students work collaboratively during the project, especially their collaborative dialogue, classroom observation was involved as one of the data collection techniques. It was
conducted through two ways which are direct observation and video recording to discover the students’ collaborative dialogue during digital storytelling production.

The instrument used in the classroom observation was observation sheet. In the context of this study, the observation was conducted two times and it was done only in second and third meeting while the students were working collaboratively to produce the text. The observation was not necessarily needed in the introduction and presentation of digital storytelling. It was not done because this study only focused on the collaborative dialogues produced during the production of digital storytelling. During the observation, there was also another observer to help the researcher and to minimize the subjectivity. Videos and notes were also taken from the activities of the participants during the collaborative writing. Video recording was necessary to be done in order to preserve the actual situation which is missing from live observation (Creswell & Plano Clark, 2006). Furthermore, the detail of the fixated observation sheet after doing the pilot study can be seen below.

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Excellent</th>
<th>Proficient</th>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Connection and Formation</td>
<td>Connected with team and demonstrated leaderships enabling team to achieve agreements for team process and collaborative completion of assignment.</td>
<td>Connected with team and developed agreement for completing assignment.</td>
<td>Connected with team.</td>
<td>Did not connect with team.</td>
</tr>
</tbody>
</table>

Table 3.1 Collaborative Group Project Observation Sheet
<table>
<thead>
<tr>
<th>Contribution to Group Goals</th>
<th>Consistently and actively works toward group goals, willingly accepts and fulfills individual role within group</th>
<th>Works toward group goals without occasional prompting accepts and fulfills individual role within group</th>
<th>Works toward group goals with occasional prompting</th>
<th>Works toward group goals when prompted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Process</td>
<td>Participated fully in collaborative process and fulfilled team agreements. Contributed substantively and demonstrated critical-thinking skills</td>
<td>Participated fully in team and fulfilled team agreements.</td>
<td>Participated in team.</td>
<td>Did not participate with team.</td>
</tr>
<tr>
<td>Consideration of Others</td>
<td>Shows sensitivity to the feelings and learning needs of others, values the knowledge, opinions, and skills of all group members</td>
<td>Shows sensitivity to the feelings of others, values the knowledge, encourages the participation of others</td>
<td>Shows sensitivity to the feelings of others</td>
<td>Needs reminders to be sensitive to the feelings of others.</td>
</tr>
<tr>
<td>Working and Sharing with Others</td>
<td>Helps the group identify necessary changes and encourages group action for change, does assigned work without reminders</td>
<td>Willingly participates in needed changes, usually does the assigned work and rarely needs reminding.</td>
<td>Participates in needed changes with occasional prompting, often needs reminding to do the assigned work</td>
<td>Participates in needed changes when prompted and encouraged, always or often relies on others to do the work</td>
</tr>
<tr>
<td>Quality of Work</td>
<td>Extra work put into assignments, all criteria met for assignment based</td>
<td>Some effort into all parts of assignment, criteria met for assignment based</td>
<td>Little effort put into some parts of assignment, criteria was not met for some assignment</td>
<td>Work done in a rush. Failed to follow rubric expectations for assignment.</td>
</tr>
</tbody>
</table>
### 3.3.2 Data from Student Documents

As a part of methodological triangulation, document analysis was involved as agreed by Creswell (2006, 2007) to support the data for cognitive development. In detail, it is necessary to find out the quality in understanding the materials as well as in allocating the prior knowledge to accomplish the tasks.

The documents which were collected including the students’ story drafts on the second and third meeting and the final product of digital storytelling on the last meeting. The story drafts from each groups were collected to see how the students were developing their story and making some changes until the final product was finished. The detail of students’ digital story can be seen in Appendix C.

