CHAPTER III

RESEARCH METHODOLOGY

Considering chapter two has described a literature review on the theories and applications of dialogic teaching in EFL classroom, chapter three will describe the methodology specified by the study's objectives. This chapter starts with a discussion of the study design, followed by a description of the research location and participants, data collection, and data analysis. The research design explains the methodology followed in this study and its features and guiding concepts. The location and participants explain the place where the research was done and the participants who were involved in this study. The data collection describes the devices and techniques used to gather data. The data analysis clarifies the data analysis technique.

3.1 Research Design

In this study, the researcher used mixed methods design. To be specific, the design was mixed methods explanatory design through time series experiments. The design includes experimenting Dialogic Teaching strategy, analyzing students' scores and eliciting students' perceptions of Dialogic Teaching strategy implementation. By comparing quantitative data and qualitative data, this study was expected to garner rich data – both from students' performance (scores) and from their perceptions of the teaching strategy done through an FGD. What can be captured by quantitative data may not be captured by qualitative data – and vice-versa. Thus, the researcher combined both data by choosing mixed methods design for the sake of holistic and thorough coverage of the Dialogic Teaching strategy implementation. On this note, the research design is illustrated in Figure 2 bellow.
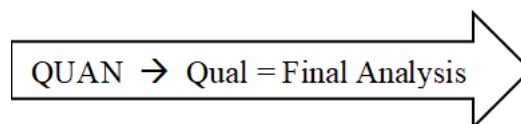
QUAN → Qual = Final Analysis

Figure 2. Explanatory research design (Dornyei, 2007; Creswell, 2012).

The quantitative data is the main data and the qualitative is the secondary one. The qualitative data was collected after the quantitative data had been collected

through the experiment of Dialogic Teaching strategy in a classroom. Creswell (2012) states that in any given experiment, the number of participants may be limited and it may not be possible to involve more than one group. In these cases, researchers may study a single group using a within-group experimental design. Thus, the current researcher employed a time series design consists of studying one group, over time, with multiple pre-tests and post-tests measures. The researcher studied one group, obtained multiple pre-test measures for a period of time, administered an intervention and then measured outcomes (or post-tests) several times. Data analysis in this example consists of examining difference scores between the pre-tests and post-tests or post-tests-only scores and using the pre-tests as covariates. This process can be seen in the table 3 below.

Table 3. Time series experimental design by Creswell (2012)

Times Series Experimental Designs							
Interrupted Time Series Design							
Time →							
Select Participants for Group	Pretest Measure or Observation	Pretest Measure or Observation	Pretest Measure or Observation	Intervention	Posttest Measure or Observation	Posttest Measure or Observation	Posttest Measure or Observation

Similarly, Johnson and Christensen (2014) maintain that researchers can improve experiments further by conducting interviews (one-to-one or FGD) to get at the research participants' perceptive and meanings that lie behind the experimental research findings. In fact, because experiments involve featured process elements (i.e. the development of the participants as a result of the treatment), including a qualitative phase to explore the nature of such processes is a natural and potentially highly fruitful design that can greatly enhance the study's internal validity (Dornyei, 2007).

In this study, the quantitative data was garnered from an experimental design with time-series method. In this method, the researcher conducted pre-test thrice at the beginning of the semester and post-test thrice at the end of the semester. In the middle of the semester, the researcher conducted an experiment by teaching students through Dialogic Teaching to see if such a teaching strategy worked well for the students. Thus, the statistical data was factored in from the three pre-tests and three post-tests by using an SPSS program.

Further, for the qualitative data, the researcher collected the data through a semi-structured open-ended Focus Group discussion (FGD). The researcher selected six students of three tiers of performance -low, medium, and high – who are articulate to speak their minds. Focus group interviews are conducted in a multifaceted and ever-changing social environment, where the interaction among group members plays a crucial role in collectively constructing meaning. One of the benefits associated with focus groups with mixed genders in comparison to individual interviews is that the interaction within the group setting can yield a broader spectrum of information, insights, and ideas.

Additionally, the responses provided by participants in focus groups tend to be more spontaneous and less influenced by societal norms, as there is no expectation for individuals to individually respond to a question within the context of a group interview (Stewart & Shamdasani, 2015). According to the aforementioned source, remarks made by a participant might elicit reactions from other participants and encourage them to articulate their thoughts and emotions. According to Belzile and Öberg (2012), there exists an implicit dichotomy among researchers about their perspectives on participants. Some researchers see participants primarily as individuals who share pre-existing truths, while others perceive participants as social creatures who collaboratively generate meaning within the context of focus group discussions. According to Schwandt (2003), constructivists see knowledge and truth as products of human creation rather than as entities to be found. They were expected to give general perceptions of the implementation of Dialogic Teaching strategy that they have been through. The qualitative data was then analyzed through the theory offered by Miles et al. (2014).

3.2 Research Site and Participants

The study was conducted in a private university located in Sumedang, West Java. There were two factors that contributed to the selection of this institution as the research location. First, the issue at hand was to the researcher's accessibility. This study focuses on the speaking skills of students and the impact of lecturer's teaching strategy on the development of such skills. The objective of the study is to analyze how impactful dialogic teaching is for Public Speaking course, evaluate the

progress made by students in developing their speaking skills, and determine the level of the speaking skills achieved by students following exposure to the lecturer's teaching strategy. In accordance with the agreement established between the researcher and the participants, the identities of the involved students and university have been made anonymous in this study report. Second, the participants were the students of the English education program sitting in the fifth semester from one class, totaling 22 students (N=22). This small number was there by default and it could still be normally distributed using non-parametric data analysis formula. According to Cohen et al. (2007), experimental methodologies necessitate a minimum of 15 participants to ensure the validity and reliability of the results. This requirement is based on the need to achieve sufficient statistical power, which is crucial for detecting meaningful differences or effects in the data. With at least 15 participants, researchers can minimize the risk of Type II errors, where true effects might go undetected due to an insufficient sample size. Having a minimum of 15 participants also allows for a more robust comparison between experimental and control groups. This is particularly important in experimental designs where the goal is to determine the impact of a specific intervention or treatment. By ensuring that each group has at least 15 participants, researchers can better control for variability and increase the likelihood that observed differences are due to the intervention rather than random chance.

