

**THE USE OF MIND MAPPING STRATEGY TO IMPROVE STUDENTS'  
SPEAKING ABILITY**

**THESIS**

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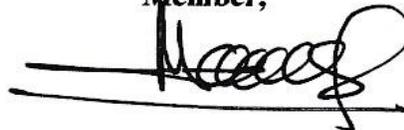
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## SURAT PERNYATAAN

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Menyatakan dengan sesungguhnya bahwa skripsi yang berjudul: **“THE USE OF MIND MAPPING STRATEGY TO IMPROVE STUDENTS’ SPEAKING ABILITY”** adalah benar karya asli saya, kecuali lampiran yang disebutkan sumbernya. Apabila terdapat kesalahan dan kekeliruan di dalamnya seluruhnya menjadi tanggung jawab saya.

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(Asrifal Mirza)

## ABSTRACT

Speaking is a discussion between two or more people regarding information, ideas, options, or feeling. Speaking is the major factor that plays the most important role in communication. Teachers' strategy in teaching speaking is very important to improve the students' ability in speaking. One of the strategies that can be used by the teacher is mind mapping which can help the students in learning speaking to be able to express their idea. Therefore, the writer conducts a study about "**The Use of Mind Mapping Strategy to Improve Students' Speaking Ability**". The purposes of this study are to find out whether mind mapping improves students' speaking ability or not and to find out how does mind mapping strategy improve students' speaking ability. The sample of this study was class 1a and 1b of MAS Darul Ihsan. To obtain the data, the writer applied quasi experimental research. The writer gave pre-test and post-test, Based on the obtained data by using  $T_{test}$  and degree of freedom 48 at significant level of  $\alpha=0.05$  showed that the gained score was 6.23. As  $T_{test}$  was higher than  $T_{table}$   $6.23 > 1.68$ ,  $H_a$  of this research was accepted. Moreover, the interview was made available to the six selected participant from experiment class. The interview revealed that students perceive mind mapping strategy helps them to generate idea in speaking. Overall findings, mind mapping strategy improve students speaking ability. Finally, the writer concludes that mind mapping strategy is one of strategies which can be used in order to improve the students' speaking ability.

Keyword : Mind Mapping, Strategy, Students' Speaking Ability

## **CHAPTER I**

### **INTRODUCTION**

#### **A. Background of Study**

Mind mapping is one of many strategies in teaching and learning English. Many teachers use this teaching strategy to teach writing, reading, and speaking. Buzan (2005) defined that mind mapping is an effective way for students to remember what they have read and recall it easily when they need it. They will be able to organize ideas on paper structurally. This strategy will facilitate the students to speak or present their thought in front of class easily. Buzan (2005) also mentioned that mind mapping is a good tool to improve students' ability in recording information and enhancing creative thinking.

Murley (2007) noted that mind map is a graphic organizer in which the major idea released from a central idea and sub-idea that are represented as branches of larger branches. It is a visual tool that can be used to generate ideas, take notes, and organize thinking. Mind mapping strategy is helpful for strong visual learners who capable to absorb information better when it is presented through visual graphic than through written text.

The aim of using this strategy is to improve students' ability in speaking. There are many researchers conducted the study about mind mapping strategy to improve students' reading and writing ability. Nevertheless, few researchers conducted a study about mind mapping strategy to improve students' ability in

speaking. In this study, the writer focuses on the impact of mind-mapping on speaking ability.

English speaking is a very important skill that has to be possessed by students in studying English in order to be able to communicate with other people from different countries.

Rahman (2007) argued that speaking is a tool of communication in conveying ideas, information, and feeling to others. It is the most important way for a speaker to express himself through a language. Moreover, Bashrin (2013) quoted from Ur said that “Speaking is the productive aural/oral skill. It consists of producing systematic verbal utterance to convey meaning.” Furthermore, Bashrin (2013) also stated that speaking is essential as a productive skill. Formerly, teachers rarely teach speaking in any classroom. However, nowadays the process of speaking activities has a lot of progress since the teachers try to encourage the students to improve their speaking ability.

In addition to speaking, Revell (1979) stated that speaking is a discussion between two or more people regarding information, ideas, options, or feeling. Thus, there have to be a concept of what they are going to say. English as Foreign Language (EFL) students will need to rehearse to be able to express their ideas in English.

In Indonesia, English is considered to be a foreign language. Most of the time, students develop their speaking ability in an EFL classroom even though they usually do not speak English in daily activities. It happens because of many

factors, one of the reason is that the students are not feeling convenience to speak English in front of their peers or in a public area. According to previous research, Sugiharti (2007) found that students are not comfortable to speak English in front of the others.

Horwitz, et al. (1986) believed that EFL students are afraid to speak in English because they are afraid to make mistakes and thought they are less competent than others. This situation is common for English beginners, especially for the students of junior and senior high school. The earlier observation at MAS Darul Ihsan shown that students were, most of the time, anxious in speaking and some of them preferred to sit at the corner of the class or pretending to be sick to avoid a chance to speak in front of the class.

Moreover, the problems that mostly occurred in students' speaking are that they have no ideas to speak in public or unable to convey the message to the listeners effectively. Consequently, they tend to repeat some words that the listeners hardly get the point of the speaker.

To solve this, the teacher should find a solution regarding the problems discussed. Otherwise, they need to put their teaching style into variation and find a way that at least the students knows what they are going to speak and they will be easy express their ideas fluently.

Based on what is discussed above, the writer has great willingness to conduct a research related to the impact of mind mapping to the ability of students in speaking under the title: “*The Use of Mind Mapping Strategy to Improve Students’ Speaking Ability*”.

### **B. Research Question**

1. Does mind mapping strategy improve students’ speaking ability?
2. How does mind mapping strategy improve students’ speaking ability?

### **C. Aim of Study**

This study is aimed:

1. To find out whether mind mapping strategy improve students’ speaking ability or not.
2. To find out how mind mapping strategymprove students’ speaking ability.

### **D. Hypothesis**

Hypothesis is a tentative answer of the research. Hypothesis in quantitative research is a must, thus requiring the researcher to formulate one. The hypothesis of this research is formulated as follow:

“Mind Mapping strategy improve students’ speaking ability”

### **E. Significance of Study**

This study has advantages for the writer himself, the students of Madrasah Aliyah Swasta (MAS) Darul Ihsan Aceh Besar, the students of English department of UIN Ar-Raniry and the teachers, lecturers in teaching English. First, this study has advantages to complete writer's one of the obligations to complete his undergraduate degree of English Teacher Training at Faculty of Tarbiyah at Islamic University of Ar-Raniry Banda Aceh and to improve writer's knowledge about speaking ability. Next, this study has advantages for students' from English Department of UIN Ar-Raniry and MAS Darul Ihsan to improve their speaking ability. At last, this study is useful as a strategy or reference for teacher or lecturer in teaching English speaking.

### **F. Terminology**

In order to avoid misunderstanding, it is essential to clarify some terms in the title, they are:

#### **1. Mind Mapping**

This term consists of two words, mind and mapping. Based on Oxford Dictionary (2015) definition, mind is a noun, it means "The element of a person that enables them to be aware of the world and their experiences, to think, and to feel". On the other hand, according to Oxford Dictionary (2015) definition, mapping is a noun derived from 'map', it means "A diagram or collection of data showing the spatial arrangement or distribution of something over an area".

Mind mapping is a graphical way to represent ideas and concepts. Mind mapping refers to the use of map in presenting ideas, concepts, and tasks.

## 2. Speaking Ability

Speaking is a noun derived from 'speak', it means way to convey information, or to express one's feeling orally. In the word of (Brown 1994), speaking is an interactive process of conveying and receiving information. Moreover, Fleming (1981) argued that ability is the quality of being able to do something and being able to perform: a quality that permits or facilitates achievement or accomplishment.

