CHAPTER 3
RESEARCH PROCEDURES

This chapter provided the methodology utilized to conduct the study. This chapter outlines seven parts of the research procedure, namely research method, research focus, setting and participant, data collection technique, data analysis technique, research steps, place and time of research. More details are described below.

A. Method of the Research

This research was conducted using Classroom Action Research (CAR) as the research design. According to Khasanah (2016) as cited in Adawiyah et al. (2021) Classroom Action Research is research implemented by the teacher to complete and improve the teaching-learning process. Meanwhile, Siregar (2025), defined CAR as a particularly essential research methodology for educators to address the increasingly complex issues of contemporary learning, especially in considering students' different demands and the quick changes in educational technology.

A representation of Classroom Action Research by Kemmis and McTaggart (1988) is provided by the following picture.
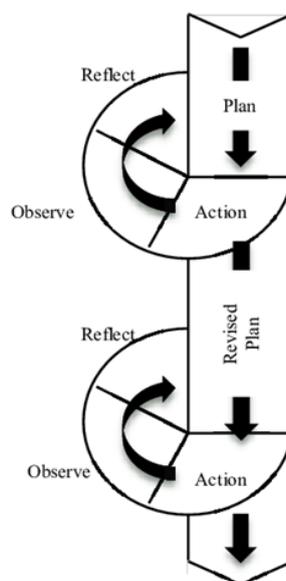

Figure 1. *Cyclical AR model based on Kemmis and McTaggart (1988)*

Based on the picture above, Kemmis and Taggart (1998) stated that there were four steps to do for classroom action research. Following the stages of CAR has four phases as follows:

1. **Planning**

   During this first step, defined goals and objectives are established, and a thorough action plan is created to solve the identified issue. The researcher does the following things: creating a lesson plan (RPP), preparing media for teaching, designing pre- and post-test, creating observation sheet, and discussing with the peer observer about the process of conducting the teaching learning process using Think-Pair-Share technique as a technique in Cooperative Learning to improve students speaking skills.

2. **Acting**

   During this second step, the researcher as a teacher implements the plan of action that has been prepared. In this step, data is systematically collected and evaluated for the effectiveness of the implemented plan. In the other words, the researcher as a teacher taught the material to the students by using Think-Pair-Share technique as a technique to improve students speaking skills, based on the lesson plan which has made in the planning stage.

   The implementation of the Think-Pair-Share (TPS) technique was conducted through three main stages. In the think stage, students were given the opportunity to listen carefully to the teacher's explanation and were provided with sufficient time to think individually based on the teacher's instructions. This stage allowed students to organize their ideas independently before engaging in discussion. In the pair stage, the teacher divided the students into pairs, and they worked collaboratively to complete the assigned tasks. Through this interaction, students were encouraged to exchange their ideas, clarify their understanding, and practice using English with their peers. In the share stage, each pair or group presented the results of their discussion to the class, while other group members provided feedback or responses.

3. Observing

During the observing stage, the peer observer analyzed the teaching and learning process, particularly the implementation of the Think-Pair-Share (TPS) technique, by using the observation sheet provided by the researcher. All data obtained from classroom observations were systematically examined through analytical procedures, including data organization, presentation, and validation. In addition, the researcher analyzed the data derived from the speaking test results to identify students' progress and performance in speaking skills during the first cycle.

4. Evaluating

In the evaluating stage, an assessment of the teaching and learning activities was conducted to determine their effectiveness in improving students' speaking skills. The researcher and the peer observer collaboratively discussed the findings to identify any problems encountered during the implementation of the Think-Pair-Share technique and to determine appropriate follow-up actions. The collected data were further analyzed as a basis for planning subsequent cycles.

Based on this evaluation, a preliminary conclusion was drawn regarding the outcomes of the classroom action research in Cycle 1. If the results indicated that students had not yet achieved the predetermined success criteria for improving speaking skills, the research would proceed to the next cycle. However, if the data showed that students demonstrated increased enthusiasm and improvement in speaking skills through the Think-Pair-Share technique, as reflected in the established indicators, the research could be concluded without continuing to the next cycle.