Okoye and Hosseini (2024) states that quantitative studies with very few participants, such as less than 30, can be analyzed. When dealing with non-normal data, researchers have several options. While some tests, such as the one-sample Z test, T test, and ANOVA, assume normality, small sample sizes may necessitate non-parametric tests. Non-parametric tests, which do not assume specific distribution types, include the Kolmogorov-Smirnov test, the Wilcoxon signed rank test, Mann-Whitney U Test, and Kruskal-Walli's test. In line with it, Hopkins et al. (2018) recommends non-parametric analyses for sample sizes below 30. In cases where non-parametric equivalents are lacking for certain tests with numerous items, regression analysis can be employed. When the sample size is less than 30, non-parametric analyses are advisable, considering the sample as non-normal. Ultimately, the differences between parametric and non-parametric

analyses are minimal, and significant findings can still be identified. The current study employed the Kolmogorov-Smirnov test for practicality.

Regarding the selection of the samples, there are several justifications for the selection of these participants. First, it is common for students to have established a solid groundwork in their language abilities by the fifth semester. They have enrolled the course of Speaking I through IV, allowing language instruction and practice for multiple semesters. This qualifies them as ideal subjects for a study on the development of speaking skills. Second, it is probable that students in their fifth semester have been presented with numerous opportunities to apply their language proficiency in both academic and social settings. This exposure may furnish significant data for an investigation pertaining to speaking abilities. Third, during this phase of their scholastic trajectory, students frequently exhibit strong awareness regarding their individual learning mechanisms. They can offer valuable insights regarding the development of their speaking abilities, which can be of great worth for research purposes. Fourth, students in their fifth semester are generally prepared to utilize more sophisticated and specialized approaches to language learning, which could serve as the subject of the study. This suggests that they are ready to learn Public Speaking class with Dialogic Teaching strategy. Fifth, nearing the conclusion of their undergraduate studies, students frequently prioritize their preparations for the professional realm. Conducting a study on the enhancement of individuals' speaking abilities can yield valuable insights that have direct relevance to their prospective professional endeavors. Sixth, students in their fifth semester are likely to be exceptionally motivated to enhance their speaking abilities due to their awareness of the critical nature of effective communication in academic and professional environments. The participants' nature was characterized by voluntary participation. Participants provided informed permission by signing a consent form after receiving detailed information from the researcher about the research's objectives, methodology, and potential benefits, therefore expressing their willingness to participate. The permission form used in this study was made by the researcher, which sought to get students' approval for their involvement in both the pretest and posttest assessments, as well as the teaching program.

3.3 Instrumentation and Data Collection

3.3.1 Instrumentation

In the current study, I, as the researcher, used two instruments in data collection process., i.e. an adapted assessment rubric for speaking skills and a self-made interview protocol. The adapted assessment rubric was derived from the works of Brown (2007), Folse (2006), and Harris (1974), ensuring a comprehensive evaluation framework. This rubric was meticulously designed to focus on four critical components of speaking skills: fluency, pronunciation, grammar, and vocabulary. Each component was carefully assessed to provide a holistic measure of students' speaking performances. The rubric served as a reliable tool to quantify and evaluate the various aspects of students' oral proficiency, offering a structured approach to assess their progress and areas needing improvement.

In addition to the rubric, the researcher developed a self-made interview protocol to gather qualitative data on students' perceptions of the Dialogic Teaching implementation. This protocol included a series of thoughtfully crafted questions aimed at eliciting detailed feedback from the students. Questions such as, "What do you like about the implementation of Dialogic Teaching?" and "What do you dislike about the implementation of Dialogic Teaching?" were designed to capture students' positive and negative experiences. Another question, "Do you have any suggestions that can make the implementation of Dialogic Teaching better?" encouraged students to provide constructive feedback and suggestions for improvement. The interview protocol was instrumental in revealing students' attitudes and perceptions towards the Dialogic Teaching approach. By engaging students in reflective discussions, the researcher was able to gain deeper insights into how the teaching method impacted their learning experience. This qualitative data complemented the quantitative data obtained from the assessment rubric, providing a more nuanced understanding of the effectiveness of Dialogic Teaching.

The combination of these two instruments allowed for a comprehensive evaluation of the Dialogic Teaching strategy. The adapted assessment rubric provided objective, quantifiable data on students' speaking skills, while the interview protocol offered rich, qualitative insights into their personal experiences

and perceptions. Together, these tools enabled the researcher to assess both the measurable outcomes and the subjective impacts of the teaching approach.

Overall, the use of an adapted assessment rubric and a self-made interview protocol provided a robust framework for evaluating the implementation of Dialogic Teaching. This dual-method approach ensured a thorough and balanced assessment, capturing both the quantitative improvements in speaking skills and the qualitative feedback from students. The findings from this study are expected to contribute valuable insights into the effectiveness of Dialogic Teaching and inform future educational practices.

A. Dialogic Teaching Guideline

For the Dialogic Teaching, the researcher used the principles suggested by Alexander as seen in the Table 4 below.