Therefore, in this study, speaking ability can be meant as a process that speakers able to convey their ideas or message effectively and well organized to a listener. Furthermore, the populations of this research were the students from MAS Darul Ihsan Aceh Besar. The writer tended to give the student a pretest and posttest in order to know whether mind mapping can improve students' speaking ability or not. Moreover, he also tended to interview them to find out how mind mapping improve their speaking ability.

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **A. Speaking**

##### **1. The Nature of Speaking**

Boonkit (2010) believed that speaking is one of four important abilities in English, especially when the speakers are not from English native country. The ability is described as the capability to use language in real situation, the ability to report acts in precise words, or the ability to express or converse ideas fluently. English as Foreign Language (EFL) student should improve their speaking ability since English has become the first international language that use to communicate with people from all around the world. English speaking ability should be improved together with the other abilities in English to fulfill the communication requirement.

Byrne (1986) suggested that speaking is an activity involving two or more participants as listeners and speakers in order interact to each other. Each participant has an attention or a set of goals that they want to achieve when they communicate. To sum up, speaking should involve at least two participants, one can be speaker who delivers information, and other can be listener who receives the information.

Lesakova (2008) argued that speaking is the ability to develop and share meaning by using verbal or non-verbal symbols. Speaking is a productive skill that people use to interact with other trough orally. It is produced and processed in

real life situation that means the speakers convey his or her message to the listener directly.

Speaking is playing a great role in daily life situation. Speaking is used to communicate among people in society in order to keep the relationship going well. Rivers (1987) believed that someone can express their thought, feeling, emotion and also influence other people through speaking that can receive a feedback directly from listener.

In addition, Hornby (1995) stated that speaking ability is the process of making speech by using voice to substitute words and express meaning. Moreover, Moris (2002) states that speaking is a natural ability that people use to communicate or to express their idea in society as a social behavior form. Therefore, speaking is the ability of someone to express feeling, idea, or something on his or her mind to other people. Speaking is an important skill that cannot be separated from daily life activities because people speak in order to convey and express their idea.

Moreover, speakers are required to be able to express what they want to say as effective as possible in order to convey the idea to a listener and to avoid the listener get the wrong message from speaker. Jones (1989) stated that speaking is a form of communication.

In short, speaking can be defined as one way to communicate with other people in society to express ideas, feeling, emotion, and information by using certain language. Speaking cannot be separated from listening, because speaking

should involve two participants at least, one can be a speaker and others can be listeners. In speaking, speaker should use good sentences in order to make the listener understand about the information that is going to be delivered.

## **2. Components of Speaking**

Every skill has a component to fulfill its needs. Speaking also needs many components because speaking is the most natural way to communicate. Without speaking, people must stay in almost total isolation from any kind of society. For most people, the ability to speak a language is the similar to understand a language since speaking is the most basic way of human interaction.

In addition, speaking is one of the language arts that are mostly used by people from all over the world. The art of speaking is very complex, it requires the simultaneous use of a number of abilities which often develop at different rates. Syakur (1987) mentioned that there are generally five components of speaking skill, they are; comprehension, vocabulary, grammar, pronunciation, and fluency.

### **a) Comprehension**

Comprehension focused on students' understanding of conversation and it measures how much explanations are required to understand students' responses. In other words, it means that if a person can answer or express idea well, it shows that she or he have a good comprehension.

b) Vocabulary

People cannot communicate effectively or express their ideas both orally and in written form if they do not have enough vocabulary since vocabulary means the suitable articulation which is used to communicate.

c) Grammar

Grammar is needed for students in order to arrange a correct sentence in conversation. Heaton (1978) explains that it is important for students to use a correct structure and appropriate grammatical in speaking. The function of grammar is also used to learn the correct way in order to gain expertise in a language in oral and written form.

d) Pronunciation

Pronunciation is the way of producing certain sounds. In process of communication, students need to be able to pronounce and produce phonemes clearly and correctly in order to avoid misunderstanding. They must be able to articulate words and create the physical sounds that carry the correct meanings.

e) Fluency

The last component in speaking is fluency. Riddel (2001) stated that fluency is the ability to speak freely without too much stopping and hesitating. Similarly, Gower, et al. (1995) believed that fluency can be thought as the ability to keep speaking spontaneously. When students speak fluently, they should be

able to get the message from the speaker resources and the abilities they have learnt, regardless of grammatical or other mistakes.

### **3. The Importance of Speaking**

It is important to understand that the improvement of spoken language is not only learning skills such as pronouncing English sounds or the ability to produce single utterances or phrases but also the development of spoken language is an ongoing and a difficult process of acquiring knowledge and developing ability to communicate with people in social life.

Boonkit (2010) opined that speaking is one of four important skills in learning English, especially when the speakers are not from English native. Furthermore, it is essential for EFL students to improve their speaking ability together with other ability in order to achieve communication goal. What is more, Brown (2001) believed that spoken language is easy to perform, but in some situations it is difficult. This statement is supported by Munjayanah (2004) on her research stated that when people want to speak fluently, sometimes they get difficulties to do it. In short, speaking is a complex skill that has to be possessed by students in learning English, they need to practice a lot in order to carry out an effective speaking performance.

### **4. Problem of Speaking**

There are several problems faced by students in speaking and it will disturb speaking abilities. Ur (1991) noted that there are four problems faced by students in speaking English, especially for EFL students:

a. Inhibition

Speaking activities require listeners to have all attention on speakers and the exposure from the listeners that can often give a stage fright to the speakers. The speakers may also be worried about making mistakes or being criticized in front of others.

b. Nothing to say

Another common problem is those students mostly have nothing to say related to the topic. In fact, the students may be bored or they may feel that the topic is unrelated to the conversation. Consequently, the students will have less motivation to speak even they know they have to participate in speaking activities. The students even lack of confidents to express what they want to say.

c. Low of Participation

On the one hand, there always will be dominant students in English class that will make other students difficult to express themselves freely. On the other hand, The students who interrupt frequently or look for the teacher's attention constantly tend to create a situation where the timid students are quite happy to sit in the corner of the class and watch the lesson unfolding rather than participating.

d. Mother tongue use

In EFL classroom where a number of the students have the same mother tongue language are found that their English is mostly influenced by that

background language. They feel inconvenient to speak to one another in foreign language.

## **5. Teaching Speaking**

According to (Hornby 1995), teaching is giving the instruction, knowledge, or skill to a person. Additionally, speaking is making use to the words in an ordinary voice. Therefore, teaching speaking means giving instruction to a person in order to communicate with others.

Teaching speaking has been underestimated for many years and English teachers have continued to teach speaking just as a repetition of drills or memorizing of dialogues. However, now the goal of teaching speaking should improve students' communicative skills since merely this that enable students learn how to interact others in English.

Moreover, in teaching speaking process, teacher's preparation is very important in order to avoid misunderstanding between students and teacher. This is because sometimes teacher's explanations are frequently not clear to their students. Ur (1991) stated that teacher should prepare some simple activities such as preparing for lesson plans or illustration to prepare a great teaching speaking performance.

Teaching speaking is an essential part in language learning. According to Harmer (2007) there are three reasons to teach speaking:

- a) Teaching speaking can provide opportunities for students to practice real life speaking in the classroom.

- b) Speaking task where the students try to use the language will provide a feedback for both teacher and students. Everyone can see how success they are and also what language problems they are experience.
- c) The more opportunities to speak, the more familiar the students to the components of speaking. They will frequently use these components when they are speaking. As a result, the students will be able to speak fluently.

## **B. Mind Mapping**

### **1. Nature of Mind Mapping**

Buzan (1991) opined that mind mapping is a diagram used to represent words, ideas, tasks, or other items linked to and arranged in radial around a central key word or idea. It is used to generate, visualize, organize, and classify ideas. It is an image-centered diagram that represents meaning or other connections between portions of information.

