CHAPTER I

INTRODUCTION

1.1 The Background of The Research

In learning a foreign language, especially English, the listening ability is important because verbal communication must be able to communicate as we know if the listening ability is very important for developing an understanding of concepts in communication. Based on Russel (in Hasyuni, 2006: 24) also said that listening ability is listening with comprehension, attention, and appreciation. In a sense, when the listener is listening, the listener must comprehend and pay attention and also appreciate what is being listened to. However, some schools and even universities had obstacles to listening ability and this causes students' listening ability to be on the verge of average. The researcher can concluded this because (Arvinia Riski Putri: Jakarta State University, 2016) stated that of 23 fourth-grade students, only 5 students get listening scores above 75, and 18 other students scored below 75. Of course, this is not good. But in reality, there are still many students who find it difficult in listening ability. Based to Azmi Bingol, Celik, Yidliz, and Tugrul Mart (2014), there are a lot of difficulties that learners may encounter in their listening ability, such as quality of recorded materials, cultural differences, accent, unfamiliar vocabulary, length and speed of listening.

From the experience of the researcher when doing a pre-research in first grade especially students in class VII-4 of SMPN 1 Labuhan Deli, the researcher found students' difficulties in listening abilities. This was obtained when interviewing the English teacher at the school who explained that the students' listening ability was still far below the average, this was caused by differences in the accents that students listen to and students' speed of listening. Based on the explanation of the English teacher, the researcher doing the research gave 5 questions written on

the whiteboard as a test to find out the students' difficulty in listening ability. But before giving a listening test, the researcher played English audio from the phone by connecting to a loudspeaker and having students listen to the audio. For evidence to prove the statement above, the researcher makes the score table, as follows:

Table 1.1 *The Score of Students' Listening Test in Class VII-4*
of SMPN 1 Labuhan Deli

No.	Students' Initial Name	Score	Level
1	TS	88	Excellent
2	RW	76	Very Good
3	KH	69	Good
4	YS	70	Good
5	BM	55	Poor
6	UI	76	Very Good
7	JL	70	Good
8	NN	71	Good
9	OD	84	Excellent
10	PY	66	Good
11	RU	79	Very Good
12	DS	68	Good
13	GQ	59	Fair
14	RB	73	Very Good
15	CU	49	Very Good
16	VW	57	Fair
17	MD	63	Fair
18	OR	86	Excellent
19	RX	58	Fair
20	SR	55	Poor

21	HS	61	Fair
22	SG	72	Good
23	LJ	64	Fair
24	RR	75	Very Good
25	FS	70	Good
26	ME	64	Fair
Total Score		1.778	
Mean Score		68,38	

Based on the table of 26 students in VII-4 above, the researcher got the mean score of students' listening test was 68,38. From the results of the students' listening test scores, the researcher found that 3 students got a score the level of excellent, 5 students got a score the level of very good, 8 students got a score the level of good, 7 students got a score with the level of fair, 3 students got a score with the level of poor and 0 students got a score with the level of very poor. The students' listening ability scored are based on picking out a word, recognizing the correct tense, deducing the meaning of unknown words from context, and identifying the main ideas it is all important. The researcher concluded that the score of students' listening ability obtained by the students in class VII-4 of SMPN 1 Labuhan Deli is still far below the average of the KKM, and it proved that the students had difficulties in listening ability.

To overcome difficulties in listening ability, teachers need an innovative learning method that can create an active and fun learning atmosphere so that the difficulties in listening ability by these students can be overcome, and one of them is the Index Card Matching method. The Index Card Matching method is a learning method in which students get a piece of card containing the questions and the student looks for another card containing the answers that match the questions they get (Yatim, 2009). Even, (Silberman, 2006) in (Astriyanti & Anwar, 2016: 40-52), explains that the index card match strategy is an active and fun way to previous the material given. That

means, the index card match strategy is an active and fun way to remember the previously taught learning materials.

Index card matching uses cards as a learning method that has an affect on listening ability because this method can help students be more active and responsive in finding cards. Research by Sarinarulita et al. (2014) showed that learning using index card matches was able to increase students' learning activity and learning achievement. In this research, the researcher used digital storytelling as a learning media which is a combination of various multimedia features such as graphics, text, recordings, sounds, songs music, and videos with art storytelling to present certain material; or points with a certain duration of time and packaged in an attractive digital format. This will certainly make students more active in their listening ability. The researcher will present a storytelling video with a duration of 2-3 minutes. Then when finished, the researcher will give a piece of card to each student in the class. The pieces of the card contain questions and answers related to the video storytelling presented by the researcher.

From the explanation above, the researcher feels confident in the applying index card matching method by digital storytelling in improving students' listening ability. The researcher took the first-grade students of SMPN 1 Labuhan Deli as the object of the research because the researcher felt that the method could be applied in this class. There will be two classes taken to be the research sample, and the two classes will be divided into a control class and an experimental class. The problem above encourage the researcher to conduct a research entitled: "**The Application of Index Card Matching Method; Digital Storytelling in Improving Students' Listening Ability at First Grade of SMPN 1 Labuhan Deli**."

1.2 The Problem of the Research

A research problem is a question that a researcher wants to answer or a problem that a researcher wants to solve. Notoatmodjo (2002: 27) stated that research problem, in general, can be interpreted as a gap between what should be and what is happening about something, or between the reality that exists or occurs with what should exist or occur and between expectations and reality From the relation of the background of the study above, the researcher formulated the research problem as follows:

Does the application of the index card matching method; digital storytelling significant in improving students' listening ability at first grade of SMPN 1 Labuhan Deli?

1.3 The Objective of the Research

Research objectives describe concisely what the research is trying to achieve. Based to Hurtado de Barrera (2005: 2) that manifest that research objectives go through different levels as the perceptual level where explore and describe. From the research problem above, the objective of this research was:

To find out the significant of the application of the index card matching method; digital storytelling in improving students' listening ability at first grade of SMPN 1 Labuhan Deli.

1.4 The Scope and Limitation of the Research

It was important to make the scope and limitation of the problem limited the problem. The scope about method in the listening ability are various listening competence learning methods. These methods include: lecture methods, discussion method and index card matching method (Tati Hendrawati blog's, 2021). But the limitation of the research are the Index Card Matching method in improving listening ability. That is way the researcher just focused to the research of index card matching method applying by digital storytelling in improving students' listening ability. In this case, the researcher applied the index card matching method where index card

matching is a learning method where students was got a card containing a question and the student would also look for another card containing answers that matched the questions students gets, then this was helped students become active and responsive in listening learning. The sample of this research was carried out in two classes where class VII-1 was the experimental class and VII-9 was the control class at SMPN 1 Labuhan Deli in the 2021/2022 academic year.