B. Focus of the Research

This research focuses on the implementation of the Think-Pair-Share technique in improving EFL (English as a Foreign Language) students' speaking skills. This study addressed the problem of low speaking skills,

particulary in terms of pronunciation, fluency, vocabulary use, grammar, and comprehension.

C. Setting and Participants

This research was conducted in one of the Islamic private high schools in Tasikmalaya, West Java. Participants of this research are one class of eleventh grade students which would be observed, with a total 19 students. The Classroom Action Research was conducted in two cycles. The first cycle included six meetings and the second cycle included two meetings. The selection of this class was also based on the recommendation of the school's English teacher, who was familiar with the students' abilities and classroom dynamics. The teacher's input, combined with the students' potential to provide relevant data to answer the research questions, made this class an appropriate choice for the study.

D. Data Collection

The researcher used a mixed method for data collection. For qualitative data, the researcher used peer observation, document analysis, and documentation and for quantitative data the researcher used peer observation, document analysis, and documentation, and for quantitative data the researcher used tests.

1. Qualitative Data

Qualitative data were collected through observations and document analysis on how think-pair-share technique can improve students' speaking skills.

a. Observation
The observation was used to monitor the students' activities during the teaching and learning process. According to Cowie (2009), observation is the conscious use of the senses (hearing, seeing, and monitoring) to

observe events and individuals. The observation included the following components:

1) Students' Speaking Performance

Students' speaking performance refers to the students' ability to produce spoken English during the teaching and learning process, especially when taking part in Think-Pair-Share (TPS) activities. Fluency, pronunciation, vocabulary use, grammar, and comprehension are some of the important factors that are taken into this element, which focused on how well students communicate their ideas.

Fluency referred to the ability of students to speak fluently and with little hesitation or delay. Pronunciation evaluates students' ability to pronounce English sounds appropriately and effectively. Vocabulary referred to the variety and suitability of words students employ to express their ideas. Grammar focuss on the accuracy of sentence structures, particulary the proper use of tenses and word order. Comprehension assesses how effectively students comprehend questions, directions, or remarks from their peers and react appropriately and accurately.

By using these indicators, the observation of students' speaking performance aims to assess how much the TPS technique helps students become more confident, coherent, and clear when speaking English. This component is crucial to determining whether TPS has a major impact on students' speaking skills development.

b. Document Analysis

Document analysis was employed to examine written materials related to the teaching and learning process, such as lesson plans, students' worksheets and documentation. According to Bowen (2009), document analysis is a methodical process for examining or assessing both printed and electronic materials, including computer-based and internet-transmitted documents.

2. Quantitative Data

The researcher conducts a pre-test to students before implementing the teaching techniques, followed by a post-test. Pre-testing and post-testing are used to compare students' skills before and after implementing the researcher's techniques. According to Stratton (2019), pre-test and post-test methods are used to evaluate participants' attitudes and perceptions of an event, as well as to assess their comfort in applying training information or new concepts.

Researchers gave a pre-test to students in the classroom before learning in the first cycle was carried out and gave a post-test at the final meeting of each cycle. This is usefull to see the improvement of students' speaking skills after applying the think-pair-share technique.

E. Data Analysis

Data analysis refers to the process of systematically organizing, interpreting, and drawing meaning from the collected data. In this Classroom Action Research (CAR), the researcher analyzed both qualitative and quantitative data to answer the research questions and determine the effectiveness of the Think-Pair-Share (TPS) technique in improving students' speaking skills.

1. Qualitative Data

The qualitative data were analyzed with an observation model according to Miles and Huberman' (1994), there are three phases of the model which are data reduction, data display, and drawing conclusions.