Murley (2007) noted that mind mapping is an effective tool to generate idea and draw it into a paper or express it orally. Besides, Budd (2003) argued that mind mapping is a graphic organizer in which main idea and sub-idea are represented as branches from larger branches. It is a visual tool that can be used to generate ideas, take notes, organize thinking, and develop concepts.

In order to create a mind-map, people usually start in the middle of the page to draw the central theme or main idea. Then, draw wider in all directions to create a growing diagram composed of keywords, concepts, facts, and

information. Furthermore, mind-map graphically show ideas in a relational framework, with the main topic at the center of the paper, major subtopics on branches derive from the main topic, and sub-subtopics around each major subtopic. Mind map can be created using paper and pens or using one of several computer applications (Murley2007)

Based on the explanation above, mind mapping can ease the students to generate their mind. Besides, teacher can use mind mapping as a strategy in teaching. Mind map is easy to create, students can create it on a blank of paper using pen or pencil. What is more, they can use computer to draw a mind map.

## **2. Characteristic of Mind Mapping**

According to Budd (2003) there are four main characteristics of mind mapping:

- a. Each mind-map has a central picture as a starting location containing the main theme or idea. The central point in the mind-map commonly used picture because picture can helps brain to generate idea easily.
- b. The ideas of the mind-map “released” from the central topic or image as branches with sub-topics connected to each other. The sizes of the branches are different and the connecting words are used to support relations to main topic.

- c. The final structure of the mind-map becomes a hierarchy of linked ideas. Palmberg (2011) claimed that our consciousness always analyses how things are connected to each other. And when that is done, the mind creates an image to symbolize the structure.
- d. Each branch has keywords or colorful pictures connected to each other. It is recommended to use the picture in the entire mind-map. A traditional outline is often lack of color whereas the use of color is important in creating mind-maps. In particular, many mind-maps use one color for each major topic to help in organization. Each branch used a single keyword, not a phrase or sentence.

### **3. Technique of Making Mind Map**

Murley (2007) mentioned that there are a number of computer applications that can be used to create mind maps on a computer. Regardless, to draw a mind map using pen, it is recommended to use a large sheet of white blank paper and turn it horizontally in a landscape orientation. Pens that are used are in multiple thicknesses colors. The following procedures are presented to describe how to make a paper-pen based mind map:

- a) Place the central theme or main idea in the center of the paper. We may find it easier to place our page in landscape orientation, which is easier to draw a mind map.
- b) Use lines, arrows, branches, and different colors as ways of showing the connection between the central theme or main idea. The relationships are important in order to keep the idea related to main topic.

- c) Avoid creating an artwork. Teachers should draw quickly without major pauses or editing. It is important in the first step of mind mapping to consider every possible idea even those that we are not going to use.
- d) Choose different colors to symbolize different things. The method is fully up to us, but we should remain consistent so that we can be better in drawing our mind map at a next step.
- e) Leave some space on our page due to the reason that we can continue to add to the idea over a period of time. If A4 sized paper is small, we may like to use A3.

Picture 2.1. Example of mind map based on Buzan (2005):



#### 4. Advantages of Mind Map

Murley (2007) explained that the radiating design of a mind-map keeps the main topic or idea central stand together with all its major sub-topics neighboring it. Similarly, sub-subtopics stay close to their topics. This arrangement keeps the big picture in focus and makes relationships and connections easier to notice.

Furthermore, mind mapping is more flexible that students' creativity will be encouraged. Memory storage is enhanced as mind mapping allows displaying all related topics on the same mind map, with keywords and connections indicated by images, symbols, and colors. Mind map is not only enhancing students' creativity, but also attracting students' attention. The benefits of mind mapping include providing the students with a more attractive and enjoyable format for their eye and brain.

In addition, Murley (2007) noted that it is easy to understand the "maps" drawn on mind-maps. This benefits the students as it saves time and increases productivity that distinguished learning styles in EFL classrooms can also be accommodated. Mind-maps are especially helpful for strong visual learners who absorb information better when it is presented via diagrams and similar visual aids than through written text.

Moreover, Al-Jarf (2011) pointed out that mind mapping is used to enhance learning. Visual learners find it useful as an illustrative tool that assists with managing thought, directing learning, and making connections. Al-Jarf (2011) also added that mind mapping enables students to better organize, prioritize, and integrate material presented in a course.

Pramono (2013) stated that mind mapping strategy able to helps the students improve their speaking ability in some aspects, such as pronunciation, vocabulary, clarity and naturalness of speech, and task achievement and communication skills. They were more confident to speak English.

To sum up, it can be concluded that mind mapping is an effective strategy to use the power of both sides of the human brain to encourage studying, problem solving, critical thinking, and memory recall.

## CHAPTER III

### RESEARCH METHODOLOGY

#### A. Brief Description of Research Location

The research of this study took place in MAS Darul Ihsan and it is located in Aceh Besar. The school is a boarding school that emphasizes the use of Arabic and English languages in social interaction and communication.

##### 1. The School

Dayah Darul Ihsan Haji Hasan TGK. Krueng Kalee is one of the two oldest existing dayah in Aceh since the Dutch colonial era. He is a follow up of the development of the Salafi dayah. Dayah Teungku Haji Hasan Krueng Kalee that has been developed in 1910-1946. The former was founded by Tengku Haji Hasan Krueng Kalee. Teungku Haji. Hasan Krueng Kalee is elderly ulama in Aceh at the beginning of this century. He was educated in Dayah Yan-Kedah, Malaysia, and continuing education to the Haram, Makkah Al-Mukarramah for 7 years.

At that time (1910 till 1946), Dayah Krueng Kalee has students who come from all around of the country and neighboring Malaysia. During that time, the development of education in his progress very rapidly and reached its peak. This is evident from many prominent scholars of national and local-intensity and high quality that has been born, such Prof. Ali Hasjimy (former Aceh Gubebernur first). Teungku Haji Nurdin (Former Regent of East Aceh), Tengku Sulaiman Haji Habib (former great Imam Mosque Baiturrahman), Teungku Haji Idris Lamreng

(father from Alm. Prof. DR. Safwan Idris, the former Rector of IAIN Ar Raniry Banda Aceh), and others.

The educational system uses Formal Methods Madrasah Education and Dayah system. Madrasah education which refers to the curriculum of the Ministry of Religious in synergy run (simultaneously) with educational methods and integrated Salafi Islamic boarding school in the morning, afternoon, evening and after dawn. Entire students live in dormitory and required to speak Arabic and English daily.

Besides, the students also equipped with a variety of extra-curricular activities, such as Les Computer, Sew, Nasyid Islami, traditional dance Aceh, Dalail Khairat, Art Tilawatil Qur'an, Scouting activities, Drama in three languages: Arabic, English, Indonesian, Speech in three languages: Arabic, English Indonesia, martial art, Khat Calligraphy. The whole dormitory students are required to use Arabic and English as the language of daily conversation.

## **2. The Facilities**

In order to support teachers and students in teaching and learning process, MAS Darul Ihsan has enough facilities as follows:

**Table 3.1 The Facilities at MAS Darul Ihsan**

No	Facilities	Unit
1.	Classrooms	9
2.	Library	1
3.	Language Laboratory	1
4.	Computer Laboratory	1
5.	Sport Field	1
6.	Teacher's Office	4
7.	Canteen	2

The teaching learning process at MAS Darul Ihsan takes place from 07.30 am until 01.10 pm for the day class and from 07.45 pm until 08.45 pm for the night class. Since both of general subject and Islamic knowledge are important for the future of youth generation, the headmaster of Darul Ihsan implement the school subject and Islamic knowledge altogether.