Table 4. Principles of dialogic teaching (Alexander, 2018)

Principle	Definition
Collective	The classroom is understood as a space of joint learning and inquiry
Reciprocal	Participants listen to each other, share ideas and consider alternative viewpoints
Supportive	Participants feel able to express ideas freely, without risk of embarrassment over 'wrong' answers, and they help each other to reach common understandings
Cumulative	Participants build on their own and each other's contributions and chain them into coherent lines of thinking and understanding
Purposeful	Classroom talk, though open and dialogic, is structured with specific learning goals in view

Alexander (2018) states that a dialogic teaching should meet several criteria to make teaching instruction run well. Below are the principals of dialogic teaching proposed by Alexander (2018). It does not matter what types of teaching and learning discourse are available or how the interaction is structured; if it is any of the following, then it is more likely that instruction will be dialogic:

a) collective: work together to complete learning activities.

b) reciprocal: participants listen to one another, share ideas, and consider varying points of view.

84

c) supportive: students can speak their minds openly without the risk of being embarrassed by giving "wrong" responses, and they collaborate to arrive at mutually agreeable conclusions.

d) cumulative: the participants build on each other's responses and vocal contributions to create cohesive paths of thought and comprehension.

e) purposeful: intentional classroom conversation, despite being open and dialogic, is also organized and structured with specific educational objectives in mind.

The students were required not only to observe and respond to questions to participate in a discussion or conversation; they must also reflect, interact, and make judgments regarding their learning. By engaging students in conversation and discussion, rather than simply imparting information or evaluating what they already know, we hope to give them increased agency in their cognitive and social lives.

C. Speaking Skills Assessment Instrument

Speaking is considered to be the most challenging of the various skills in terms of scoring, delivering, and preparing for it. One of the reasons is that it is difficult to determine what criteria to choose in evaluating the oral communication. When evaluating someone's speaking ability, it is common practice to test them on a number of different aspects, including their pronunciation, grammar, vocabulary, fluency, comprehension, and appropriateness. Speaking is a talent that may make it easier for individuals to grasp what is being conveyed to them, hence it is becoming more essential. English students' speaking ability is expected to be good because they have been learning English since some years before and they will have many performances related to oral skill in universities.

It comes as a surprise that a large number of English students, particularly in Indonesia, struggle with their speaking performance. In addition to this, their beliefs regarding grammar and the ability to speak fluently are consistently brought up. They believe that it is impossible to speak without having mastered grammar, and some students believe that in order to master speaking ability, it is necessary to remain in an environment where native English is spoken. Acclimating oneself to

the process of learning and practicing speaking performances is one of the things that is required of us so that we may become proficient in public speaking. Speaking ability can be broken down into four categories: fluency, pronunciation, grammar, and vocabulary. The following is an explanation of each category.

a) Fluency

According to Fillmore (1979), the concept of fluency may be understood in four distinct ways. First, he considers fluency to be the capacity to talk for an extended period of time with relatively few pauses and the capacity to fill the time with speech. Second, a person who is fluent in a language is able to communicate without pausing and convey their thoughts in a way that is clear, well-reasoned, and loaded with semantic content. Third, speakers who know what to say in a broad variety of settings, and lastly, speakers who are creative and innovative in their use of language and have all of the aforementioned talents. In Nunan (2004), Foster and Skehan provide a model for evaluating speaking in which fluency is judged by taking into account the total number of seconds of quiet and the amount of time individuals spend uttering "um" and "ah" while they finish a task.

b) Pronunciation

Since it lends meaning to all that we say, proper pronunciation is one of the most critical aspects of effective public speaking. A poor comprehension and misunderstanding will result from an incorrect pronunciation. The student's capacity to produce understandable utterances in order to successfully complete the requirements of the activity is referred to as their pronunciation (Thornbury, 2005). Pronunciation is crucial to good communication since the erroneous use of pronunciation ultimately leads to the message being misconstrued by the receiver. The way a word is pronounced, including the stress placed on its individual syllables, has a significant impact on both the meaning of the word and the context in which it is used. As a result, this has the potential to permanently alter the meaning of the sentence that is being communicated.

c) Grammar

Grammar is the set of principles that governs the traditional arrangement of words in sentences as well as their connection to one another (Brown, 2001). Grammar is essential because language is what enables us to have conversations

about language, and language is what makes grammar possible. It is much simpler for a person to talk and write in an appropriate manner, and it also helps to smooth up the language that is created. Grammar is the study of the many kinds of words and word combinations that are used to construct sentences in any language, including English. The ability to communicate effectively and with self-assurance in English is directly linked to having strong grammatical skills. If you are proficient in grammar, you will be able to steer clear of the faults that cause native English speakers to see your language as being unusual.

d) Vocabulary

According to a statement made by Wilkins (1972) as cited in Thornbury (2002), without grammar very little can be expressed, and without vocabulary nothing can be conveyed. This demonstrates that expanding one's vocabulary is nearly as essential as expanding one's knowledge of grammar. When one considers the significance that Thornbury has shown, one must come to the conclusion that the process of teaching language to students has to be engaging for the purpose of achieving the desired result.

From the explanation above, the researcher made some adaptations to fit the goal of the study and to make speaking skills assessment easier. Table 5 below is an adapted speaking assessment rubric used by the researcher to assess students' speaking scores.

Table 5. Speaking Skills Assessment Rubric adapted from Brown (2007), Folse (2006) and Harris (1974).