Table 1

Steps of Miles and Huberman' Model (1994)

Stages	Points
Data Reduction	The first phase is data reduction, which entails a meticulous method of choosing, focusing down, streamlining, abstracting, and converting the raw data into a format that is easier to handle. In order to distill the enormous amount of data into digestible chunks, researchers frequently use methods like coding, classification, and summarization. This phase is essential because it aids in locating important themes and trends that show up in the data.
Data Display	The second step is organizing and presenting the condensed data in an understandable and visually appealing way. To produce visual representations of the data, researchers employ a variety of methods, including matrices, charts, diagrams, and narratives. These displays help find connections and interconnections between various themes and provide a greater comprehension of the material.
Draw Conclusions	In the last step, the presented data is analyzed in order to draw significant conclusions and validate the results. To gain a thorough grasp of the studied phenomenon, researchers examine the correlations, themes, and patterns found in the earlier phases. This step also entails assessing the findings' validity and reliability closely to make sure the conclusions are unbiased and supported by the facts.

2. Quantitative Data

The data collected from the tests were analyzed using descriptive statistics. This test used to evaluate various aspects in students' speaking skills such as fluency, vocabulary, grammar, pronunciation, and comprehension. According to Madsen (1984) as cited in Mahsar (2020), teachers are able to create their own rating scale or modify this one for their own purpose. The scoring rubric applied in this research as follows:

Table 2

Scoring Rubric

Aspect	Score	Indicator
Fluency	1-5	Often hesitant and forced silence by language limitation.
	6-10	Speech and fluency are strongly affected by language problems
	11-15	Speed of speech seems to be slightly affected by language problems
	16-20	Speech as fluently as that of a native speaker
Vocabulary	1-5	Inaccurate or inadequate that affect the understanding
	6-10	Sometimes inaccurate or inadequate
	11-15	Few times inaccurate or inadequate
	16-20	Almost no inadequacy or inaccuracy
Grammar	1-5	Grammatical inaccuracy makes understanding almost impossible
	6-10	Grammatical inaccuracy does not impede the understanding
	11-15	Few grammatical inaccuracy
	16-20	No grammatical inaccuracy

Aspect	Score	Indicator
Pronunciation	1-5	Inaccuracy of pronunciation makes understanding almost impossible
	6-10	Inaccuracy of pronunciation does not impede understanding
	11-15	Few inaccurate pronunciation
	16-20	Accurate pronunciation
Comprehension	1-5	Understands only slow, very simple speech, require repetition and rephrasing
	6-10	Understands simplified speech/dialogue but need repetition and rephrasing
	11-15	Understands quite well the normal educated speech/ dialogue, but sometimes need repetition or rephrasing
	16-20	Understands everything in normal educated conversation

The assessment of students' speaking skills in this research was conducted using a speaking scoring rubric consisting of five aspects: fluency, vocabulary, grammar, pronunciation, and comprehension. Each aspect was scored on a scale of 1–20, resulting in a maximum total score of 100 for each student. The indicators for each score range were based on students' performance in terms of accuracy, fluency, and understanding in spoken English, as presented in the scoring rubric.

The final score of each student was obtained by summing the scores from the five aspects. The data were analyzed using descriptive statistics, including the calculation of total scores and mean scores for each test. The Criteria of Minimum Completion (KKM) for this research was set at 85. If the mean score showed a significant improvement compared to the pre-test and the majority of students reached or exceeded the KKM, it could be

concluded that the Think-Pair-Share (TPS) technique was successful in improving students' speaking skills.

Convert scores:

a. Convert the scores to a 100-point scale.

   Students score: (N/100) x 100

b. Maximum score: 100

c. Minimum score for passing (KKM): 85

Table 3

The Result of Pre-Test

Students	Fluency	Vocabulary	Grammar	Pronunciation	Comprehension	Total
S1	14	12	13	12	16	67
S2	15	12	14	13	16	70
S3	15	14	15	13	16	73
S4	18	17	17	16	17	85
S5	15	14	15	13	16	73
S6	15	14	15	14	17	75
S7	16	15	16	14	17	78
S8	17	16	16	15	17	81
S9	16	15	16	14	17	78
S10	18	17	17	17	17	86
S11	16	15	15	15	17	78
S12	16	16	16	15	17	80
S13	15	14	15	14	16	74
S14	15	15	15	14	16	75
S15	18	17	17	17	17	86
S16	14	13	14	13	15	69
S17	16	15	16	14	17	78
S18	18	17	17	17	17	86
S19	16	16	16	15	17	80
TOTAL	303	284	295	275	315	1472

Based on the pre-test results presented in Table 3, the total score obtained by the students was 1472. The mean score of the pre-test was 77.47, indicating that the students' speaking ability before the implementation of the Think-Pair-Share (TPS) technique had not yet met the Criteria of

Minimum Completion. Among the five speaking aspects, comprehension achieved the highest total score (315), while pronunciation obtained the lowest total score (275). These results indicate that although the students were relatively able to understand the topic, they still faced difficulties in pronunciation and speaking fluency. Therefore, an appropriate instructional technique was needed to improve students' speaking performance.