1.5 The Significance of the Research

The findings of this research are expected to gave useful information about the significantly index card matching method in improving students' listening ability. There are two kinds significance of this researcher, they are:

1. Theoretically

    a) For the students, it could be to enrich knowledge regarding new learning

       methods in improving students' listening ability by applying the Index Card Matching method.

    b) For the teachers, it could be to finding a reference on learning methods in improving students' listening ability in the classroom by applying the Index Card Matching method.

    c) For the other researchers, it could be to conduct the same learning method but with a different perspective.

2. Practically

    a) For the students, it would be had a positive impacted to supported in applying the Index Card Matching method to practice in the class in improving listening ability.

    b) For the teachers, it would be provide alternative solutions useful in improving listening ability by applying the Index Card Matching method in teaching practice in class.

c) For the other researchers, it would be to useful listening ability with Index Card Matching method.

1.6 The Hypothesis

H_o : The Application of the Index Card Matching Method; Digital Storytelling does not significant in Improving Students' Listening Ability at First Grade of SMPN 1 Labuhan Deli.

H_a : The Application of the Index Card Matching Method; Digital Storytelling significant in Improving Students' Listening Ability at First Grade of SMPN 1 Labuhan Deli.

1.7 Theoretical Framework

This part explained the framework that the researcher used to answered the research problem. The answered to the research problem are based on some of the theories explained in this research.

To answer the research problem, the researcher would be use the theory of listening ability from Hidayat's (2013: 21) theory about the meaning of listening ability. The researcher would be apply the Index Card Matching (ICM) method to students in class. It would be used as an activity for the research. And the researcher used digital storytelling as learning media. The activity is started by the researcher as a teacher who would be pre-test to the two classes selected as the research sample (experimental class and control class) and then review the previous learning materials in the form of discussed with students in class and then apply the index card matching method in the experimental class to got student scores. However, the main result that the researcher wanted to got is an increased in students' listening ability after the index card

matching method is applied in classroom learning. To analyzed the student involved in the application of this learning method, the researcher used the tests in the experimental class and the control class and also made observations in the two classes.

The test was used the theory from Brown (2004: 3) related to the test that could be used to analyzed how able students understand the learning material in class, the theory from Creswell (2012: 297) related to the Pre-Test which would be given to students before the learning method is applied, and the theory from Creswell (2010: 297) regarding the Post-Test which was gave to students after the learning method is applied. Not only that, the theory from Arikunto (Gunawan, 2013: 143) related to the observation that could be used to observed the situations in class and the conditions of the students. Those theories mentioned would had been using to analyzed the research problem posed by the researcher. The researcher would be provided conclusions about the overall learning activities carried out in class to students so that students understand the purpose of the research that has been carried out in class.

1.8 The Definition of Key Terms

1. The Application

   The application intended by the researcher in this research is the act of putting learning methods to improve the listening ability at the first grade of SMPN 1 Labuhan Deli in experimental class, while the learning method is the index card matching method.

2. Index Card Matching Method

   Hamruni (2011: 162) stated that index card match is the way fun and also active for reviewing learning materials. Not only that, Suprijono (2009: 120) said the index card match method is looking for a pair of cards used to repeat the previously given instructional material. Based on the definition of the experts above, the researcher concludes that index

card matching method is an active and fun way to repeat learning material by looking for card pairs.

3. Listening Ability

Machado (2012) states that listening ability is the first language art ability learned, and it develops before a child speaks. It means, that many children develop the ability to listen carefully to the speech of others during infancy and early childhood, while others do not. Based on the explanation, the researcher concludes if listening ability is the first ability learned by humans since childhood.

4. SMPN 1 Labuhan Deli

SMPN 1 Labuhan Deli is one of the junior high schools in the Deli Serdang district which has already been pointed out by the government to implement the inclusion educational system. In the Deli Serdang district, there are many junior high schools and one of them is SMPN 1 Labuhan Deli. The research, the researcher was doing the research at SMPN 1 Labuhan Deli. This school is located at Jalan Veteran No. 20, Tj. Gusta, Kec. Labuhan Deli, Kab. Deli Serdang, North Sumatra 20116.

CHAPTER II

REVIEW OF LITERATURE

2.1 Language

2.1.1 Definition of Language

Language is part of the most basic human abilities because language is acquired by humans from childhood. Language is a communication tool used by humans to convey ideas or feelings, and distribute knowledge and language is also the identity of a nation. In Smarapradhipa (2005: 1) language is communication between members of the public in the form of a symbol of the sound produced utilizing said, human. Meanwhile, Chomsky (2002: 1) stated that a language is a natural object, a component of the human mind physically represented in the brain and part of the species. Language is a system of arbitrary vocal symbol which permit all people in given to other people, who have learned the system of the culture, to communicate or to interact (Brown, 2001: 1).

Based on the definitions of the experts above, the researcher concludes that language is a symbol of sound represented in the brain and used to communicate or interact. Since people were born, language has been inherent in people. Of course, the first language people listen to is their mother tongue, because the mother tongue is the first language the people learned. With language, people could convey ideas or feelings, and knowledge to their interlocutors. Even, language can create a new relation between the people.

2.2 Ability

2.2.1 Definition of Ability

Ability is the capacity of individuals to perform various tasks in a specific job or enable one to do things well. Based on Heinle (in Collins Co Build School Dictionary of American English, 2008: 2) said that ability is the quality or skill that you have which can make it possible for you to do something. Sulaiman (2007: 112) defines ability as an inborn or learned trait that allows a person to complete their work, either mentally or physically. Then, Robert Kreitner (2005: 185) stated that ability is a stable characteristic related to a person's maximum physical and mental ability.

From the definition of the experts above, the researcher concludes the qualities or skills that enable someone to do work are called abilities. ability is a skill or quality that is born or learned that allows a person to complete work both mentally and physically. And the ability also affects the individual's capacity to perform the work, which is why everyone's ability is different.