Fluency	Pronunciation	Vocabulary	Grammar	Score
Ideas are expressed effortlessly without unnatural pauses or hesitations and the speed is natural	Pronunciation is easily understood and stress, intonation, rhythm is used effectively	Wide range of grammar and vocabulary used accurately and flexibly with confident use of idiomatic speech	A variety of complex and basic sentence structures is used well; grammatical errors are rare and meaning is not affected	5
Ideas are expressed with few pauses at a speed that rarely distracts the listener, with few hesitations	A few pronunciation errors do not distract communication	Wide range of vocabulary generally used accurately and flexibly despite some inappropriate terms	Complex and basic sentence structures are attempted; there are few grammatical errors and meaning is not affected	4
Ideas are expressed without excessive pauses at a speed that may occasionally distract the listener, added with some hesitation	Some pronunciation errors slightly distract communication	Despite having clear meaning, frequent use of the wrong words and inadequate vocabulary leads to conversation somewhat limited	The range of sentence structures is adequate; there are grammatical errors but meaning is not often affected	3
Speech is frequently hesitant with some sentences left uncompleted	Multiple errors with pronunciation make it hard to understand despite having acceptable features of spoken English	Misuse words and very limited vocabulary make comprehension quite difficult	The range of sentence structures is limited; there are many grammatical errors and meaning is occasionally affected	2
Even with extraordinary effort on the part of the listener, understanding is difficult	Frequent errors in pronunciation or stress or intonation makes it almost entirely unintelligible	Vocabulary limitation is so extreme as to make conversation virtually impossible	The range of sentence structures used is extremely limited, and numerous grammatical errors often affect meaning	1
			Total Score: 5 x 4 = 20; 20 x 5 = 100	

The use of the rubric above had the potential to enhance students' perception of their own achievements or setbacks by eliminating the ambiguity around evaluation and providing explicit instructions for evaluating their performance. The use of a speaking evaluation rubric yielded several notable advantages. Firstly, the provision of clear instructions offered students a comprehensive understanding of the specific expectations pertaining to their oral communication skills. The students had the ability to access and comprehend the comprehensive evaluation criteria, as well as grasp the necessary measures required to enhance their talents. The use of an evaluation rubric enabled the lecturer to provide precise and targeted feedback to his students. The lecturer had the ability to demonstrate to students the domains in which they have achieved success, as well as the areas in which they may enhance their performance. This feedback served as a source of motivation for students, encouraging them to continuously improve their speaking skills.

Furthermore, the use of spoken assessment rubrics contributed to a just and unbiased evaluation procedure. By using a same rubric across all students, the lecturer was able to consistently and objectively evaluate the students' oral speaking skills. This practice serves to mitigate the influence of individual preferences or subjective perspectives in making judgments. The process of adapting a speaking evaluation rubric proved to be a beneficial endeavor in my capacity as an English instructor. This resource offers concise instructions to students for enhancing their oral communication abilities and facilitates the provision of positive evaluations. The use of the spoken assessment rubric enabled the facilitation of a more efficacious learning encounter, while concurrently ensuring equitable and unbiased evaluation for the students.

C. Speaking Test

Brown (2004) asserts that speaking is a productive talent that can be directly and objectively seen. Although these observations are usually influenced by the precision and efficacy of a test-taker's listening skill, the reliability and validity of an oral production test are unavoidably compromised as a result of this. According to Brown (2004), a speaking exam is an important evaluation that has the purpose

90

of determining the level of oral language competency possessed by a student. One may use it as a measurement of how effectively persons are able to vocally express themselves in the language that is being targeted. Learners are required to participate in spoken exchanges throughout these types of examinations, which enables the examiners to evaluate their fluency, pronunciation, grammar, and vocabulary use. The objective is to ascertain whether or not the students have successfully acquired the language and are able to communicate effectively in scenarios that are representative of real life.

According to Harmer (2007), a speaking exam is a way to evaluate a person's capacity to communicate in a particular language. This capability encompasses not only an understanding of the characteristics of language but also the capacity to process information and language in a on the spot manner. In order to successfully manage speaking turns, it is necessary to have the capacity to maintain cooperation. The ability to communicate verbally is considered by Nunan (2003) to be the single most crucial component of learning a second language or a foreign language. The capacity to carry on a conversation in the language is the yardstick by which success in speaking is evaluated. Those who are proficient in speaking are able to communicate their thoughts, convey information, and have meaningful conversations with other people. A number of components, such as fluency, pronunciation, grammar, and vocabulary, are included in the speaking exam that is being used in this particular research. Fluency is being able to communicate oneself in a seamless and unreserved manner. The correct articulation and modulation of sounds is what comprise appropriate pronunciation. Grammar refers to the appropriate use of linguistic concepts. Word choice and lexical knowledge are the two components that make up vocabulary.

3.3.2 Procedures
3.3.2.1 Experiment

The researcher conducted experiments by teaching students speaking skills using Dialogic Teaching. The experiment was done in between pretest session and post-test session. As one semester consists of 16 meetings, the experiment was

carried out for 10 meetings while the remaining meetings were for pre-tests (3 times) and post-tests (3 times).