The school also provides multimedia room, computer and science laboratory. Multimedia room is used as language laboratory that is aimed at helping students to learn language especially English and Arabic. Meanwhile, computer laboratory is proposed to facilitate students in operating computer to improve students' knowledge of technology. The school also offers science laboratory to the students to learn the science material in practice. However, the problem is the science laboratory's facility is incomplete. Thus, the students cannot use the science laboratory effectively. In learning process, the school splits the classes for females' and males' class. In this boarding school, male and female students do every activity separately.

In MAS Darul Ihsah English lesson is divided into five lessons. Those are structure, writing, listening, speaking, and reading.

## **B. Population and Sample**

### **1. Population**

In this study the writer needs to decide the population to collect the data. Creswell (2008) explains population is “a group of individuals who have the same characteristic”. Considering this statement, the writer determined the population of this study was the first grade students of MAS Darul Ihsan students.

### **2. Sample**

Arikunto (2010) stated that sample is a limited number of elements from a population to be representative of the population. There are four classes of the first year’s students at MAS Darul Ihsan. A sample was selected based on the teacher’s recommendation to take I-A as experimental class and I-B as control class. For the reason, they have been studying speaking English in Darul Ihsan since junior high school until now. Therefore, the sample of this study was the students in class I-A that consist of 27 students and I-B which consists of 23 students.

## **C. Research Design**

The aim of this study is to see the improvement of students’ speaking ability and how does the ability improved in learning English using mind mapping as a strategy. Thus, the writer used the type of sequential explanatory mixed method which combined quantitative and qualitative method. Creswell (2007) stated that sequential explanatory is a type of mixed method which the writer collect the data using quantitative method and then follow up by qualitative in

order to strengthen the data. In this study the writer used quasi-experiment study in order to answer the first research question and interview to answer the second research question.

Quantitative method is the method used in the particular population and sample, by using research instrument in collecting data and analyzing by statistical analysis. Cresswell (2008) noted that quantitative research is a type of educational research in which the writer decides what to study; reviews these numbers analyzes by using statistics; and conducts the inquiry in an unbiased, objective manner.

In addition, to determine whether mind mapping strategy can improve students' speaking ability, the writer applied experimental research. Cresswell (2008) mentioned that experimental designs are procedure in quantitative research where the writer determines whether an activity or materials make a difference in results for participants. Kind of experimental research used in this study was Quasi-experiment.

The experiment starts with the selection of participants. Borg (1993) Et al, mentioned that quasi-experiment participants are not assigned to condition randomly. The writer used quasi experiment, because he chosen the pre-existent group that the teacher suggested him to chose and did not pick the sample randomly. The writer took two classes as samples; control and experiment classes.

The writer gave students the pre-test to know the students' ability in speaking. Afterwards, the students were treated by using mind mapping

strategy. The treatment was given to improve the students' speaking ability. Finally, the students were given post-test. Post-test was used to determine whether mind mapping can improve students speaking ability or not.

Moreover, to find out how mind mapping strategy improves students' speaking ability, the writer used interview. There are six interviewee were chosen from 27 students of experiment class, the six selected interviewee were from the two top highest, two lowest and two in the middle class.

#### **D. Data Collection Procedure**

In collecting the data, the writer was conducted the quasi-experimental teaching in five meetings for experiment class and two meeting for control class in order to know whether mind mapping strategy improves students' speaking ability or not. Next, the writer used test to measure students' speaking ability before and after the treatment applied. Afterward, to know how mind mapping improve students' speaking ability, the writer use interview in collecting data:

##### **1. Quasi Experimental Teaching**

The writer used quasi experimental research. He taught speaking English by using mind mapping as a strategy for experimental group of students. The teaching conducted into five meeting, including pre-test in the first meeting and post-test in the last meeting. For the control class, the writer conducted only two meeting that consisted of pre-test in the first meeting and post-test in the second meeting.

Here are the details of experimental class:

1. The First Meeting in experiment class ( October 6<sup>th</sup>, 2016)

The writer entered the classroom and introduced himself to the students. He also explained about the purpose of his research and why English learners need to learn about speaking. After five minutes self introduction, he checked the student's attendance list and called their names one by one to know them closer.

Moreover, in order to know students ability in speaking, the writer gave the pre-test to the students. He asked students to speak about holiday in front of the class and it took approximately 5 minutes.

2. The Second Meeting in Experiment Class ( February 7<sup>th</sup>, 2016)

For the second meeting in experiment class, the writer began the class by checking the attendance list and then gave the students general explanation about mind map. Next, the writer distributed example of mind map to the students. Afterward, the writer gave explanation about the mind map that he distributed before and he also taught them how to create a mind map.

Thereafter, the writer asked the students to make a simple mind map about random topic and he guided them during their activity. Next, the students presented their mind map in front of class. At the end of learning, the writer asked one student to give a conclusion about the lesson they have learnt

3. The Third Meeting in Experiment Class ( February 10<sup>th</sup>, 2016)

For the third meeting in experiment class, the writer began the class by checking the attendance list. Next, the writer started to explain the students how to

generate an idea, he taught them how to convey idea structurally using mind map. Then, he gave them several minutes to ask what they did not know.

Thereafter, the writer taught the students how mind map would help them to generate their idea in order to support their speaking ability. At the end of the class, the writer asked the students if they have any question. Finally the writer ended the teaching and learning process by saying salam.

#### 4. The Fourth Meeting in Experiment Class ( February 13<sup>th</sup>, 2016)

For the fourth meeting in experiment class, the writer asked the students to explain about mind map in order to review the lesson. Then, the writer explained that commonly mind map uses color to a keyword in the map. The functions is to make them easier in remembering the ideas they have generated and the color would help them to speak structurally based on their mind map. Afterward, the writer asked students to ask everything related to the lesson.

At the end of the class, the writer asked the student to create a mind map about holiday as their homework. Finally the writer asked some students to give a conclusion and finally the writer ended the lesson by saying salam.

#### 5. The Fifth Meeting in Experiment Class ( February 14<sup>th</sup>, 2016)

For the third meeting in the experiment class, the writer gave them post-test of speaking about the same topic as in the first meeting but in this meeting the students speak based on their mind map that the writer asked them to create as their homework in the fourth meeting.

The writer used post-test in order to know if there any improvement of students speaking ability after he gave them treatment using mind mapping as

strategy. At the end of the class, the writer chose six students and asked them to meet him after zuhur, because he wanted to interview them in order to know how mind mapping strategy improves their speaking ability.

Here are the details of control class:

1. The First Meeting in Control Class (February 7<sup>th</sup>, 2016)

The writer entered the classroom and introduced himself to the students. He also explained about the purpose of his research and why English learners need to learn about speaking. After five minutes self introduction, he checked the student's attendance list.

Moreover, in order to know students ability in speaking, the writer gave the pre-test to the students. He asked students to speak about holiday in front of the class and it took approximately 5 minutes.

2. The Second Meeting in Control Class (February 14<sup>th</sup>, 2016)

For the second meeting in control class, the writer started the class by checking students' attendance list then he explained the purpose of the second meeting. In this meeting the writer gave the students post-test to measure their speaking ability and compared the result to the experiment class. The writer asked them to speak about holiday same as the first meeting.

## **2. Test**

Test was given to the students to measure the students' ability in speaking. There were two kinds of test that the writer used in this study. The first test called pre-test and the second was post-test. Pre-test was given at the beginning of the

meeting before the treatment was conducted and the pre-test was speaking activity about holiday. Meanwhile, post-test was done after the treatment was applied by writer and it was speaking activity about holiday referred to the mind map they have created.

### **3. Interview**

Borg and Gall (1983) mentioned that there are three main types of interview: structured, semi-structured, and unstructured. In this study, the writer chose semi-structured interview to get the information from the interviewee. Thus, it serves as a source to understand how mind mapping strategy improves students' speaking ability.