### 3.3.3 Data from Questionnaire

The questionnaire was designed for this research in gaining students’ perspective of the learning activities. In addition, having their responses is important to validate the data interpretation. The questionnaire consisted of ten close-ended questions which cover the students’ opinion about collaborative group project, digital storytelling, and training and support (including statements about challenges they encountered and teacher’s support during the project. The distribution of the items is depicted as follows.
Table 3.2 Distribution of Questionnaire Items

<table>
<thead>
<tr>
<th>Topics</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses to collaborative group project activities</td>
<td>1-5</td>
</tr>
<tr>
<td>Responses to the use of digital storytelling in writing narrative texts</td>
<td>6-8</td>
</tr>
<tr>
<td>Teacher’s support during the project</td>
<td>9,10</td>
</tr>
</tbody>
</table>

In administering the questionnaire, Indonesian language was used to avoid misunderstanding because the students’ first language is Indonesian. Regarding that, the close-ended questions apply the Likert scale as the measurement in which the respondents were given even number of choices so that they did not select a middle option. In Likert questions, the respondents were asked to rate a particular issue on a scale that ranges between strongly agree to strongly disagree. Furthermore, one open-ended question about their suggestion towards the implementation was included as well to get deeper information on how the implementation should be based on their views. The questionnaire was then administered at the end of the meeting after the students had presented their project to find out their responses. The detail on the questionnaire can be seen in Appendix B.

3.4 Research Procedure

The study was implemented through different cycles of activities which can be seen in figure below:
In detail, each of the procedures are elaborated as follow.

3.4.1 Selection of Text and Software

There are several criteria that the researcher considered in selecting the text. First, the text should contain all of the elements of narrative texts started from linguistic feature to organizational structure. Second, the text themes should bring out the students’ imagination. Third, the level of difficulties in grammar, vocabulary, structure, language use and the length of the text were also considered and adjusted to be used as teaching materials for the participants in the eighth grade.

Moreover, digital story cannot be separated from software, in which the story was made. Software selection had also been considered carefully before the researcher continued to the next step. The software should be adjusted to the students’ ability of using the technology. In this case, the researcher decided to use storybird as the tool for students to create their digital story. It is a free digital storytelling tool on a website and students do not have to install the software in their personal computer. It is also very convenient because it can even be accessed through the students’ smartphones.
3.4.2 Pilot Study

To investigate the feasibility of the collaborative writing activities used, the lesson plans and the instruments were tested in different classes. During the pilot study, the students’ engagement during the production of digital stories were observed using the observation sheet. There was also an external observer who helped the researcher to observe the class and finally gave some constructive advices for the betterment of the research. The result of pilot study made some improvement for both lesson plans and also the instruments.

Moreover, some adjustments made is related to the text in the lesson plan. After the pilot study, the text was remade by changing the uncommon vocabularies for eight grade students to the common one because several students did not understand some part of the narrative text given. Moreover, there was also some adjustments related to the instruments. Regarding the observation sheet, there was an additional evaluation criteria added to it. Furthermore, an open-ended question was added in the questionnaire so that the students could give any suggestion to the teacher regarding the project that they had done.

3.4.3 Preparation of Lesson Plan

Four lesson plans were designed to be implemented in this study for four meetings. Those lesson plans were designed into four stages as suggested by Lambert (2010): introduction, scaffolding and story drafting, creation of digital stories, and presentation of digital stories. The following table is a summary of the lesson plans applied and the detail of each meeting can be seen in the Appendix A.
### Table 3.3 Summary of Lesson Plans

<table>
<thead>
<tr>
<th>No.</th>
<th>Lesson Plans</th>
<th>Stage</th>
<th>Activities</th>
</tr>
</thead>
</table>
| 1   | Lesson Plan 1 | Introduction | • Teacher administered ten questions about narrative texts to know the students’ prior knowledge about it.  
• Teacher introduced students to digital storytelling project by showing the story of “The Clever Prince”.  
• Teacher helped students understand narrative text by asking them to do the worksheet provided and another activities. |
| 2   | Lesson Plan 2 | Scaffolding & Story Drafting | • Teacher introduced students to storybird and how to use it.  
• Teacher guided the students to create digital stories by using mind map (write first about the setting, character, the orientation, events happened, and resolution).  
• Teacher scaffold the students to develop their mind map into a text (first draft). |
| 3   | Lesson Plan 3 | Creation of Digital Stories | • Teacher guided the students to import their story drafts to storybird.  
• Teacher scaffold the students to check again their story drafts and revise it. |
| 4   | Lesson Plan 4 | Presentation of Digital Stories | • Provided students the opportunities to present their digital stories.  
• Facilitated a presentation on digital stories (peer feedback).  
• Teacher administered ten questions about narrative texts to know the students’ cognitive development. |

### 3.4.4 Research Implementation

The application of digital storytelling as a collaborative writing project in this study only focuses on the collaborative dialogue happened during the production of digital story. Moreover, as stated in 2013 curriculum that the basic...
competency of the eight grade students is to comprehend the narrative text, not to produce a narrative text. Therefore, in this case, the students were only asked to rewrite and simplify the text using their own language while also using another elements of digital story such as pictures and audio. The researcher, in this case, made a schedule to conduct the research and to implement the stages in digital storytelling. The research was held in August until September. The research implementation’s schedule is shown below.