The experiment started with giving students understanding about how the class was going to be taught and giving them opportunity to negotiate the topics for a speech performance that was then followed by a dialogic discussion. Afterwards, the lecturer gave corrections, suggestions and insights on their speaking performance. For a clearer picture of the experiment, see Figure 3 bellow.
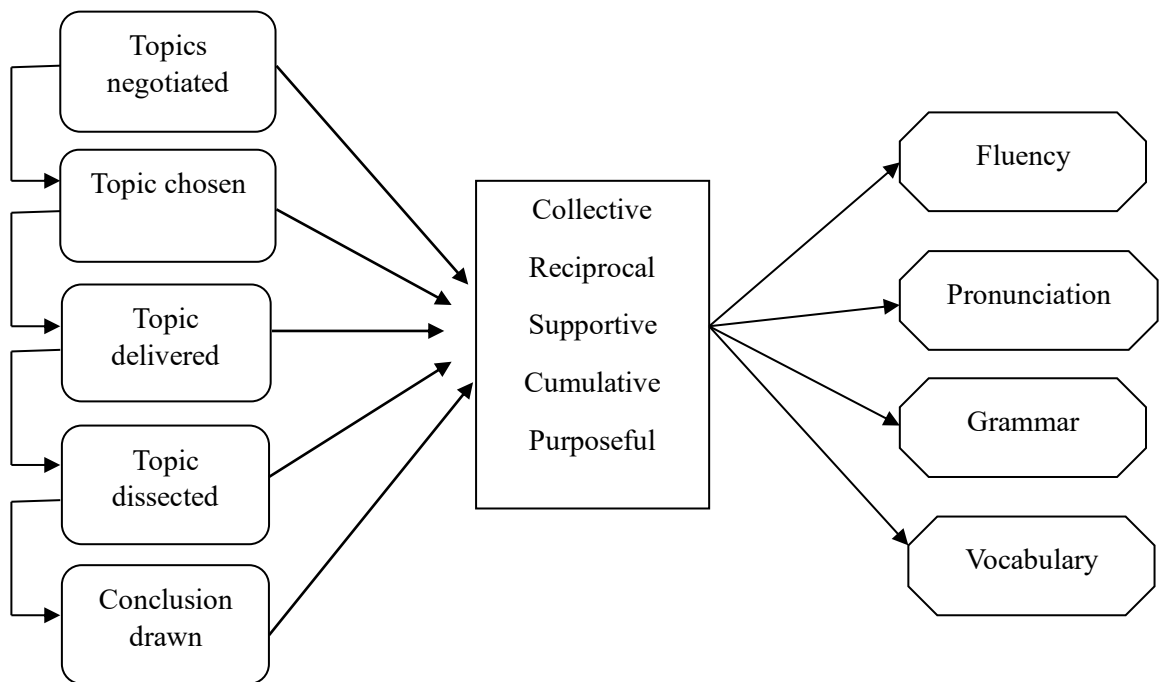

Figure 3. Outline of Dialogic Teaching Treatment

Figure 3 above illustrates that the current study started from the baseline of the participants' speaking performance and ended up with the expected results. The students first took the pre-tests thrice and the results likely came out average. Then, I, as the researcher, delivered Public Speaking materials through Dialogic Teaching strategy for several meetings. Then, the students took three post-tests to confirm if the Dialogic Teaching strategy brings out some improvements in student speaking skills. Further details are elaborated in the following passages.

In conducting the research, I, as the researcher, did several steps: (1) making the students familiar with Dialogic Teaching; (2) teaching public speaking theories.

These plans were used to improve the students' speaking skills. These two steps will be further discussed in the passages below.

First, in making the students familiar with Dialogic Teaching, the researcher (who also acted as the lecturer) introduced the Public Speaking class to the students and the classroom activity was bound to be completed in the beginning of the semester, based on the Dialogic Teaching proposed by Alexander (2017). This Dialogic Teaching consists of five key principles, including *collective, reciprocal, supportive, cumulative,* and *purposeful.*

Within *collective* principle where a classroom is designed for joint learning and inquiry, the students engaged in several key activities to maximize their learning experience. They encouraged curiosity by asking questions that delve deeper into the topics given, which helped in understanding concepts of Public Speaking more thoroughly and stimulates critical thinking. Collaboration with peers on projects and discussions regarding Public Speaking fostered diverse perspectives and enhanced problem-solving skills. Active participation in class discussions, debates, and activities aided students in retaining information and applying knowledge in practical scenarios. Reflecting on what has been learned help the students in identifying areas of strength and those needing improvement. Constructive feedback from peers and the lecturer was crucial for students in refining ideas and improving understanding. Going beyond the textbook by exploring additional resources and conducting research deepened knowledge and encouraged independent learning for the students. Sharing findings and insights with the class through presentations developed communication skills and confidence of the students. Finally, creating a supportive environment where every student felt comfortable sharing their thoughts and ideas built a positive learning community.

Within *reciprocal* principle, the students in the classroom were asked to cooperate with their peers to build a collaborative classroom atmosphere. When the students listened to each other, shared ideas, and considered alternative viewpoints, they engaged in a collaborative and dynamic learning process. This approach fostered a deeper understanding of Public Speaking as students were exposed to

93

diverse perspectives and ideas. Listening actively to peers helped in building empathy and respect for different opinions, which is crucial for creating a supportive learning environment. Sharing ideas encouraged students to articulate their thoughts clearly and confidently, enhancing their communication skills. Considering alternative viewpoints promoted critical thinking and problem-solving abilities, as the students learned to evaluate and integrate different perspectives into their understanding.

Within *supportive* principle, implementing an environment where the students felt able to express ideas freely without the risk of embarrassment over 'wrong' answers, and where they helped each other to reach common understandings, was achieved through several strategies. First, the students and lecturer established ground rules for respectful communication and active listening, emphasizing that all contributions were valuable and that mistakes were part of the learning process. Second, the students and lecturer modelled positive behavior by demonstrating how to give and receive constructive feedback and showing appreciation for diverse viewpoints. Third, the students and lecturer created a supportive atmosphere where they felt safe to share their thoughts and using positive reinforcement to acknowledge their efforts. Fourth, the lecturer encouraged collaboration through activities that required teamwork and peer interaction, such as group projects, discussions, and peer review sessions. Fifth, the students were encouraged to use open-ended questions to encourage creative thinking and discussion, helping them understand that there could be more than one correct answer. Sixth, the lecturer provided opportunities for reflection to help the students process feedback and understand different perspectives. Seventh, the students and lecturer celebrated mistakes as learning opportunities by reinforcing the idea that making mistakes is a natural part of learning and discussing how errors could lead to deeper understanding and growth. Eighth, the lecturer facilitated peer support by encouraging the students to help each other by sharing knowledge and offering support through peer tutoring and study groups. By implementing these strategies, the lecturer created a classroom environment where students felt confident to

express their ideas, learn from their mistakes, and support each other in reaching common understandings.