The interview requires the data collection through direct interaction between the writer and the participant. It therefore obtains detailed information which reveals in-depth responses from interviewees. Additionally, the interview was recorded and the interviewees were aware of it.

The writer made an appointment with six students and told them that he would hold an interview after zuhur. The interviewee were two of that have the highest score, two who have the middle score and the last two who have the lowest score.

### E. Rubric

The rubric was adapted from David P. Harris (2007) in the book *Testing English as A Second Language* and modified by the writer based on the aim of the research.

**Table 3.2. The Rubric of Speaking**

Level	Score	Indicators
FLUENCY	25	Speak fluently, no significant pause.
	20	Speak well enough, pause here and there.
	15	Speak diffluent, too many pause.
	10	Speak unclearly.
VOCABULARY	25	Use key diction, supporting diction, additional.
	10	Use supporting diction and additional diction.
	15	Use supporting diction
	10	There are no key diction, supporting diction and additional diction
COMPREHENSION	25	Understand the topic without any difficulties.
	20	Understand most of the topic, there are some repetitions.
	15	Understand only a little about the topic, there are many repetitions.
	10	Understand too little about the topic.
PRONUNCIATION	25	The pronunciation is very clear and easily understood.
	20	Easily understood the word. Despite, the influence of mother tongue can be detected.
	15	The pronunciation is not really clear, but it can be understood by the listener.
	10	The pronunciation is not clear.

This rubric was used to measure the students' achievement in their speaking in pre-test and post-test in order to know students speaking ability. The highest score is 100 points if students could speak clearly. And the lowest score is 40 points if they cannot utilize their English well.

## F. Data Analysis

### 1. The Analysis of Test

In analyzing the data that were collected from the test, the writer used statistical formula from to Sudjana (2002) to get mean score, standard deviation, and t-score.

#### a. Mean

The writer calculated the Mean of students' scores, the formula is:

$$X = \frac{\sum FiXi}{\sum Fi}$$

Where:

X : mean (average score)

Fi : frequency

Xi : middle score of interval class

FiXi : the amount of multiplication between the frequencies and the middle scores of interval class

#### b. Standard Deviation

To find the standard deviation, the formula is:

$$SD_d = \sqrt{\frac{\sum D^2}{N} - \left(\frac{\sum D}{N}\right)^2}$$

Which:

SD<sub>d</sub> : Standard Deviation Difference

$\sum D$  : Total of difference score

N : Refers to total sample

c. T-test

T-test is used to see the significant differences between two means.

According to the formula is:

$$t_0 = \frac{MX - MY}{SX - Y}$$

Where:

T : t-test

MX : the mean score of deviation experimental group

MY : the mean score of deviation of control group

$S_{X-Y}$  : standard error of the mean difference between two variables X (experiment group) and Y (control group).

## 2. Data Analysis of Interview

The interviews analysis were transcribed and coded into two themes; 1) Students perception on implementation of mind mapping strategy, and 2) Students difficulties in learning speaking. The transcripts are single-spaced with double spacing between speakers. Furthermore, all of the transcriptions were done in Indonesian. Translation to English was in the report, not in the transcript. To maintain the reliability of data from interview the transcriptions was crosschecked by an experienced.

The transcripts, then, was analyzed thematically. Mckay (2006) opined that the analysis was mainly based on the transcript, but complemented by notes that were taken during the session. The finding of thematic analysis reported in narrative.

#### **G. Research Writing Guide Book**

The book that is used as a guide in this study was “Panduan Penulisan Skripsi Mahasiswa Fakultas Tarbiyah UIN Ar-Raniry 2014” published by Tarbiyah Faculty, Islamic State University Ar-Raniry.

## CHAPTER IV

### DATA ANALYSIS

#### A. The Data Analysis of the Tests

The test was given to the students to measure the students' speaking ability before and after the treatment was given. There were two tests in which the students participated; the pre-test and post-test. The writer took class 1a (experiment group) and class 1b (control group) of MAS Darul Ihsan as the sample of this research. To obtain the result of Mean, Standard Deviation, and T-test, the writer did several steps:

1. Mean

a. Finding the range of score

$$R = H - L$$

b. Finding the interval class

$$I = 1 + (3,3) \log n$$

c. Finding the space of interval class

$$P = \frac{R}{I}$$

d. Finding the mean score

$$X = \frac{\sum FiXi}{\sum Fi}$$

2. Standard Deviation

$$SD_d = \sqrt{\frac{\sum D^2}{N} - \left(\frac{\sum D}{N}\right)^2}$$

## 3. T-test

$$t_0 = \frac{MX - MY}{SX - Y}$$

Table 4.1 The students' score of pre-test

No	Control class (1b)		Experiment class (1a)	
	Initial	Pre-test	Initial	Pre-test
1	AR	55	AF	55
2	AF	65	AR	50
3	AA	65	Ard	55
4	AN	40	AZ	40
5	DS	55	AQ	45
6	FR	50	BH	70
7	FK	50	FR	45
8	IAS	60	FS	60
9	KR	45	Ju	50
10	MNHi	60	KKa	50
11	MNHa	55	KKi	55
12	MI	65	MA	45
13	MHTT	65	MPI	50
14	MF	40	MM	45
15	MIH	50	Mu	70
16	MIZ	55	MAR	60
17	MN	40	MI	55
18	MT	70	MN	50
19	PP	70	MZ	60
20	SSDD	75	MHDH	40
21	SSZ	55	MY	75
22	TSF	45	RFZ	65
23	TM	55	RT	40
24			SIM	65
25			SN	75
26			TJA	65
27			ZAS	60
	<b>Lowest Score</b>	<b>40</b>		<b>40</b>
	<b>Highest Score</b>	<b>75</b>		<b>75</b>

To analyze the data of the tests, the writer calculated the data by using some steps: First, the Range (R) of the score in control group was determined by using the formula:

$$R = H - L$$

Where:

R : the range of the score

H : highest score

L : lowest score

The highest score of pre- test was 75 and the lowest score was 40. Thus the range is:

$$R = 75 - 40$$

$$R = 35$$

Next, the interval class was identified by using formula bellow:

$$I = 1 + (3,3) \log n$$

Where:

I : the amount of interval class

n : the amount of sample

3,3: constant value

$$I = 1 + (3,3) \log 23$$

$$I = 1 + (3,3) 1.36$$

$$I = 5.49 \quad \approx 6$$

Then, the space of interval class was found by using the following pattern:

$$P = \frac{R}{I}$$

Where:

P : interval space

R : the range of score

I : the amount of interval class

$$P = \frac{35}{6}$$

$$P = 5.83 \quad \approx 6$$

From interval and range of interval class result, the frequency distribution table was presented in the following table:

Table 4.2 The frequency distribution table of students' pre-test score

<b>Interval Class</b>	<b>Xi</b>	<b>Fi</b>	<b>FiXi</b>
40-45	42.5	5	212.5
46-51	48.5	3	145.5
52-57	54.5	6	327
58-63	60.5	2	121
64-69	66.5	4	266
70-75	72.5	3	217.5
		<b><math>\Sigma 23</math></b>	<b><math>\Sigma 1289.5</math></b>

Where:

$X_i$  : the middle score of interval class

$F_i$  : frequency

$X_i F_i$ : the amount of multiplication between the frequencies and the middle scores of interval class

Based on the frequency distribution above, the writer determined the mean score by using following formula:

$$X = \frac{\sum F_i X_i}{\sum F_i}$$

$$X = \frac{1289.5}{23}$$

$$X = 56.06$$

The same steps were used to identify the mean score for pre-test of experiment class. First, the Range (R) of the score, the highest score of pre- test was 75 and the lowest score was 40.

$$R = H - L$$

$$R = 75 - 40$$

$$R = 35$$

Next, the interval class:

$$I = 1 + (3,3) \log n$$

$$I = 1 + (3,3) 27$$

$$I = 1 + (3,3) 1.43$$

$$I = 5.7 \quad \approx 6$$

Then, the space of interval class:

$$P = \frac{R}{I}$$

$$P = \frac{35}{6}$$

$$P = 5.83 \quad \approx 6$$

Table 4.3 The frequency distribution table of students' pre-test score

<b>Interval Class</b>	<b>Xi</b>	<b>Fi</b>	<b>FiXi</b>
40-45	42.5	7	297.5
46-51	48.5	5	242.5
52-57	54.5	4	218
58-63	60.5	4	242
64-69	66.5	3	199.5
67-72	69.5	4	278
		<b><math>\Sigma 27</math></b>	<b><math>\Sigma 1477.5</math></b>

Based on the frequency distribution above, the mean of pre-test score was

$$X = \frac{\sum F_i X_i}{\sum F_i}$$

$$X = \frac{1477.5}{27}$$

$$X = 54.72$$

After following the steps to calculate the mean score for pre-test of control class and experiment class, the result for those calculations were 56.06 and 54.72.

