

CHAPTER III

RESEARCH METHODOLOGY

Chapter three depicts the methodology used in conducting the research. There are four parts to this chapter. They are research design, research site, data collection technique, and data analysis research design that defines the method used in this study. The research site describes the setting and the participants of the research, and the data collection technique shows the instruments used in this research while data analysis talks about the ways how to analyze the collected data.

3.1. Research Design

Since the purpose of this study is to improve learning especially in speaking skill, then collaborative action research used as the research design of this study. As Collaborative action research defined as cooperating the research together to explore questions of mutual interest through cycles of action, experience and reflection, in order to develop insights into particular phenomena, create frameworks for understanding, and suggest actions which improve practice (Butt & Townsend, et. al., 1992). Teacher and researcher are together to implement the method since we have the same aim that is to improve students' speaking skills. Collaborative action research takes place when educators initiate and control the research in conjunction with the other day to-day activities of leading a school or classroom. It is a search for answers to questions relevant to educators' immediate interests, with the primary goal of putting the results immediately into practice. It is very practical in orientation in that it deals with real life problems of the classroom or school life. Burns (1999) also stated that collaborative action research provide some benefits for language teachers, especially female language teachers, to strengthen their voices and finally the increasing of individual and collective knowledge about learning capacitate teacher to do research and practice in productive ways.

Kemmis, S dan McTaggart (1988) also point out that collaborative action research is a systematic process that includes four "moments" or stages that spiral to provide a continuous structure of professional development. The four phases include planning, acting, observing, and reflecting more carefully, more systematically, and more rigorously than one usually does in every day of teaching classroom. Those procedures are applied to give treatment to the students in the classroom. This research leads teacher to a deeper understanding of their practices. The teacher is English teacher of one of university in Bandung, which is a female teacher. Teacher want to solve the problem of students speaking skills which did not achieve minimum standard criteria. It is supported by an opinion from Zuber-Skerritt (2001) that elaborates that the of this research is to motivate practical improvement, innovation, development of social practice, and skill of teacher better than before. To conclude, both teacher and researcher did the research together to improve students' speaking skills.

3.2. Research Site and Participants

This study was conducted in one of the universities in Bandung. This study chose the university level because in using Web-Based TED-Ed, participants have to have self-regulation since Web-Based TED-Ed should be accessed by a participant before the live meeting. The participant were twenty students, aged 18 to 21 years old. This study chose one class as a sample since every class has the same characteristics. They do not have a special english language learning background because they graduated either from high school or vocational school. Moreover, the teachers of the chosen class said that every year both low or high achiever students divided evenly in every class. The sample was chosen randomly since all those students have the same chance to be a participant. Sutrisno Hadi (2004) said that random sampling is giving the same opportunity to all students as individuals to be the research participants. Then, the research was held once a week. The teacher implemented the research's plan in live meeting and the researcher as the observer.

3.1. Data Collection Technique

In this research, data collection aimed to see the changing score of students into a better score than before in their speaking skills by using TED-Ed as learning media. Data was collected by counting the result of students' pre-test, post-test, and interviews. The explanation about the instrument and data collection technique in this study is described below.

1. Test. The test is a way to evaluate and measure the students' scores in a certain field including education. This research used two types of tests in collecting the data.
 - a. Pre-test. A pre-test is the first test to do to know students' ability in English. In this research, the pre-test was done once and it was only at the first meeting. The topic was about overcoming your insecurity. Students participated in it by opening Web-Based TED-Ed and reviewing the video without any prior treatment with minimum three minutes and maximum five minutes speaking. All answers were uploaded into their teacher's email by using an audio recording. The result of this data called pre-test data. It would be compared to the data collected after the treatment.
 - b. Post-test. This test is the second type of data that was collected to be compared to the first data or pre-test data. This data was taken at the end of every cycle. Since this study has three cycles so that post-test conducted three times and the topics are intermitten fasting, how to sound smart, and phrasal verb. This post-test data was collected after some meetings after students have gotten the treatment before. This post-test aimed to figure out the changes in students speaking skills in English after treatments have been given. This post-test was also done by using Web Based TED-Ed. Students have given a link to Web-based TED-Ed and students reviewed the video by using minimum three minutes and maximum five minutes speaking. The result of this post-test was compared with the pre-test to reveal the changes.