Within the *cumulative* principle, the students engaged in several key practices to build on their own and each other's contributions, chaining them into coherent lines of thinking and understanding. They listened actively to what others were saying, which helped in understanding their perspectives and identifying points that could be expanded upon within Public Speaking class. Connecting new contributions to previous ones and highlighting connections between different points created a cohesive line of thought. If something was unclear, asking clarifying questions ensured that everyone was on the same page and helped in refining ideas. When contributing, students aimed to add new insights or build upon existing ideas by providing examples, offering different viewpoints, or suggesting solutions. Periodically summarizing the discussion ensured that everyone understood the main points, and synthesizing different contributions formed a comprehensive understanding. Encouraging participation by inviting quieter members to share their thoughts enriched the discussion and led to more robust conclusions. Reflecting on the discussion helped evaluate the coherence and depth of the understanding achieved, identifying any gaps or areas that needed further exploration. By engaging in these practices, the students collaboratively built a rich and coherent understanding of the topic, enhancing their critical thinking and communication skills.

Within the *purposeful* principle, the students focused on several key practices to ensure that classroom talk remained both open and dialogic while being structured with specific learning goals of learning public speaking in view. They stayed focused on objectives by keeping the learning goals in mind during discussions, which helped ensure that conversations remained relevant and productive. Contributing meaningfully involved making contributions that aligned with the topic and objectives, sharing insights, asking relevant questions, and providing examples that supported the learning goals. Building on others' ideas by listening to peers and expanding on their contributions helped create a coherent and cumulative line of thought that advanced the discussion towards the learning goals.

95

If something was unclear or off-topic, asking clarifying questions ensured that the discussion remained focused and aligned with the objectives. Periodically reflecting on the discussion to assess whether the learning goals were being met involved summarizing key points and identifying any gaps in understanding. Encouraging balanced participation ensured that all the students had the opportunity to contribute, promoting a diverse range of perspectives and achieving a more comprehensive understanding of the topic. Supporting arguments and contributions with evidence and examples strengthened the discussion and helped in achieving the learning goals. Maintaining a respectful and open-minded attitude towards different viewpoints fostered a positive learning environment and encouraged meaningful dialogue. By engaging in these practices, the students ensured that classroom talk remained both open and dialogic while being effectively structured to achieve specific learning goals.

Second, in teaching public speaking theories, the lecturer delivered some theories of Public Speaking within a few meetings. The lecturer offered some topics and negotiated them with the students. Here, the students also proposed topics on their own to accommodate their interests. Upon negotiation, the agreed upon topics were reached and the students were asked to get ready to deliver the topics one by one. The students were given the topic impromptu from the negotiated topics. Thus, this method triggered their spontaneity in delivering their speech. To be specific, one student was allocated time 5 minutes to deliver his message. There are two reasons why the duration lasts 5 minutes, including theoretical reason and practical reason (Sen, 2024). For theoretical reason, a 5-minute presentation is a concise discourse in which an individual shares an idea (Sen, 2024). It transcends mere brevity; it represents a concentrated fusion of key points, delivered with precision and clarity. During this brief duration, students should employ three strategies. First, they must establish a clear structure for presenting their idea. When using a PowerPoint presentation, they should organize their five-minute slide deck with a title slide, outline, problem statement, solution, and conclusion. This format facilitates audience comprehension. Second, students should deliver the topic engagingly, maintaining eye contact and employing dynamic gestures to sustain

interest. Smooth transitions and a well-defined conclusion create a lasting impact. Third, content should be concise and succinct, focusing on a single main idea while avoiding extraneous details. This approach ensures a sharp and easily comprehensible presentation. For practical reason, the time allotment for Public Speaking classroom is very short, lasting only one and half hours – and making a five-minute speech would solve the issue (Sen, 2024). Within this duration, at least 11 students should perform their speech and discuss it together with their friends afterwards. Thus, a five-minute speech satisfies the theory so that the students are supposed to be succinct while it also fits the time allotted for the speech performance in the class. After a five-minute delivery, the student sat down in from of the class and started opening the discussion with his peers and lecturer. For example, he just talked about 'tourism in Sumedang', then the whole class began to give their opinions on it, by saying the government should take over the ownership of tourist attractions for cheaper and affordable prices. Then, other students may argue that such an idea may not be entirely acceptable considering private businesses are also needed to improve local economies. The students pointed out their ideas one after another in a respectful way. And the discussion went on until another 10 minutes. This duration is measured this way due to time constraint that the researcher has in the classroom (Sen, 2024). The class lasts only one hour and half – and all students have to be accommodated in this tight space of time. Here, the students were allowed to mix English with Bahasa Indonesia when stuck with difficult words or expressions. The high achieving students helped the low achieving students to deliver their ideas. Questions, responses, inputs and arguments were welcomed and no personal judgements were made towards each other as everyone's idea is unique and worth listening to. Once in a while, the lecturer gave some insight to the discussion. After the students finished dissecting the topic, then the session for one student ended and the next student was called to do the same as the previous student. After the class finished, the researcher summarized the topics discussed and gave some corrections on the mistakes in students' English, including the ones in fluency, grammar, pronunciation and vocabulary as well as gave some suggestions on how to improve them.