Table 4.4 The students' score of post-test

No	Control class (2b)		Experiment class (2a)	
	Initial	Post-test	Initial	Post-test
1	AR	60	AF	65
2	AF	70	AR	60
3	AA	60	Ard	70
4	AN	40	AZ	60
5	DS	55	AQ	60
6	FR	60	BH	85
7	FK	45	FR	55
8	IAS	65	FS	75
9	KR	60	Ju	60
10	MNHi	50	KKa	70
11	MNH	60	KKi	65
12	MI	65	MA	50
13	MHTT	45	MPI	70
14	MF	55	MM	65
15	MIH	65	Mu	80
16	MIZ	45	MAR	75
17	MN	55	MI	70
18	MT	65	MN	65
19	PP	60	MZ	75
20	SSDD	70	MHDH	50
21	SSZ	50	MY	90
22	TSF	50	RFZ	80

23	TM	60	RT	45
24			SIM	80
25			SN	90
26			TJA	75
27			ZAS	75
<b>Lowest Score</b>		<b>40</b>		<b>45</b>
<b>Highest Score</b>		<b>70</b>		<b>90</b>

The steps and formula which were used to analyze post-test was not different from the formula used to analyze pre-test. The first step was identifying the range (R) of the score in control class by using the formula:

$$R = H - L$$

$$R = 70 - 40$$

$$R = 30$$

Next step was determining the number of class or interval class (I) by applying the following pattern:

$$I = 1 + (3,3) \log n$$

$$I = 1 + (3,3) \log 23$$

$$I = 1 + (3,3) 1.36$$

$$I = 5.49 \quad \approx 6$$

After getting the calculation result, then thus data was imported to the space of interval class:

$$P = \frac{R}{I}$$

$$P = \frac{30}{5}$$

$$P = 6$$

Next step was creating frequency distribution table.

Table 4.5 The frequency distribution table of students' post-test score in control class

<b>Interval Class</b>	<b>Xi</b>	<b>Fi</b>	<b>FiXi</b>
40-45	42.5	4	170
46-51	48.5	3	145.5
52-57	54.5	3	163.5
58-63	60.5	7	423.5
64-69	66.5	4	266
70-75	72.5	2	145
		<b><math>\Sigma 23</math></b>	<b><math>\Sigma 1313.5</math></b>

Thus, the mean score of the table could be identified by using following formula:

$$X = \frac{\sum FiXi}{\sum Fi}$$

$$X = \frac{1313.5}{23}$$

$$X = 57.11$$

The same steps were used to identify the mean score for post-test of experiment class. First, the Range (R) of the score, the highest score of post- test was 90 and the lowest score was 45.

$$R = H - L$$

$$R = 90 - 45$$

$$R = 45$$

Next, the interval class:

$$I = 1 + (3,3) \log n$$

$$I = 1 + (3,3) 26$$

$$I = 1 + (3,3) 1.43$$

$$I = 5.7 \qquad \approx 6$$

Then, the space of interval class:

$$P = \frac{R}{I}$$

$$P = \frac{45}{6}$$

$$P = 7.5 \qquad \approx 8$$

Table 4.6 The frequency distribution table of students' post-test score in experiment class

<b>Interval Class</b>	<b>Xi</b>	<b>Fi</b>	<b>FiXi</b>
45-50	47.5	3	142.5
51-56	53.5	1	53.5
57-62	59.5	4	238
63-68	65.5	4	262
69-74	71.5	4	286
75-80	77.5	8	620
81-86	83.5	1	83.5
87-92	89.5	2	179
		<b><math>\Sigma 27</math></b>	<b><math>\Sigma 1864.5</math></b>

Based on the frequency distribution above, the mean of post-test experiment class was:

$$X = \frac{\sum FiXi}{\sum Fi}$$

$$X = \frac{1864.5}{27}$$

$$X = 69.05$$

After following the steps to calculate the mean score for pos-test of control class and experiment class, the result for those calculations were 57.11 and 69.05.

## B. Examining Hypothesis

In examining the hypothesis, the writer used “t” test ( $t_0$ ) to determine significant difference in examining students’ score.

$$t_0 = \frac{MX - MY}{S_{X-Y}}$$

Where:

T : t-test

MX : the mean score of deviation experimental group

MY : the mean score of deviation of control group

$S_{X-Y}$  : standard error of the mean difference between two variables X (experiment group) and Y (control group).

In examining hypothesis, the writer needed to firstly determine null hypothesis ( $H_0$ ) and alternative hypothesis ( $H_a$ ).

$H_0$  = Mind mapping strategy cannot improve students’ speaking ability.

$H_a$  = Mind mapping can improve students speaking ability.

Then, the regulation was  $H_a$  would be accepted if  $T_{test} > T_{table}$ , otherwise  $H_0$  would be not accepted.

The next steps, the writer listed the post-test and pre-test score in order to find out the differences score between those tests.

Table 4. 7 Students' pre-test and post-test score

No	Experiment		Control		Pretest - posttest t (X)	Pretest- posttest (Y)	X <sup>2</sup>	Y <sup>2</sup>
	Post- test	Pre- test	Post- test	Pre- test				
1	65	55	60	55	10	5	100	25
2	60	50	70	65	10	5	100	25
3	70	55	60	65	15	-5	225	25
4	60	40	40	40	20	0	400	0
5	60	45	55	55	15	0	225	0
6	85	70	60	50	15	10	225	100
7	55	45	45	50	10	-5	100	25
8	75	60	65	55	15	10	225	100
9	60	50	60	45	10	15	100	225
10	70	50	50	60	20	-10	400	100
11	65	55	60	55	10	-5	100	25
12	50	45	65	65	5	0	25	0
13	70	50	45	65	20	-20	400	400
14	65	45	55	40	20	15	400	225
15	80	70	65	50	10	15	100	225
16	75	60	45	55	15	-10	225	100
17	70	55	55	40	15	15	225	225
18	65	50	65	70	15	-5	225	25
19	75	60	60	70	15	-10	225	100
20	50	40	70	75	10	-5	100	25
21	90	75	50	55	15	-5	225	25
22	80	65	50	45	15	5	225	25
23	45	40	60	55	5	5	25	25
24	80	65			15		225	
25	90	75			15		225	
26	75	65			10		100	
27	75	60			15		225	
	<b>N<sub>x</sub> = 27</b>		<b>N<sub>y</sub> = 23</b>		<b>∑365</b>	<b>∑20</b>	<b>∑5375</b>	<b>∑2050</b>

Where:

X and Y : difference score

N : total sample

From the table above, it could be found the mean score of variable X and Y by using the following:

$$\text{Variable X} \quad MX = \frac{\sum X}{Nx}$$

$$MX = \frac{\sum 365}{27}$$

$$MX = 13.52$$

$$\text{Variable Y} \quad MY = \frac{\sum Y}{Ny}$$

$$MY = \frac{\sum 20}{23}$$

$$MY = 0.87$$

Next, finding the score of standard deviation difference between the difference score of two variables, X and Y by using the following formula:

$$\text{Variable X} \quad SDx = \sum X^2 - \frac{(\sum X)^2}{Nx}$$

$$= 5375 - \frac{(365)^2}{27}$$

$$= 5375 - \frac{133225}{27}$$

$$= 440.74$$

$$\begin{aligned}
 \text{Variable Y} \quad SD_y &= \sum Y^2 - \frac{(\sum Y)^2}{NY} \\
 &= 2050 - \frac{(20)^2}{23} \\
 &= 2050 - \frac{400}{23} \\
 &= 2032.60
 \end{aligned}$$

Then, calculate the standard error of the mean difference ( $S_{X-Y}$ ) between variable X and Y.

$$\begin{aligned}
 S_{X-Y} &= \sqrt{\frac{SD_X + SD_Y}{N_X + N_Y - 2} \cdot \left( \frac{1}{N_X} + \frac{1}{N_Y} \right)} \\
 &= \sqrt{\frac{440.74 + 2032.60}{27 + 23 - 2} \cdot \left( \frac{1}{27} + \frac{1}{23} \right)} \\
 &= \sqrt{\frac{2473.43}{48} \cdot (0.037 + 0.043)} \\
 &= 2.03
 \end{aligned}$$

From the previous calculation,  $M_x$  was 13.52 and  $M_y$  was 0.87 while the score of  $S_{x-y}$  was 2.03. Then  $t_0$  score can be calculated by using following formula:

$$\begin{aligned} t_0 &= \frac{MX - MY}{SX - Y} \\ &= \frac{13.52 - 0.87}{2.03} \\ &= 6.23 \end{aligned}$$

Next, calculate degree of freedom. Interpreting the  $t_0$  by determining degree of freedom by using following formula:

$$\begin{aligned} Df &= (N_x + N_y) - 2 \\ &= (27 + 23) - 2 \\ &= 48 \end{aligned}$$

Hypothesis of this research used  $T_{table}$  at significant level of  $\alpha = 0,05$ . According to  $T_{table}$  list, the value of distribution table at 48 as degree of freedom was 1.68. Since  $T_{test} > T_{table}$   $6.23 > 1.68$ ,  $H_0$  was rejected and  $H_a$  was accepted.

### **C. The Analysis of the Interview**

Interview used in this research aims to answer the second research question. It is proposed to gain in-depth understanding about how mind mapping strategy improves students speaking ability. The interview was focused on two topics, 1) students' perception on the implementation of mind mapping strategy,

and 2) students' difficulties in learning speaking. In this section, the writer analyzes the interview obtained from the participants and parted into each topic.

1. Students perception on the implementation of mind mapping strategy

Most of students never heard about mind mapping strategy before research conducted. They believed by implementing this strategy they can improve their speaking ability because this strategy helped them to generate and organize ideas, enrich vocabulary, and more fluently in speaking English.

In contrast, some of students faced some obstacles when they used mind mapping strategy such as lack of idea, forgot what they have written in the map and nervous to express their idea based on their map. Thus, all of those statements based on the question: "have you ever heard about mind mapping strategy before?", "does mind mapping strategy improve your speaking ability?", and "did you faced any obstacles in using mind mapping strategy?"

2. Students difficulties in learning speaking

Generally, students shared the same experience when they perform speaking. Some students were lack of confidence in speaking English especially when they have to speak in public because they believed that they are have not enough vocabulary to speak effectively. The students tended to use body language to replace words when they could not express it in verbal language in order to let the idea conveyed. In addition, the students suggest other students who find it difficult in speaking English to practice more in order to improve their speaking ability. Thus, all of those statements based on the question: "what are the difficulties you faced in speaking English?", "how do you overcome your

speaking problem?” and “what are your solution to other students who still difficult to express their speaking?”

#### **D. Discussion**

The aim of this study was to investigate the use of mind mapping strategy to improve students' speaking ability. The data to answer the research questions and hypothesis of this study were successfully collected by writer in the field.

Based on the analyzed data, the research finding showed some important points that need to be discussed. The first point related to the first research question of this study, the question was about does mind mapping strategy improve students' speaking ability. The result showed that using mind mapping strategy improved students' speaking ability. It was accordance to the result of post-test control class and post-test experiment class where students' scores were improved (mean of post-test control class: 57.11, mean of post-test experiment class: 69.05).

The result of this study has shown a similarity with the work found by Indarwaty (2012) that mind mapping strategy able to improve the seventh year students' achievement on speaking ability at SMPN 3 Kedungwaru Tulungagung in the academic year 2011/2012.

According to the data from interview analysis, almost all students had the positive responses toward mind mapping strategy to improve their speaking ability. Students easier to organize their idea, they would get new vocabulary and

perceived that they speak more fluent. Besides, they thought that mind mapping strategy assisted them to improve their speaking ability.

The result, the analysis of hypothesis showed that  $H_a$  “mind mapping strategy can improve students’ speaking ability” was accepted, since the result of t-test indicated  $t_0$  value is bigger than  $t_{table}$  value ( $6.23 > 1.68$ ). Eventually, it can be summarized that mind mapping strategy improves students’ speaking ability.

## CHAPTER V

### CONCLUSIONS AND SUGGESTIONS

#### A. Conclusion

After analyzing the data and discussing the result in the previous chapter, the writer would like to draw conclusions as follow:

1. Applying mind mapping strategy can improve students' speaking ability for first grade students at MAS Darul Ihsan. Based on the result of students' score which post-test scores in experiment class was higher than post-test scores in control class (mean of post-test experiment class was 69.05 while mean of post-test control class was 57.11). Also, the improvement of students' speaking ability was showed in *t-test* calculation where *H<sub>a</sub>* (mind mapping strategy can improve students' speaking ability) is accepted. In other words, using mind mapping as a strategy in teaching English speaking will improve students' speaking ability.
2. Generally, the students perceived that mind mapping assisted them to improve their speaking ability, they believed that mind mapping help them to generate idea. Before they use mind mapping, they perceived speaking is difficult especially in generating idea and organize it. Commonly, mind mapping uses picture to replace main topic, the picture helps students to think better and to limit a topic, so then it makes them

easier to develop idea. As the result, their speaking will be systematically and fluently

## **B. Suggestions**

Based on the result from the tests and interview, the writer would like to over several suggestions:

1. Teachers might use mind mapping strategy as their reference in teaching speaking for their students .
2. For researchers, the researchers can use this research for further study about applying mind mapping strategy in others skills, such as writing, listening, and speaking.