2. Interview. Another instrument to collect the data was an interview. The researcher interviewed students after all intervention. This instrument aimed to get information about the facts, believes, feelings, attitudes, and as supported evidence of test data. An interview is a data collection method in which the interviewer asked questions to the interviewee orally. In this study, questions were in the form of a semi-structured interview. It means the interviewer had already main questions but in a way of delivering, it was done informally since sometimes there was a really important answer to include but not written yet. It implies that semi-structured interviews are flexible but it was still guided by the main questions. The interview was conducted among six out of twenty students. Those students are two students who got the highest score, two students who got the lowest score, and two others who got the middle score. The students were chosen randomly as participants. Furthermore, the result of this interview was expected to corroborate and ensure the results from both pre-test and post-tests so that the research would be more valid.

All the instruments above were related to each other functionally (Sugiono, 2009). This research chose those instruments to prove whether Web-Based TED-Ed learning media might foster students' speaking ability.

3.2. Procedures of the Research

This study was done in six meetings for six weeks. Every two weeks were for the first cycle and the other four weeks were for the second and the third cycles. There are four steps for every cycle in doing action research. Those are planning, acting, observing, and reflecting as we can see in the figure below.

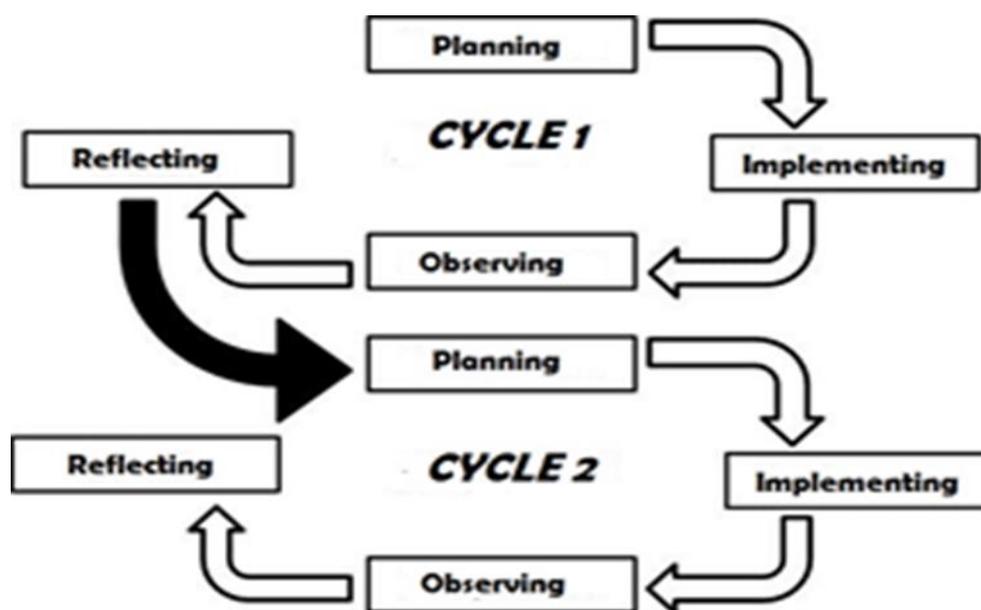


Figure 3.1 Action research procedures
(Suhardjono & Supardi, 2010)

In the first meeting out of those six weeks, the pre-test was done and for the rest meetings was the implementation of Web-Based TED-Ed. Finally, the last meeting of each cycle was post-test.

This study aimed to see the changing of students' speaking skills into a better score so that the amount of cycle was done as the need for this study goal. Therefore, this study was guided by the lesson plan. After giving the pre-test to students, then the data was calculated for the first time. Then, from that data, the teacher and researcher matched the video given by looking into students' abilities and the material in their syllabus. Since TED-Ed had a video section, then the video was given by the link of Web-Based TED-Ed to the students. After all of the preparation then TED-Ed implemented in a meeting. The teacher had done it well. Some procedures of the first cycle were described as follows.

1. Pre Test

This pre-test session did not include to the meeting day. It was done before the meeting. The procedures were as follows.

-Teacher gave link of Web Based TED-Ed to the students. There is a video in that link and the instruction was provided as well.