2.3 Listening

2.3.1 Definition of Listening

Listening is one of the four abilities that must be learned in English learning. It is an active process of receiving and responding to spoken (and sometimes unspoken messages). Based on Brown (2001:247) listening is the major component in language learning and teaching because in the classroom learners do more listening than speaking. It means listening is the most important aspect of language learning and teaching since students listen more than they speak in the classroom. Helgesen (2003: 24) states that listening is an active, purposeful process of making sense of what we hear. The more often we hear, the more we could understood something. And another expert said that listening is a process of receiving what the speaker says (receptive orientation); constructing and representing meaning (constructive orientation); negotiating

meaning with the speaker and responding (collaborative orientation); and creating meaning through involvement, imagination, and empathy (transformative orientation) (Rost, 2002: 177).

From the expert definition above, the writer concludes that an individual can understood what the speaker saying, namely by listening to what is said and then responding to it. Listening is the major component in language learning and teaching to received what the speaker says to understood something and created meaning through involvement. When listening or responding to what is listening, the person really understand the meaning conveyed by the other person.

2.3.2 Types of Listening

Tyagi in (Feueacmrq, 2013) there are types of listening. He explained the types that exist in listening so that people know that there are also types of listening. And he hoped that people would be able to distinguish between the types. Here are the types of listening:

1) Appreciative listening is listening for pleasure and enjoyment. It is looking for ways to accepted and appreciated the other person through what they say. It is also seeking the opportunity to praised, such as listening to music.

2) Critical listening is listening to evaluate a message of purpose what the speaker says, criticize or otherwise pass judgment on what someone else says based on your evaluation. It focuses on evaluating whether the messages are logical and reasonable or not.

3) Active listening is listening in a way that demonstrated interested and encouraged continued speaking. It is probably the most important listening skill because it combines the skills of listening and responding to the speaker's comments, gave the speaker your personal opinion or advice, or drawing the ownership of the conversation away from the speaker.

4) Discriminative listening is the most basic form of listening. It is a type of listening for something specific but nothing else. It means that it does not involve the understood of the words or phrase's meaning but only the different sounds that are produced.

5) This type has similar to discriminative listening. That is also fundamental to all sub-types, but the difference is comprehension listening involved understanding and seeking the meaning of the messages that are being communicated.

Based on the expert above, the researcher concludes that these types of listening have their characteristics, which are the characteristics that distinguish one type from another type. So when people listen, these people have different listening abilities from other people because there is not only one type of listening but many types.

2.3.3 Elements of Listening

Listening is influenced by the elements that build listening to it. Based on Shockingawful in iRubric (2017: 1), it is stated that there are four elements in listening, they are:

1. Ability to Focus

    Ability to focus means the capability of students or listeners in listening to the material from the audio. Ability to focused define in two, focused on the ears to listen to the audio and focused on the eyes for reading and matching the text with the audio. Such as eyes may not be adapting well to the numerous distraction in a typical classroom and some noisy sounds from the outside of the classroom.

2. General Understanding

    General understanding means that the students or listeners can understood the main idea of the content of the text. The listeners are usually quick to understand the idea of the text. The listener can imagine catching the general meaning of something they hear.

3. Listening for Details

Listening for details is sometimes known as listening for specific information. It involves understanding the task and focusing to catch certain information. It will be easier to understand if listen in detail.

4. Accuracy of Answer

Accuracy of answers means the capability of students or listeners to answer the task with the correct answer. It involves understanding the text and vocabulary to get the correct answer.

The elements of listening to that underlie the listening. From the expert explanation above, the researcher uses listening elements for detail and accuracy of answers in the application of the index card matching method in listening learning. Without these elements, people will not be based on the ability to listen, these elements are important for people to listen.

2.3.4 The Process of Listening

Listening turns out to be a process that must be done, and that process becomes an important part of listening. Nunan (2001: 249) and Bebita Tyagi (2012) in their journals state that listening has five stages of the process that must be passed. The five stages are as follows:

1) Hearing

Perception of sound, not necessarily paying attention, you must hear to listen, but you do not need to listen to hear. Refer to as the response caused by sound waves stimulating the sensory receptors of the ear; it is a physical response; you must hear to listen, but you need not listen to hear (perception necessary for listening depends on attention).

2) Understanding

Which consists of analyzing the meaning is what we have heard and understanding symbols we have seen and heard. Referred to understand symbols we have seen and heard, we

must analyze the meaning of the stimuli we have perceived; symbolic stimuli are not only words but also sounds that have symbolic meanings as well. For successful interpersonal communication, the listener must understand the intended meaning and the context assumed by the sender.

3) Remembering

It means that an individual, in addition, to receiving and interpreting the message has also added it to the mind's storage bank, which means that the information will be remembered in our mind. This means that an individual has not only received and interpreted a message but has also added it to the mind's storage bank. In listening our attention is selective, and so too is our memory. What is remembered may be quite different from what was originally seen or heard.

4) Evaluating

The listener evaluates the message that has been received. It is at this point when active listeners weigh evidence, sort fact from opinion, and determine the presence or absence of bias or prejudice in a message. At this point, the active listener weighs evidence, sorts fact from opinion, and determines the presence or absence of bias or prejudice in a message.

5) Responding

A stage in which, according to response, the speaker checks if the message has been received correctly and gives good feedback.

When people listen, there are interrelated processes or sequences of listening that people had to went through. Without the process, it is impossible for people to do listening activities. That is way, process in listening very important to people to do listening activity.

2.3.5 Factors Affecting of Listening

Factors are things (conditions, events) that contribute to (influence) the occurrence of something. It greatly affects people's activities while listening. That's why, in listening several factors influence the listening. Based on Tarigan (2008: 105), factor affecting listening consists of:

1. Physical factor

   The physical condition of a listener is an important factor that determines the effectiveness and quality of effectiveness in listening. Health and physical well-being are important assets that determine the success of listening.

2. Psychological factors

   Psychological factors also affect the listening process. Positive psychological factors will have a good influence, while negative psychological factors will have a bad influence on listening activities.

3. Experience factor

   The experience factor is an important factor that affects the process of listening to someone. Lack of interest is the result of little or no experience in the field to be studied.

4. Attitude factor

   Basically, humans have two main attitudes, namely acceptance and rejection. People will be accept to the things that are attractive and profitable for their and reject the things that are not attractive and unfavorable to their, both of these have an impact on listening.

5. Motivation factor

   Motivation is one of the determinants of a person's success. If someone has a strong motivation, it is hoped that the person will succeed in achieving the goal, likewise with listening.