Table 4

The Result of Cycle 1 Test

Students	Fluency	Vocabulary	Grammar	Pronunciation	Comprehension	Total
S1	15	15	14	14	15	73
S2	16	16	15	15	15	77
S3	16	16	15	15	16	78
S4	18	18	18	17	17	88
S5	16	15	16	15	15	77
S6	17	16	16	16	16	81
S7	17	17	16	16	17	83
S8	17	17	17	17	17	85
S9	16	16	16	16	17	81
S10	18	18	18	17	18	89
S11	16	16	16	17	17	82
S12	16	16	16	17	18	83
S13	16	15	16	16	15	78
S14	16	15	16	15	16	78
S15	18	18	18	17	17	88
S16	16	15	15	14	15	75
S17	17	17	16	16	16	82
S18	18	17	18	17	18	88
S19	17	17	17	16	17	84
TOTAL	**316**	**310**	**309**	**303**	**312**	**1550**

After the implementation of the Think-Pair-Share (TPS) technique in Cycle 1, the post-test results presented in Table 4 showed an improvement in students' speaking skills. The total score increased to 1550, with a mean score of 81.58. Improvements were observed in all speaking aspects, particularly in fluency, which increased from 303 to 316, and vocabulary, which improved from 284 to 310. However, although the mean score

increased compared to the pre-test, most students had not yet achieved the KKM. This finding indicates that further improvement and refinement of the teaching strategy were necessary in the next cycle.

Table 5

The Result of Cycle 2 Test

Students	Fluency	Vocabulary	Grammar	Pronunciation	Comprehension	Total
S1	17	18	16	15	16	82
S2	17	17	16	16	17	83
S3	17	17	17	16	17	84
S4	19	18	18	18	18	91
S5	17	17	16	16	17	83
S6	18	17	17	17	17	86
S7	18	17	18	17	18	88
S8	18	18	18	18	18	90
S9	18	17	17	17	17	86
S10	19	18	18	18	19	92
S11	17	17	17	18	18	87
S12	18	17	17	18	18	88
S13	17	16	17	16	18	84
S14	17	16	17	16	18	84
S15	19	18	18	18	18	91
S16	17	17	16	16	17	83
S17	18	17	17	17	18	87
S18	19	18	18	18	18	91
S19	18	17	18	17	19	89
TOTAL	**338**	**327**	**326**	**322**	**336**	**1649**

The post-test results of Cycle 2, as presented in Table 5, showed a more significant improvement in students' speaking skills. The total score increased to 1649, and the mean score reached 86.79. All speaking aspects improved consistently, with fluency reaching a total score of 338, vocabulary 327, grammar 326, pronunciation 322, and comprehension 336. In this cycle, most students achieved or exceeded the KKM of 85, indicating that the students demonstrated better fluency, confidence, and accuracy in speaking English. These results confirm that the continuous implementation

of the Think-Pair-Share (TPS) technique effectively improved students' speaking skills.

F. Time and Place of the Research

This research was conducted at one of Islamic Private schools in Tasikmalaya, West Java, Indonesia. Meanwhile, the time of this research was conducted in the period from:

Table 6
Research Timeline

Description	Sep 2024	Oct 2024	Nov 2024	Dec 2024	Agt 2025	Sep 2025	Okt 2025	Nov 2025	Des 2025
Research Proposal Writing		■	■	■					
Research Proposal Examination				■					
Data Collection	■	■	■						
Data Analysis					■	■			
Report							■		
Thesis Result Seminar								■	
Thesis Examination									■