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**Nomor : Un.07/DT/TL.00/2401/2015**

**TENTANG**

**PENGANGKATAN PEMBIMBING SKRIPSI MAHASISWA FAKULTAS TARBIYAH DAN KEGURUAN UIN**  
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b. Bahwa namanya yang tersebut dalam Surat Keputusan ini dianggap cakap dan mampu untuk diangkat dalam jabatan sebagai Pembimbing Skripsi dimaksud.
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3. Undang-undang Nomor 12 Tahun 2012, tentang Pendidikan Tinggi;  
4. Peraturan Pemerintah Nomor 13 Tahun 1991, tentang Pokok-pokok Organisasi IAIN;  
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8. Peraturan Menteri Agama RI Nomor 12 Tahun 2014, tentang Organisasi dan Tata Kerja UIN Ar-Raniry Banda Aceh;  
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10. Keputusan Menteri Agama Nomor 40 Tahun 2008, tentang Statuta IAIN Ar-Raniry;  
11. Surat Keputusan Rektor IAIN Ar-Raniry Nomor. IN/3/R/Kp.00.4/394/2007, tentang Pemberian Kuasa dan Pendelegasian Wewenang Dekan;
- Memperhatikan** : Keputusan Seminar Proposal Skripsi Program Studi Pendidikan Bahasa Inggris Fakultas Tarbiyah dan Keguruan UIN Ar-Raniry Tanggal 28 Maret 2015

**MEMUTUSKAN**

**Menetapkan** :

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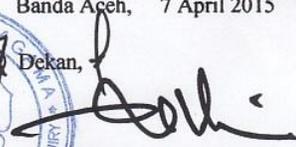
Program Studi : **Pendidikan Bahasa Inggris**

Judul Skripsi : **The Use of Mind Mapping Strategy to Improve Students' Speaking Ability**

- KEDUA** : Kepada pembimbing yang namanya tersebut di atas diberikan honorarium sesuai dengan peraturan yang berlaku;
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- KEEMPAT** : Surat Keputusan ini berlaku sampai akhir Semester Ganjil Tahun Akademik 2015/2016.
- KELIMA** : Surat Keputusan ini berlaku sejak tanggal ditetapkan dengan ketentuan segala sesuatu akan diubah dan diperbaiki kembali sebagaimana mestinya apabila kemudian hari ternyata terdapat kekeliruan dalam penetapan ini.

Banda Aceh, 7 April 2015

Dekan,

  
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2. Ketua Prodi PBI Fak. Tarbiyah dan Keguruan;
3. Pembimbing yang bersangkutan untuk dimaklumi dan dilaksanakan;
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Lamp : -

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Kepada Yth.

Di -

Tempat

Dekan Fakultas Tarbiyah dan Keguruan (FTK) UIN Ar-Raniry Darussalam Banda Aceh dengan ini memohon kiranya saudara memberi izin dan bantuan kepada:

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Semester : IX  
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Untuk mengumpulkan data pada:

**Madrasah Aliyah Swasta Darul Ihsan**

Dalam rangka menyusun Skripsi sebagai salah satu syarat untuk menyelesaikan studi pada Fakultas Tarbiyah dan Keguruan UIN Ar-Raniry yang berjudul:

**The Use of Mind Mapping Strategy to Improve Students' Speaking Ability**

Demikianlah harapan kami atas bantuan dan keizinan serta kerja sama yang baik kami ucapkan terima kasih.

Banda Aceh, 11 Januari 2016

Dekan,  
Wakil Dekan Bidang Akademik



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Yang bertanda tangan di bawah ini, Kepala MAS Darul Ihsan Gampong Siem, Kecamatan Darussalam, Kabupaten Aceh Besar, dengan ini menerangkan bahwa;

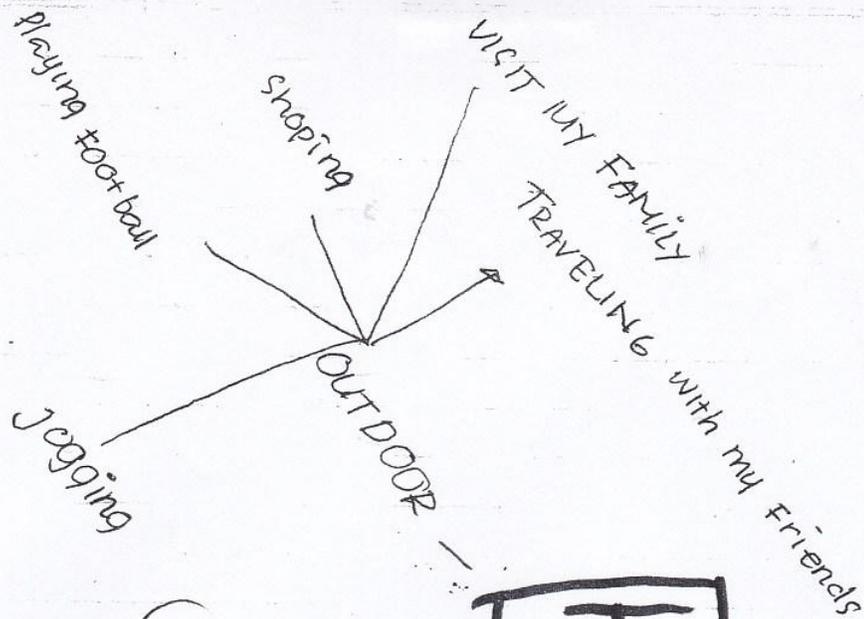
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Benar yang namanya tersebut diatas adalah mahasiswa FTK UIN Ar-Raniry Darussalam Banda Aceh yang telah selesai melaksanakan Penelitian dan Pengumpulan Data Skripsi di Madrasah Aliyah Swasta Darul Ihsan dengan judul:

**“(THE USE OF MIND MAPPING STRATEGY TO IMPROVE STUDENTS SPEAKING ABILITY)”**

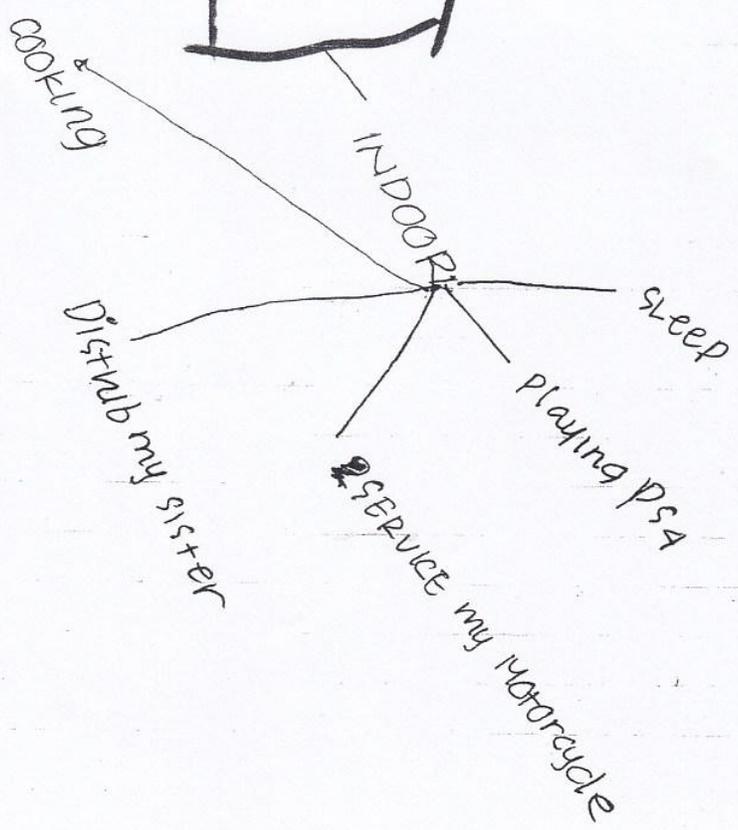
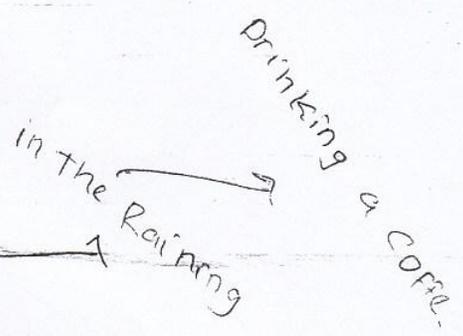
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Siem, 3 Februari 2016  
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JUANDA

# Holiday



## **Interview Instrument**

1. Have you ever heard about mind mapping strategy before?
2. Does mind mapping strategy improve your speaking ability?
3. Did you face any obstacles in using mind mapping strategy?
4. What are the difficulties you faced in speaking English?
5. How do you overcome your speaking problem?
6. What are your solution to other students who still difficult to express their speaking?

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Banda Aceh (2011-2015)

Banda Aceh, 15 February, 2016



(Asrifal Mirza)