Motivation is one of the determinants of a person's success. If person has a motivation, it is hoped that the person will succeed in achieving the goal, as well as listening. If someone has motivation, then that person will easily learn to listen well.

6. Gender factor

Generally, between men and women have different attention and the way focus to things is also different. It turns out that the effect of gender factor differences on listening greatly affects people's listening activities.

7. Environmental factor

Environmental factors have a big influence on the learning success of students in general. Environmental factors in the form of physical environment and social environment.

8. Role in society factor

Listening ability can also be influenced by the role in society. The role in society is an important facto for improving listening skills.

The researcher stated that the factors mentioned by Tarigan above greatly affected listening. For people, these factors greatly affected the listening ability that the people have. These factors could be affected in listening, so that is what makes people found it difficulties to listen. That is the reason, each factor is related to each other, without exception.

2.3.6 Obstacles of Listening

In the listening process, several obstacles are often encountered. These obstacles greatly affected in the process of listening. These obstacles are also a barrier for people in the listening process. Based on Kembong Daeng (2007: 56-59) there are nine obstacles to listening, namely:

1) Limited facilities

   The unavailability of adequate books and recording devices, the condition of the study rooms that do not support listening lessons, and the large number of students in the class.

2) Factors of attention and listening habits that are still lacking

   This is still a lot related to the problem of classroom management in the teaching-learning interaction of listening.

3) Linguistic factors

   Factors that are the main obstacles in teaching listening are linguistic factors, namely starting and recognizing sounds at the phonological level and supra segmental signs such as pauses, intonation and so on.

4) Biological factors

   Students whose hearing is not good, for example, because of body parts especially the hearing organ that does not function properly.

5) Environmental factors

   If a class that is already large enough is trained to listen in a classroom or school environment full of noise and the hustle and bustle of the sound of traffic vehicles around it, then of course the results will not be good if listening learning is carried out in a classroom setting in a quiet environment.

6) Teacher factors

   Teachers who are sympathetic in appearance, skilled in presenting the subject matter, showing their liking or interest in the material being taught, like their students, and mastering

learning material will be more successful in teaching and listening to teachers than teachers who have opposite and conflicting characteristics the properties mentioned above.

7) Methodological factors

Good mastery of many methods that teach listening also allows for greater lesson success.

8) The factor of teaching materials

The level of difficulty of teaching materials should be adjusted to the development of students, both linguistic development and the development of psychological maturity. Learning materials that are too difficult can be frustrating for students. On the other hand, learning materials that are too easy can be boring for students. The level of difficulty of the presentation material should be at a level that can be called teachable (level can be taught).

9) Curriculum factor

A curriculum that is designed and structured well and clearly, will greatly assist teachers in teaching listening.

It turns out that listening also has obstacles that are often encountered in listening learning in class. And this has an impact on improving listening ability in the classroom. Every student has different obstacles.

2.4 Listening Ability

2.4.1 Definition of Listening Ability

Listening ability is necessary for building good communication with others because in a conversation it is necessary to understand the message conveyed. Based on Hidayat (2013: 21) argues that listening ability is also important to be mastered for its benefit in building good communication. Acep Hermawan (2011: 130) listening ability is a person's ability to digest and understand words or sentences uttered by a speech partner or certain media. And then. Rost in

Permatasari (2013: 19) says listening ability is the ability in receiving messages, constructing meaning, responding the utterances of the speakers in various ways depending on the purpose of communication.

From the explanations of the experts above, the researcher concluded that listening ability is a person's ability to digest messages and understand words or sentences spoken by speakers in various ways to build a good communicated. Each individual's listening ability is different. Therefore, the ability to listen to one individual cannot be equated with another individual. The individual's way of building communicated depends on the listening ability that the individual has.

2.4.2 Criteria of Listening Ability

A criterion is a measured that is the basis for assessed or determined of something. The criteria in listening are used to see the listen to abilities possessed by people. Based on Ariza et al. (2007: 110), these are some criteria of listening ability, such as:

1) Can understand a different point of view;

2) Can understand the opinions;

3) Can understand the meaning of words/expressions;

4) Identify the main idea and significant details of the content;

5) Give a clear answer to the question; and

6) Support the answer with details.

2.5 Index Card Matching Method

2.5.1 Definition of Index Card Matching Method

Istarani in (Noperto Tulus Parulian Tobing, 2012: 224), index card match is a method of finding a pair of cards that is fun enough to use to repeat the learning material that has been given previously. Then, an index card match is a game to find the pair of a card or to find the card match (Suprijono, 2019:120). Meanwhile, Helmiati (2012: 98) says index card match is the best way that can make students more active to review the lesson that has been given before. From the explanations of the experts above, the authors can conclude that the index card matching method is a method of finding pairs of cards or finding matching cards that can make students more active in reviewing the learning materials that have been previously given.

Then, Silberman in (Article RadarSemarang.id, 2009:240) index card matching method is a fun and active way to repeat learning material, and this method allows students to pair up and play quizzes with classmates. And this is what makes the index card matching method unique from other learning methods because this method requires students to find partners to read each other's questions and answers aloud in turn so that other friends can hear them, and this method can build togetherness and intimacy between students.

The Index Card Matching method applied in listening learning is to find out how far students have mastered the subject matter after the material has been taught so that it will be easier to discuss the subject matter that will be discussed next because the material has been discussed previously. Even the Index Card Matching method is very helpful for students in listening to questions and answers that are heard from their partners so that students can find pairs of cards from the pieces of cards that are with them. So that is the result to be achieved in the application of this index card matching method.

2.5.2 Procedure to Apply Index Card Matching Method

A procedure is a series of activities, tasks, steps, decisions, calculations, and processes, which are carried out through a series of jobs that result in the desired goal, a product, or an effect. In applying the index card matching method several processes must be applied. Based on Suprijono in (Article RadarSemarang.id, 2013: 120), the steps of a learning strategy using an active learning model of the Index Card Match type, are as follows:

1. First, make as many pieces of paper as the number of students in the class and divide the papers. It is into two equal parts.

2. Second, in half of the section, write questions about the material to be studied. Each paper contains one question.

3. Third, on the other half of the paper, write the answers to the questions that have been made. Then shuffle all the paper so that the questions and answers will be mixed.