- Students reviewed the content of the video by using audio recording.
- The audio was about three to five minutes
- After that students sent their answer to the teacher's email.
- Students were given two days to accomplish the pre-test

Cycle I

The researcher used Web-Based TED-Ed as media in a blended-learning method which can help students' in learning English, especially for speaking skills. The topic was a compound sentence and the learning objectives are as follows. Students are able to explain the information presented by lecturers, understand how to construct compound sentence and able to using compound sentences in conversation. To achieve those learning objectives, then some procedures were provided below:

- a. Planning. In this phase teacher and researcher discussed and formulated activities to be done in the first cycle as these list activities below:
 - 1) Selecting media and materials with the teacher that supported the syllabus. The media was TED-Ed and the material was intermitten fasting as the topic material.
 - 2) Choosing the materials, constructing the lesson plan, and arrange the procedure or steps with the teacher. All the procedures and steps are written in action section.
 - 3) Preparing teaching aids related to the theme and integrated it in Web-Based TED-Ed (example: video, picture, a sheet of paper, and therefore the website link of TED-Ed).
 - 4) Preparing the post-test in cycle I.
 - 5) Preparing the list of students' names and scoring of the first cycle. Those preparations were designed to get the target of the teaching and learning process. Students purported to improve their speaking skills through the materials got.

- b. Acting. After the preparation was done, the lecturer held the teaching-learning process. In this acting phase, the teacher implemented all those planning and preparation mentioned above, those activities were presented as written below:
- 1) Asking about the video given before the meeting (asking students to note new vocabulary). This activity aims to know how far students' comprehension and to add students' vocabulary. This is called an online activity as a blended learning model. It aims to give students prior knowledge before come to face to face section.
 - 2) Asking some students to review the video. Students watched the video until they understand. Then they reviewed the content with three to five minutes without stop. Students also must include at least five compound sentences.
 - 3) Asking their take away from the video
 - 4) Giving the Web-Based TED-Ed link. Ordering the students to access Web-Based TED-Ed link which accommodated the materials about compound sentences.
 - 5) Students were provided opportunity to ask any difficulties in accessing Web-Based TED-Ed or the sites within the learning process.
 - 6) Giving students a chance to answer questions provided by TED-Ed Web Based on part of the questionnaire. All answers were about their opinion. Teacher's roles are encouraging students to speak students' opinion, leading in reviewing session, asking some questions as the trigger so that students want to speak up, motivating students to speak up, giving respond for students' answer, being the example to students to speak up and giving the feedback. In giving the feedback, teacher telling students directly the mistakes and giving general feedback at the end of the meeting.
 - 7) Questions in TED-Ed leads students to have deep comprehension about the topic provided which was in English subtitle.
 - 8) Giving students an example of how to answer the questions by using compound sentences implicitly.
 - 9) After they answered all questions continued with discussing the answer related to the video and their experience.

- 10) Do repetition to the compound sentence's example and asking students how many sentences in my sentence before? (lead them to be able to find about the compound sentence before it explained before)
 - 11) Asking students to do the task of dig deeper section and read the article provided. The teacher and students discussed the article in the dig deeper part and find the relation to the video before. After students were sure about the message then students answer the questions in a discussion way. In this discussion-part, students expected to organize their sentences and tell to others about their frightened to speak with native speaker meanwhile, teacher did correction and feedback of students speaking.
 - 12) The last part was the discussion. It is one of the blended learning aspects that believed to increase students' speaking skills in a face-to-face section. Students gave their opinion in a way of a compound sentence about the topic given and giving a chance for the students to present their opinion.
 - 13) Giving post-test. Students were given TED-Ed link. After that, students record their answer three to five minutes. Then, students sent their answer to teacher's email.
- a. Reflecting. In this level, the researcher and teacher attempted to have any reflection, evaluation, and description of the impact of the action. Reflection is a way to evaluate and analyze the current method, problems, and real issues within the action. Reflection is an evaluation phase, it is accustomed to evaluate whether the media may be the matter solving and improve students' speaking skills.

The researcher evaluated all activities along with the teacher to create a mirrored image of what is going for them to correct the issues. One topic was done in two meetings, and then it was continued with other material by using Web Based TED-Ed after that the post-test was given. After the first post-test result came out. The teacher and researcher analyzed the results and reflected on the whole process. After the analysis, the teacher tried to find the missing part, search for the solution, and continued to the second cycle. Some additional

activities in the next cycle were; teacher will emphasize students to repeat the video given until students understand the content, students should note unfamiliar vocabularies at least ten vocabularies so that students can have prior knowledge, students will also taught how to ask and give opinion so that they can do discussion in a good way, and students also have to understand the article because they have to share it to other groups and absorb other groups knowledge of their article. In this second cycle, there were two meetings and the implementation had been done as the preparation planned after that post-test was held in the last session of the second cycle. In this phase, students' pronunciation and comprehension were the better skills.