97

From this activity, the Dialogic Teaching values that include *collective, reciprocal, supportive, cumulative*, and *purposeful* developed. First the students collectively formed their ideas on how something, namely how tourism in Sumedang is supposed to be done and why it is necessary for the people from all walks of life. In doing so, they worked together to complete learning activities by building a concept of tourism in Sumedang together. Second, the students gave each other feedback within the form of sharing ideas with one another. They listened to one another, shared ideas, and considered varying points of view on how tourism in Sumedang is supposed to be organized. Third, the students were supportive of each other by helping those who lacked of vocabulary or ran out of ideas to share. They spoke their minds openly without the risk of being embarrassed by giving wrong responses, and they collaborated to arrive at mutually agreeable conclusions. Fourth, the students built on each other's responses and vocal contributions to create cohesive paths of thought and comprehension on problems of tourism in Sumedang. Fifth, despite being open and dialogic, the discussion was organized and structured with specific educational objectives in mind. Particularly, the students proposed the topic of *tourism* since they were interested in being a tourist guide in the future – and the vocabulary and knowledge learned from the discussion would be useful in their future career endeavors. Thus, the topic and talk regarding the negotiated topic was purposeful – and met the Dialogic Teaching principles.

The classroom activity through the Dialogic Teaching above also enhanced students' speaking skills in English, including fluency, pronunciation, grammar, and vocabulary. This so happened as the researcher did several things during classroom activity. First, the researcher jotted down the strengths and weaknesses demonstrated by the students who already performed their speech and discussion. Here, the researcher focused on how well the pronounced words, how fluently they spoke, how grammatically proper their English was, and how appropriate and rich their vocabulary was. Second, the researcher delivered his insights and inputs and recommendations towards their English performance. Third, the students were also encouraged to give suggestions and inputs to their peers for a more all-

encompassing input. This series of activities was completed with the cooperation of the students and the lecturer in the class.

3.3.2.2 Speaking Test Procedure

In conducting the speaking tests, the researcher did some steps as follows. First, he prepared five topics for students to choose from. The topics were general ones, such as hobbies, current issues, and academia life. The students chose one topic randomly through lucky draw system. Then, they were asked to describe the chosen topic within five minutes. When doing so, their voice was recorded with an audio recorder and a camcorder in case the audio recorder did not work properly. After finishing the test, the students were asked to get back to their seats. This test was conducted in the classroom and students took turns to do so for three times in the beginning of the semester (pretest) and three times at the end of the semester (posttest). The tests items were validated by the researcher's supervisors. These tests were administered to identify if there was progress that students made following Dialogic Teaching treatment. Three raters – lecturers with more than 5 years of teaching English experience – were employed to assess students speaking tests according to the adapted speaking assessment rubric to avoid biases and boost data validity and reliability.

3.3.2.3 Focus Group Discussion (FGD) Procedure

At the end of the semester, a semi-structured open-ended Focus Group Discussion (FGD) was done on some selected students to investigate their perceptions of the implementation of Dialogic Teaching. Several open-ended questions were formulated and derived from the phenomena captured during the data collection in the classroom activity. The selected students were interviewed with questions that elicited their perceptions of the implementation of Dialogic Teaching for improving speaking skills in English. The researcher formulated the question items and justified and verified them by an expert through expert judgement processes. The results of this FGD were then used to confirm and corroborate the quantitative data analysis and interpretations. A Focus Group

Discussion (FGD) was administered by selecting students based on their confidence, articulation, and bravery in speaking up. Eight students, 3 males and 3 females were chosen to share their perceptions of the implementation of Dialogic Teaching for improving speaking skills that they have been through during the study. The discussion was guided by a semi-structured open-ended question to reveal their perceptions. This FGD was used to elicit students' perceptions of the implementation of Dialogic Teaching, which encompasses whether they feel their speaking skills have improved, whether they like such a teaching strategy, and whether they have some suggestions for the better practice of such a teaching strategy.

FGD was used as the second form of evidence in this investigation. The decision to use this particular data gathering approach was influenced by several factors proposed by researchers in the field of study. First, interviews are suitably used in the context of examining individuals' comprehension of the significance within their lived experiences (Kvale, 1996). Additionally, according to Merriam (1998), interviews are considered the most effective method for gathering information on aspects that are not readily observable, such as individuals' emotions, ideas, and intentions. Moreover, interviews provide comprehensive and detailed accounts of the issue under investigation. An interview may be seen as a kind of "conversation" (Blommaert & Dong, 2010) that has the potential to stimulate participants to articulate their ideas, perspectives, and opinions in a profound and insightful manner (Yin, 2014). Finally, interviews provide an opportunity to triangulate information gathered from other sources (Lincoln & Guba, 1985). Moreover, the interview is characterized as a "professional conversation" (Kvale, 1996) and is regarded as "the gold standard of qualitative research" (Silverman, 2000).

Upon careful examination of the research questions in this study, it was determined that the most suitable approach to be used is the semi-structured interview technique. The use of this specific methodology facilitated the acquisition of valuable data from the participants via the sustained emphasis on the study subject (Yin, 2014). According to Cohen et al. (2017), the use of semi-structured

interviews allowed participants to engage in discussions pertaining to a particular matter from their own perspectives, hence facilitating the expression of their attitudes, beliefs, and opinions. Furthermore, Bogdan and Biklen (1992) said that the use of semi-structured interviews facilitated the collection of data in the participants' own language, hence enabling a deeper understanding of their interpretations of a given circumstance. Marshall and Rosmann (2006) highlighted the efficacy of using semi-structured interviews as a valuable tool for elucidating and articulating the subjective viewpoints of participants about various occurrences.