4. Fourth, each student is given one paper. Explain that this is an activity done in pairs. Half of the students will get the questions and the other half will get the answers.

5. Fifth, ask students to find their partners. If anyone has found a partner, ask them to sit close together. Also, explain so that they do not tell the material they get to other friends.

6. Sixth, after all, students find a partner and sit close together, ask each pair in turn to read the questions obtained aloud to their other friends. Then the questions are answered by their partner.

Not only does Suprijono mention the steps in implementing the index card matching method. Another expert, Hamruni in (journal Defi Yuniantika, 2009:290) mentioned the steps for implementing the Index Card Match method in the learning method, as follows:

1) On the card separate index, write a question about whatever is taught in class. Make enough question cards to match one and a half students.

2) On the card separately, write an answer for each these questions.

3) Merge two cards and shuffle a few times until completely random.

4) Give one card on students. Explain that this is game practice. Some hold question and some hold answer.

5) Order students find the game card. When the game is formed, instruct students who play to find a seat together. (Tell them not to state to other students what is in the card).

From the steps for implementing the Index Card Matching method proposed by several experts above, the researcher can conclude and make their steps for the Index Card Matching method to be used during research, such as:

1. Prepare as many cards as the number of students in the class;

2. Then, divide the pieces of the card into two equal parts;

3. Next, write questions about the material to be taught on half of the card pieces and each card contains one answer;

4. Then write the answers to the questions that have been made on the other half of the card pieces and each card has one answer;

5. After that, combine all the card pieces and shuffle until all the card pieces are mixed randomly so that the card pieces containing the questions and answers can be mixed;

6. Then, distribute one piece of card to each student and explain that this is an activity carried out in pairs so that the student who gets the question must find a friend who gets the answer to the question he gets, and vice versa;

7. Next, ask students to find their partner, and after that ask them to sit close to their partner. Then explain to them not to tell the material they got to other friends;

8. After that, ask each pair to read the questions obtained aloud in turn so that other friends can hear them, then their partner reads the answers aloud as well;

9. And after all, pairs have read the questions and answers obtained, the researchers then make clarifications and also make conclusions about the learning outcomes that have been carried out.

2.5.3 Advantages of the Index Card Matching Method

The advantage is a factor or circumstance of benefit to its possessor. The application of the index card matching method has advantages in its application in the classroom. Hisham Zaini (2008:69) mentions the advantages of the index card matching method, namely:

1. Improving student learning activities, such as cognitively and physically.

2. Because there are elements of the game, this method is fun.

3. Improving students' understanding of learned material.

4. Effectiveness as means to train students' courage.

5. Effectiveness train students' discipline in respecting time to study.

Other experts mention the advantages of implementing the index card matching method. Namely Suprijono (2013: 34) states that the advantages of index card matches are as follows:

1. Cultivate a sense of joy during teaching and learning activities.

2. Submission of material becomes more attractive to students.

3. Can create an active, pleasant atmosphere.

4. Can improve student learning outcomes according to the level of mastery learning.

5. Student assessment can be done directly between teachers and students.

2.5.4 Disadvantages of the Index Card Matching Method

In addition to having advantages, the index card matching method also has disadvantages in its application. A disadvantage is an unfavorable circumstance or condition that reduces the chances of success or effectiveness. The reduced chance of success in such a situation is due to a disadvantage of applied. Based Suprijono and Marwan (2013: 194) said if the disadvantages of applying index card matching, are as follows:

1) Students need a lot of time to complete their assignments and achievements.

2) It takes a long time for the teacher to prepare.

3) Adequate skills and a democratic spirit in the teacher must be mastered in classroom management.

4) Students are required to be able to work together in solving problems.

5) The class becomes noisy and chaotic so that it can disturb other classes

6) Teachers must have a democratic spirit and adequate skills in terms of classroom management.

7) Demanding certain traits from students or tendencies to work the same problem-solving.

The disadvantages of the index card matching method are also conveyed by (Afandi, 2013) in (Tobing, 2018: 22), the disadvantages of index card matches are:

1) Need a long time for students to finish all the tasks and presentations

2) Teachers should make mature preparations for longer periods

3) Demands the particular nature of learners to cooperate in solving problems

4) The classroom atmosphere is noisy so it disturbs other classes

5) Effective if one class consists of a lot of learners.

2.6 Digital Storytelling

2.6.1 Definition of Digital Storytelling

Digital storytelling is storytelling using the help of digital software in which there is a combination of images, audio, text, and video. Norman (2011: 1) defines digital storytelling as the combination of spoken narrative, some visuals, a soundtrack, and new technology to share a story. Meanwhile, Clarke and Adam (2012: 76) digital storytelling is a 2-3 minute long story in which a personal element is emphasized and can be linked to other people, places, and interests or to anything that will give a story a personal touch. Nowadays, a new generation of storytelling starts with digital storytelling which integrates pictures, music, and audio through computers (Hett, 2012: 23). From the definitions of experts, the researcher concluded that digital storytelling is the method of storytelling with pictures, music, and audio that the duration of the story is 2-3 minutes and is associated with other people, places and interests or with anything that will tell a story.

2.6.2 The Benefits of Digital Storytelling

Everything must have an advantage in using it. As with digital storytelling, it has benefits in its use in learning. Based on Lowenthal in (Harun, 2009:20) enlist a couple of benefits of digital storytelling in education some of which are redundant with Robin's Jenkin's and Lonsdale's, such as:

1. By including multimedia in storytelling, teachers can expand students' engagement in class, it is a good way to engage students in the learning process using digital storytelling.

2. Students' digital stories will not only reach the local classroom but also the global audience with the available online technology. This is one of the strengths of digital storytelling.

2.7 Previous Relevance Research

Related to this research, the researcher takes some previous research from other researchers related to this research, First from Munirul Umam (2014) made research entitled **"USING**

INDEX CARD MATCH STRATEGY TO IMPROVE DESCRIPTIVE WRITING ABILITY AMONG SEVENTH GRADE STUDENTS OF JUNIOR HIGH SCHOOL OF MANBA'UL ULUM SEPUTIH AGUNG CENTRAL LAMPUNG". This research described if Munirul stated Index card matches helped the students in finding ideas. By using Index Card Match Strategy, the students found a lot of information and illustration, which stimulated them to develop their writing ability. He uses English teachers and teachers as observers and collaborators. And using group investigation as a strategy in teaching writing descriptive text.