1. Cycle II

The second cycle was completed to support the reflections' results of the first cycle. It is aimed to improve students' speaking skills within the second cycle. The topic and material were different from the first cycle, the material was asking and giving an opinion. The procedures are as below:

- a. Planning. In the planning phase of the second cycle, the researcher and teacher have formulated some activities that arranged as follows:
 - 1) Identifying the problem and created the answer to the issues. The problem are as follows. Students were silent during live meeting. They need activities to encourage in speaking. There were some techniques prolem. They are poor connection, flipping from zoom to TED-Ed.
 - 2) Making the lesson plan and designing the steps in doing the action.
 - 3) Preparing and reselecting teaching aids with the theme asking and giving an opinion (example: video, picture, an illustration, Web-Based TED-Ed link, and a sheet of paper).
 - 4) Preparing post-test of the second cycle.
 - 5) Preparing the list of students' names and scoring of the second cycle. The preparation was intended to realize the aim of the teaching-learning process. Students presupposed to improve their speaking skills by the materials which were given.

- b. Acting. In the second cycle, the acting phase was sort of the same as the acting in the first cycle. During this phase, the lecturer led in teaching and learning. The activities of acting innovate the cycle II are:
- 1) Giving video before the live meeting to students. It is the online part of blended-learning. The online part also continued in a face to face section by using online material and media. Before class, students have been asked to found some meanings of some vocabulary related to the video given three days before class. It aims to enrich students' vocabulary.
 - 2) Asking students to take away from the video in a meeting in a live meeting or called as face to face section.
 - 3) Asking students and giving them opinions after they shared their take away.
 - 4) Telling them the way to ask and giving opinions just now was one of the ways to ask people opinions and how to respond to other opinions. Then, giving materials and explaining the language features.
 - 5) Giving the instance of asking and giving opinion with a brief dialogue in a very different situation and identifying the expressions in video form.
 - 6) Asking some students to share their understanding of the video in the center of the video.
 - 7) Asking some questions. Describing was the way to answer sort of those questions taken from Web-Based TED-Ed after the video end.
 - 8) Giving occasion for the students to ask any difficulties while using Web-Based TED-Ed within the learning process. In think-part, students were encouraged to have better comprehension about the content given through the video. It was one of the way to increase the aspect of comprehension to be better.
 - 9) Asking students to present their understanding of giving opinion expression.
 - 10) Forming a group for every student. A teacher has five articles in dig-deeper for every group. Students should understand the article given in the dig-deeper part, after that every member of the group chat with other members

of the group to share their knowledge and take other group knowledge about the article and finally back to the original group and sharing.

- 11) Obtaining the materials deeply. Meanwhile, the teacher helped, guided, and monitored the students.
- 12) Giving chance for students to presentation and discussing time.
- 13) Concluding the materials and giving feedback after the lesson.
- 14) Giving post-test. Students were given TED-Ed link. After that, students record their answer three to five minutes. Then, students sent their answer to teacher's email.

- c. Reflecting. During this point, the teacher and researcher reflected, evaluated, and analyzed the results of the action. The students' success and failure in doing activities in the first and second cycles were assessed by touching on the criterion of the third level of the speaking indicator. In this cycle, students' speaking skills especially in comprehension and pronunciation were much better than the previous cycle but the change in both scores and processes in the classroom of students, still has not reached the middle score which means the next cycle must be held again. The teacher and therefore the researcher expected that there is a minimum of half of the students who reach the passing grade but it did not happen.

In the second cycle, the improving skill was not prominent yet, but surprisingly students had been more self-confident to speak. One of the highlight activities that avoid being done in this third cycle was students cannot do group work by chatting since it did not take maximal result. So that some additional activities are storytelling, presentation, and pretending to be a YouTuber. Since this study aims to find students' speaking skill change into a better score, then the teacher and researcher decided to do another cycle. Some additional activities are students Furthermore, after having a reflection of the implementation of the second cycle, then the third cycle was implemented as following procedures below and had a post-test in the last session of the meeting.

2. Cycle III

As the scores in the second cycle was not achieved middle score, the next cycle hopes achieved the middle score of speaking skills indicator. This third cycle was completed to support the reflections' results of cycle II. It is aimed to improve students' speaking skills within cycle III. The topic and material are different from cycle II, the material is a phrasal verb. The procedures are as follows.