In accordance with the recommendations and principles of semi-structured interviews, the current study predetermined a collection of interview questions to provide guidance to the researcher over the course of the investigation (Edwards & Holland, 2020). The interview questions were structured, arranged, and categorized in a manner that facilitated a cohesive line of inquiry, enabling the respondent to develop and expand upon concepts from one topic to the subsequent. The interviews consisted of open-ended questions to allow participants to express their thoughts and experiences, and to address certain topics predetermined by the study question (Cohen et al., 2017). In the current study, the researcher arranged the interview appointments and ensured a conducive setting devoid of disruptions throughout the interview. The interview was conducted in Bahasa/Indonesian to ensure that the participants could freely express themselves without any language barriers (see Table 6 for the allocation of questions according to core themes for the interview questions). The interview was recorded in an audio format in order to store audio recordings and prevent data loss. Table 6 below lists the questions for the FGD of this study.

Table 6. List of Questions for Focus Group Discussion (FGD)

	Central Themes	Distribution of the questions
Central theme 1	Students' responses on the classroom activities in general	1. What do you think about the classroom activities in general? Why?
		2. What knowledge did you get during the course of Public Speaking this semester?
		3. What do you think about the tasks given in the classroom activities?

Central theme 2	Students' perceptions on the implementation of dialogic teaching	1. What do you think about the implementation of dialogic teaching?
Central theme 3	Students' suggestions about improvement to the implementation of dialogic teaching	1. What do you think are the strengths and weaknesses of the implementation of dialogic teaching?
		2. What are your suggestions to make the implementation of dialogic teaching better?

This interview protocol was validated by the researcher's supervisors and a trial-interview with three lecturers of three different universities in Indonesia. The FGD results in this study were used to gather information on the dialogic teaching implementation as perceived by the students. Furthermore, the use of interview data not only yielded unforeseen revelations, but also facilitated the researcher in obtaining unprompted responses to an inquiry. Additionally, this methodology allows the researcher to investigate the underlying reasons behind students' behaviors.

3.4 Data Analysis

A statistical program of SPSS version 27 was used for the quantitative data analysis, mainly its *t-test* analysis tool. A *t-test* was used to determine if there was a significant difference between the means of pre-test and post-test scores and how they are related. Then, the result was further analyzed by corroborating it with the qualitative data garnered from a Focus Group Discussion (FGD) and classroom observations. Despite a small number of participants, which is 22 or less than 30, the data could still be made normally distributed. This small number was there by default and it could still be normally distributed using non-parametric data analysis formula. Okoye and Hosseini (2024) states that quantitative studies with very few participants, such as less than 30, can be analyzed. When dealing with non-normal data, researchers have several options. While some tests, such as the one-sample Z test, T test, and ANOVA, assume normality, small sample sizes may necessitate non-parametric tests. Non-parametric tests, which do not assume specific distribution types, include the Kolmogorov-Smirnov test, the Wilcoxon signed rank test, Mann-Whitney U Test, and Kruskal-Walli's test. In line with it, Hopkins et al.

(2018) recommends non-parametric analyses for sample sizes below 30. In cases where non-parametric equivalents are lacking for certain tests with numerous items, regression analysis can be employed. When the sample size is less than 30, non-parametric analyses are advisable, considering the sample as non-normal. Ultimately, the differences between parametric and non-parametric analyses are minimal, and significant findings can still be identified. Thus, in the current study, the Kolmogorov-Smirnov test was employed to make the small data, which is 22, become normally distributed.

For the qualitative data analysis collected through FGD, the researcher used Miles, Huberman, and Saldana's (2014) theory for qualitative data analysis, which involved data condensation, classification, presentation, interpretation and conclusion drafting or verification. The interview transcripts were sent back to the interviewees for verification reasons. After gaining their consent, the researcher examined and reread the data using a table to thematically code significant material. This level of classification lead to the emergence of several key themes. For a more precise analysis, the categories from each transcript were continuously compared to identify a complete pattern so that each may be read accurately. Peer debriefing and double crosschecking was undertaken to increase the reliability of the research by sharing the analysis result with his dissertation advisors for deeper data interpretation and verifying it back to the participants for confirmation. Following their acceptance, a definitive conclusion was developed to allow future claims of explanation. This technique prevents false assertions, misrepresentations, and fraudulent analysis (Lichtman, 2010).

3.5 Ethical Considerations

Several ethical concerns have always been taken into account during the research project. The researcher first applied for ethical permission from the ethics committee of Universitas Pendidikan Indonesia. Then, the letter was sent to the target university for confirmation. The data was collected upon receiving their and the student's consent. In specific, several concerns were highlighted as the following.

First, voluntary participation was paramount. All participants were free to quit or withdraw from the study at any time without obligation to continue without being required to offer a reason for withdrawing from the research. Second, informed consent was used to ensure that students comprehend all the necessary information to determine whether or not to participate. This detailed the research's advantages, dangers, financing, and institutional approval. Third, anonymity data pseudonym was used as an alternate way to replace identifiable information about participants with fictitious identifiers. Fourth, confidentiality was employed to safeguard students' personal information when storing or using it. Fifth, communicating the result ensured that the data analyzed is reliable, trustworthy, and believable. Sixth, the American Psychological Association 7th Edition (APA, 2020), as outlined in the Dissertation Handbook, was used to acknowledge the works of other authors cited in the dissertation.

3.6 Concluding Remarks

This chapter details the research technique of this study. It comprises several parts addressing study design, research location and participants, data collection processes, data analysis, and concluding remarks. The research design explained the approach, principles, and features applied in this investigation. The research location and participants detail the people participating in this study and the area where the investigation will be done. The data collection offered the instrument and the techniques of data collection. Data analysis is the technique of examining the data. The following chapter will address the results of the study and the discussion.