Second from Ahmad Nur Fathoni (2011) made research entitled **"Improving vocabulary mastery by using index card match game for the first students' at MTs Darul Hikmah Tawangsari Tulungagung"**. This research described Ahmad said that most of the seventh-grade students of MTs Darul Hikmah were lazy in memorizing new vocabulary because they did not have strong motivation during the learning process. So for that, he chose the index card match game because this was the best way to solve the problems faced by these students.

Third from Suci Supriyanti Liana (2016) made research entitled **"THE IMPLEMENTATION OF INDEX CARD MATCH STRATEGY IN IMPROVING STUDENTS' ABILITY IN COMPREHENDING ACTIVE-PASSIVE VOICE AT MAS PAB-1 HELVETIA"**. This research described if Suci explains that the ability of students at MAS PAB-1 Helvetia in comprehending active-passive voice can be increased by implementing the index card match strategy. She can conclude that with the test results obtained from the two cycles carried out during the learning process.

Fourth from Nelly Irmayani Pandia (2018) made research entitled **"The Effect of Using Index Card Match Technique on the Students Achievement in Learning Reading Comprehension"**. This research described she stated that if this research were to find out the

effect of the index card match technique on the student's achievement in learning reading comprehension and to know the student's difficulties in reading comprehension by using index card match technique at the Xth grade the students of SMA NEGERI 1 KUALA with the 252 students as the population in this research. The research used Quantitative research and was divided into two classes, the experimental class X-mia 2 consisted of 36 students and for control class X-mia 3 consisted of 36 students. The sample used was random sampling. The result of the analysis showed that the t-test was higher than the t-table, t-test > t-table or $8.49 > 1.99$ at a = 0.05, and the degree freedom (df) 70 which means that Ha was accepted. The students nearly have no difficulties. it is fact that in attitude assessment maximum score for care was 180 the students had 158, respect was 180 the students had 155, teamwork was 180 the students had 152, self-confident was 180 the students had 154, and responsibility was 180 the students had 149.

Fifth from Fitrianizar (2018) made research entitled **"The Implementation of Index Card Match (ICM) in Teaching English Tenses"**. This research described if she teaching simple present tense and simple past tense to the Eighth-grade students of SMP Negeri 4 Banda Aceh by implementing index card matches to improve students' ability. In collecting the data, Fitrianizar used tests and questionnaires and research done within 6 meetings for each class through pre-test, experiment, post-test, and questionnaire. And the result of the research was calculated that the mean score of the post-test of the experimental class (78,30) was higher than the mean score of the post-test of the control class (55,5), which showed that the students of the experimental class improved their mastery in learning the simple present tense and simple past tense by using index card match.

Sixth M. Wisre Saputra (2018) made the research enitled **"Improving Students' Listening Comprehension Using Index Card Match Technique"**. This research explained that if he finding out the improvement of students' listening comprehension particularly in terms of the accuracy of answer and general understanding in dialogue by Index Card Matching Technique at tenth grade students. The findings showed that Index Card Matching technique was effective to improve students' listening comprehension. It was supported by the students' mean score in pre-test was 5,88 and it was improved to be 7,88 in post-test and the value of t-test was bigger rather than the value of t-table (4,85 > 1.711). It was supported by the students' mean score in pre-test was 6,43 and it was improved into 7,98 in the post-test. Based on the result analysis, the researcher concluded that Index Card Matching Technique improved students' listening comprehension.

From the previous research finding above, the researcher concluded that the similarities and differences of the six research. This can be seen in the table below:

Similarities	Differences
Based on the previous relevance research above, the researcher made concluded that the similarities of the six previous research are that they both use Index Card Matching as a method or technique and also strategies in teaching or learning English to students. In this case, the researcher state that in the researchers' research if the use and implementation and also application of Index Card Matching can actually be used to help improved and also can	Based on the previous relevance research above, the researcher made concluded that the difference from the six previous relevance is the research design used in the research they are doing, and from the research design that the six researchers did, it can be concluded that the data had been technique of collected data that the researchers made must be different. This can be saw as follows: 1) In the research

effective to students' English ability at school. The English ability are writing, reading, speaking and listening. This can be saw as follows:

a) Munirul Umam stated that the use of index card matching strategy was able to improve students' descriptive writing ability;

b) Ahmad Nur Fathoni explained that the index card match game can be used to improve students' vocabulary mastery;

c) Suci Supriyanti Liana said if the implementation of index card match strategy can improve comprehending active-passive voice in MAS PAB-1 Helvetia;

d) Nelly Irmayani Pandia explained that the use of the index card match technique had an effect on the students achievement in learning reading comprehension;

e) Fitrianizar stated that if the implementation of index card match is used in teaching English tenses; and