- a. Planning. In the planning phase of the third cycle, the teacher and researcher created some activities that were as follows:
 - 1) Identifying the problem and created the answer to the issues.
 - 2) Making the lesson plan and designing the steps in doing the action.
 - 3) Preparing and reselecting teaching aids (example: video, picture, an illustration of true, Web-Based TED-Ed link, and a sheet of paper).
 - 4) Preparing the post-test of cycle III.
 - 5) Preparing the list of students' names and scoring of cycle III. The preparation was intended to realize the aim of the teaching-learning process. Students presupposed to improve their speaking skills by the materials which were given.

- b. Acting. During cycle III, the teacher led the teaching and learning process. The activities were as follows.
 - 1) Giving video before the meeting to students and teacher asked students to find some certain vocabularies meaning which related to video that will be discussed in a meeting. It aims to enrich students' vocabulary.
 - 2) Asking their take away from the video in a meeting.
 - 3) Asking them the other example of a phrasal verb.
 - 4) Giving materials and explaining all about phrasal verbs therefore the language features.
 - 5) Giving other examples of phrasal verb
 - 6) Asking some questions. Describing is the way of answering sort of those questions taken from Web-Based TED-Ed.

- 7) Allowing the students to ask any difficulties while using Web-Based TED-Ed within the learning process.
 - 8) Asking students to have storytelling using a phrasal verb.
 - 9) Having group work. Meanwhile, the teacher helped, guided, and monitored the students. This discussion part aim to support students' pronunciation. it habituated students to pronoun words correctly and teacher' role was as the corrector who exemplified the right pronunciation.
 - 10) Giving chance for students to present and share their knowledge.
 - 11) Taking the conclusion of the material and giving feedback after the lesson. Both online and face-to-face sections created a chance for students to keep practicing speaking.
 - 12) Giving post-test. Students were given TED-Ed link. After that, students record their answer three to five minutes. Then, students sent their answer to teacher's email.
- c. Reflecting. During this part, the researcher and teacher reflected on, evaluated, and described the results of the action whether students' success and failure in doing activities. It was assessed by taking on the criterion of the third level of the speaking indicator. The teacher and therefore the researcher expected that there were a minimum half of the students who reach the passing grade.

The result of the third cycle post-test showed that there was a better change compared to the pre-test, especially in students' pronunciation and comprehension. Both pre-test and post-test were assessed by using the Scoring Rubric of speaking skills which components are: Vocabulary (V), Pronunciation (P), Fluency (F), Comprehension (C), and Grammar (G) (Brown, 2004).

As the whole cycles were done, the result was found as well. Almost all students were improved in comprehension, pronunciation and vocabulary, but there were three to four students who were not improved. It was because these factors. First, students did not want to try to speak up and keep silent during the class. Second, the teacher instruction did not do well. for example, students did not watch

the video until they understand, but they just watch it one to two times. Third, students did not explore the related topic like the other students. And the last, students did not do the task well. Those factors are as students' inhibition in this study.

3.3. Data Analysis

This study was conducted qualitatively. Both pre-test and post-test were as basic data to be calculated to identify the number of students who reached the passing grade. The last cycle result was compared to the cycle before. The procedures in collecting and analyzing the data both of pre-test and post-test are as follows.

- Students' answers were collected from teacher's email
- Teacher sent all the answer to researcher as well.
- Teacher and researcher listened students' answers
- Based on the speaking indicator, teacher and researcher assess the audio of students into every skill indicator.
- After that, the score was displayed on a table included the average of every score.
- Then, every table was interpreted qualitatively.
- Not only that, the interpretation of the score followed by description of learning process.

This study called improving if the average score of the post-test was on top of a pre-test. After all the treatments, students were interviewed by using a semi-structured interview as a way to collect qualitative data. After all cycle were done, then the researcher schedule time for interview. There were six students interviewed. Since the interview was semi structures interviewed, there were some main questions and continued with other related questions while interviewing. Therefore, the result of interview supported the result of post test. Majorly students felt that their comprehension, pronunciation, and vocabulary were better. They also felt that their fluency and grammar were not satisfied yet but they said that they will get ay improvement if the learning method was as interesting as learning by using

TED-Ed. This interview showed students' responses toward TED-Ed in the classroom and support the post-test result. If the results showed a positive response, then it means students feel involved and encouraged during the classroom teaching with TED-Ed as a learning tool. The results of the interview were provided in the shape of a transcript. The result supported the students' attitudes whether negative and positive attitude. If the major number of students have a positive attitude toward TED-Ed, it means TED-Ed contributed well in improving students' speaking skills.