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Day and Date</th>
<th>Material</th>
<th>Data Collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tuesday, August 29th</td>
<td>Introduction of Digital Storytelling</td>
<td>Pre-test</td>
</tr>
<tr>
<td>2</td>
<td>Tuesday, September 5th</td>
<td>Scaffolding and Story Drafting</td>
<td>Video recording, observation sheet, story drafts</td>
</tr>
<tr>
<td>3</td>
<td>Friday, September 8th</td>
<td>Creation of Digital Stories</td>
<td>Video recording, observation sheet, story drafts</td>
</tr>
<tr>
<td>4</td>
<td>Tuesday, September 12th</td>
<td>Presentation of Digital Stories</td>
<td>Post-test</td>
</tr>
</tbody>
</table>

### 3.4.5 Questionnaire Administration

Questionnaire was administered to the students after all of teaching sessions were completed. Questionnaire was addressed to all of the students in the class to find out their responses toward digital storytelling as collaborative writing project. The detailed questions can be seen in the Appendix A.

### 3.5 Data Analysis

In relation to this study, the analysis of the three sources (classroom, observation, student documents, and questionnaire) was carried out in order to
converge findings, validate other form of data, and transform data for comparison (Creswell, Clark 2006) for answering the statements of the problem. Moreover, the data gained from the instruments were elaborated descriptively because the characteristic of a case study is that the phenomenon being studied has to be described comprehensively (Airasiyan, et al, 2006 as cited in Griffie, 2012).

3.5.1 Data from Classroom Observation

The observation data was analyzed from the recorded videos during the activities in the class. The recorded videos were very beneficial to see the real situation in the class and complete the data from observation sheet. The video recording was aimed to find out the nature of collaborative dialogue occurred during the production of digital story. The video recording from two groups were transcribed and then the dialogue occurred were classified into two types, Language Related Episodes (LREs) and Non-Language Related Episodes (NLREs). The quality of the text itself was not evaluated holistically as it was not the scope of this study.

Furthermore, the observation sheet was also analyzed specifically to discover the students’ engagement within the group during the production of digital storytelling. It included students’ contribution to the group project, students’ connection with the team, and also their leadership. The observation result from the researcher observation sheet and the external observer were compared. All of the results were coded and categorized to be elaborated descriptively supported by evidence to strengthen the result. The detailed information about the result of classroom observation can be seen in Appendix A.

3.5.2 Data from Documents

The story drafts from each groups were collected to see the students’ progress. Regarding that, students’ works were scanned if they were complete or not. Then, further analysis was undergone to see the changes made in the text within the group until the final project was completed and whether those changes contributed to more accurate text.
3.5.3 Data from Questionnaire

The questionnaire was administered to reveal students’ responses toward the implementation of digital storytelling as collaborative writing project. This questionnaire was intended to strengthen the data taken from classroom observation. Afterwards, the data from questionnaire was analyzed based on the frequency of students’ answer. The data gained from questionnaire were calculated using the percentage scale formula. The formula is as follows:

\[
P = \frac{F_o \times 100}{n}
\]

P = Percentage
Fo = Frequency of Observed
N = Number of Samples

The questionnaire was analyzed and then categorized into positive and negative responses to make it easier for the interpretation. Finally, the result was explained in relation to the research questions and relevant literature.

3.6 Concluding Remarks

This chapter has presented the methodology in conducting the research and description of research procedure in order to find out the answer from research question stated in Chapter I. This chapter also has discussed several main parts of the study which are research design, site and participants, data collection, and data analysis technique. The following chapter will provide a description of the findings and discussions of the data obtained.