f) M. Wisre Saputra

conducted by Munirul Umam, Ahmad Nur Fathoni and M. Wisre Saputra, it was stated that the three researchers both used qualitative research in their research.
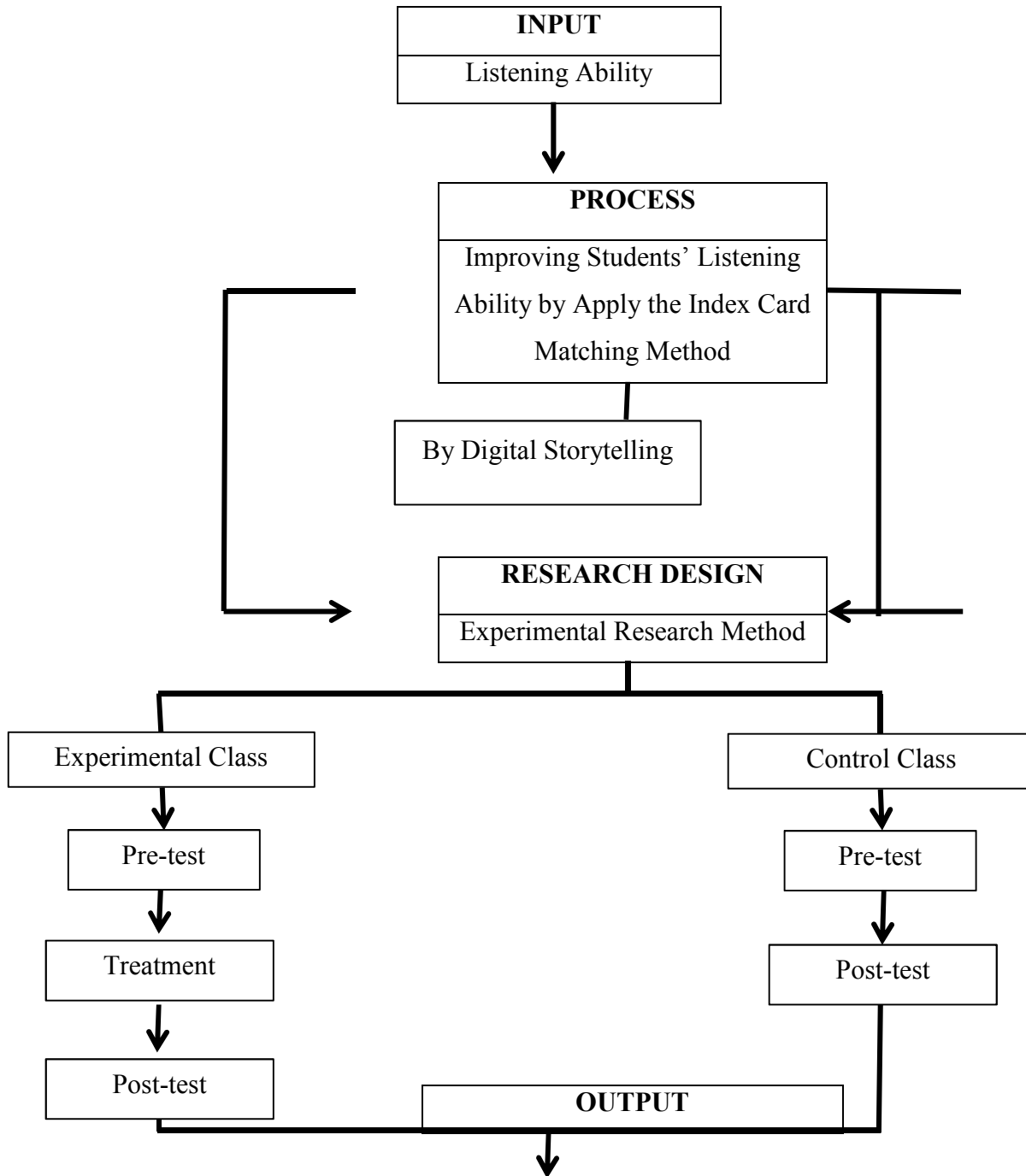
2) Meanwhile, Suci Supriyanti Liana used Classroom Action Research (CAR) as the research design she has been doing.

3) Then, Nelly Irmayanti Pandia and Fitrianizar used quantitative research in their research.

explained that the increase in students' listening comprehension was due to using the index card match technique.	

The contribution of previous relevant research to the research that the researcher did was as a guide in using Index Card Matching as a method in teaching English. This is because the method used by the researcher is the same as the method or technique used by the six researchers above. So, the researcher can use it as a guide in making research and also apply this method in research. The six previous research also helped in terms of knowledge about the index card matching method. Both the advantages and disadvantages of index card match in learning. So that before applied the learning method, the researcher already knew how the index card matching method in improving students' listening ability in class.

2.8 Conceptual Framework

INPUT
Listening Ability

↓

PROCESS
Improving Students' Listening Ability by Apply the Index Card Matching Method

| By Digital Storytelling |

RESEARCH DESIGN
Experimental Research Method

Experimental Class		Control Class
Pre-test		Pre-test
Treatment		Post-test
Post-test		

OUTPUT

The Significant of Apply the Index Card Matching Method in Improving Students' Listening Ability

Figure 2.1 *Conceptual Framework*

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

The research had been used quantitative research, because the researcher was used statistical analysis to calculate the numerical data. Based on Aliaga and Gunderson in Muijis (2004: 2) Quantitative research was explaining phenomena by collecting numerical data that are analyzed using mathematically based methods in particular statistics. The research method carried out by the researcher was the experimental research method. Experimental research method was a research conducted with a scientific approach using two sets of variables. Based on Sugiyono (2016: 109) experimental research method can be interpreted as a research method used to find the influence of certain treatment of others under controlled conditions.

In this research, the researcher was using a true experimental design. Characteristics of a true experimental design are the presence of a control group and a sample selected at random. The researcher referred to the Pretest-Posttest Control Group Design that consisted of two groups, namely the control group by conventional method and the experimental group by applying the index card matching method. This design can be seen in the table following:

Table 3.1 *Pretest-Posttest Control Group Research Design*

Class	Pre-Test	Treatment	Post-Test
Experimental Class	O_1	X_1	O_2
Control Class	O_3	X_2	O_4

Sources: Arikunto (2002: 79)

Note:
O_1 = Pre-test of experimental class
O_2 = Post-test of experimental class
X_1 = Using index card matching method
X_2 = Without using index card matching method
O_3 = Pre-test of control class
O_4 = Post-test of control class

By using experimental research, the sample of the research was two classes, namely the experimental class, and the control class, and each class would be given a pre-test and post-test. The first class as the experimental class was given treatment by applying index card matching method and the second class as the control class without treatment but was given the conventional method.

3.2 Location of the Research

The research is held at SMPN 1 Labuhan Deli, which is located on Jalan Veteran No. 1060/19, Kec. Labuhan Deli, Kab. Deli Serdang, North Sumatra 20116. The population of the research is students at first grade in the academic year 2021/2022.

3.3 Population and Sample

3.3.1 Population

Based on Sugiyono (2013: 61) population was a generalization area that consists of an object or subject. While. Arikunto (2002: 108) defined that population as all subjects of the research. The population in this research was taking from all of the students at first grade in SMPN 1 Labuhan Deli in the academic year 2021/2022. There were nine classes on average, with students of every class in each grade (VII-1, VII-2, VII-3, VII-4, VII-5, VII-6, VII-7, VII-8, and VII-9). The total population was 275 students, but the researcher was chose two classes as subject in this researcher.

Table 3.2 *The population at First Grade of SMPN 1 Labuhan Deli*

No.	Class	Number of Students
1.	VII-1	28 students

2.	VII-2	31 students
3.	VII-3	30 students
4.	VII-4	31 students
5.	VII-5	32 students
6.	VII-6	27 students
7.	VII-7	34 students
8.	VII-8	33 students
9.	VII-9	29 students
Total of the students		275 students

3.3.2 Sample

Based on Sugiyono (2016: 80) sample was a part of the number and characteristics passed by the population. The researcher used the clustering random sampling technique. Gay and Airasian (2000: 17) stated that cluster sampling was sampling in which groups, not individuals, are randomly selected. In this research, the researcher took two classes for the sample. The first class was VII-1 which had 28 students as an experimental class, and the second class was VII-9 which had 29 students as a control class. The total sample was 57 students. The experimental class was giving treatment by applied the index card matching method and the control class was without treatment but was giving the conventional method.

Table 3.3 *The Sample of the Research*

No.	Group	Class	Number of Students
1.	Experimental Class	VII-1	28 students
2.	Control Class	VII-9	29 students

Total of the students	57 students

3.4 Variable

Sugiyono (2015: 61) stated that a variable is defined as a person's attribute or objects that have a variance between one person and another or one object with another object. Not only that, Charles in Adnan Latief (2015: 11) variable was defined as characteristics that tend to differ from individuals who may have the same variable measure. In experimental research designs examine the causal relationship between variables, there are two kinds of the variable used, such as:

1. Independent Variable

An Independent variable was an attribute or characteristic that influences or affects an outcome or dependent variable (Creswell, 2012: 116). The independent variable is a variable that influences the dependent variable and can be manipulated, changed, or replaced. The independent variable in this research was Index Card Matching Method.

2. Dependent Variable

An Independent variable was an attribute or characteristic that influences or affects an outcome or dependent variable (Creswell, 2012: 116). The independent variable was a variable that influences the dependent variable and can be manipulated, changed, or replaced. The independent variable in this research was Index Card Matching Method.
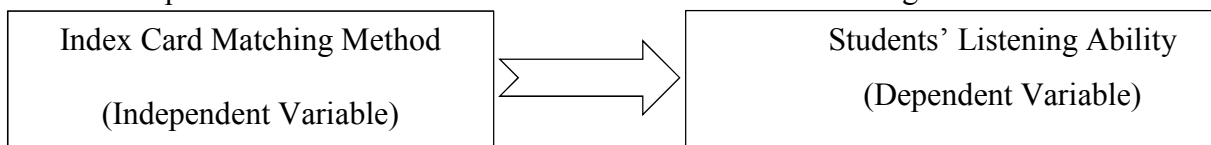
Index Card Matching Method (Independent Variable)	→	Students' Listening Ability (Dependent Variable)

Figure 3.1 *Relation of Independent-Dependent Variable*

(Source: Sugiyono, 2015: 61)

3.5 Instrument of the Research

The instrument has an important function in this research. An instrument is a tool to collect data needed in research. Creswell (2012: 157) is an instrument is to measure the variables in the research that may not be available in the literature or commercially. In collecting the data about the application of the index card matching method in improving students' listening ability, the researcher used the test. The test is used to measure what students get by the application of the index card matching method by digital storytelling.

The instruments used in this research was collected by giving a test in the form of answers the questions consisting of 7 items for both classes (experimental class and control class) in the pre-test and post-test. The test was focused on previous learning material. After that, the students are asked to answer the test. The pre-test is conducted to know the student's understanding of the previous learning material and given before the treatment. Post-test was given for both classes after giving the treatment. The source of the questions used as a test in this research was made based on the material contained in the books and English syllabus of Junior High Schools. The test is prepared in such a way in the attempt to know how the result of the applied index card matching method in improving students' listening ability through digital storytelling as a listening media.

The instruments used as a guide in giving scores on the students' listening test are: picking out a word, recognizing the correct tense, deducing meaning of unknown words from context and identifying the main ideas. Each of these instruments has its rating in determining the score that will be obtained by students in the listening test. These results are used as results for the research. So, students are expected to be able to answer the test well. The rating scores are as follows:

Table 3.4 *The Rating Scored of Listening Test*

Criteria of Mastery	Level	Description
81-100	Excellent	Excellent at picking out a word, recognizing the correct tense, deducing meaning of unknown words from context and identifying the main ideas.
73-80	Very Good	Very good at picking out a word, recognizing the correct tense, deducing meaning of unknown words from context and identifying the main ideas.
65- 72	Good	Good at picking out a word, recognizing the correct tense, deducing meaning of unknown words from context and identifying the main ideas.
57-64	Fair	Still able at picking out a word, recognizing the correct tense, deducing meaning of unknown words from context and identifying the main ideas.
49-56	Poor	Unable at picking out a word, recognizing the correct tense, deducing meaning of unknown words from context and

		identifying the main ideas.
Less than 48	Very poor	Very unable to picking out a word, recognizing the correct tense, deducing meaning of unknown words from context and identifying the main ideas.

(Sources: https://www.britishcouncil.org//)

3.6 The Technique of Collecting Data

Data collection techniques are an inseparable part of the research process because data collection in research is the most important technique. After all, the purpose of research is to obtain data. The data obtained is then used as material to conclude. The research will be conducted as follows:

1. Pre-test

Students would be giving a pre-test before the treatment. The pre-test had been used to measure the students' listening ability before the treatment was given. The activities that will be carried out during the pre-test are: in the first meeting, both classes (experiment class and control class) are given a pre-test before applying the treatment. First, the researcher comes to the class. Then, the researcher gave a pre-test by giving questions related to digital storytelling playing and writing the questions on the whiteboard then ask students to answer the questions on a sheet of paper.

2. Treatment

The treatment was giving to students after the researcher got the scored in the pre-test. In this research, the researcher applied the index card matching method by using digital storytelling as learning media in the class. In experimental class was taught by applied the index card matching

method, while the control class was taught without the index card matching method but using the conventional method.

3. Post-test

Post-test was giving to both classes after applying the treatment. This post-test was the same as the pre-test. The purpose of the post-test is to know how the result of the applied index card matching method by digital storytelling in improving students' listening ability, whether it was affected or not.

3.7 Validity and Reliability of the Test

1. The Validity of the Test

In quantitative research, validity is really important to know how valid data is. Based on Brown (2004: 22) validity is the extent to which inferences made from assessment results are appropriate, meaningful, and useful in terms of the assessment. Meanwhile, validity is a measure that shows the level of validity or accuracy of an instrument (Suharsimi, 2006: 144). A valid instrument has high validity. Conversely, a lack of valid instruments is to have low validity. So, a valid instrument must be able to detect exactly what it is supposed to measure. There are four types of validity, such as (1) construct validity, (2) content validity, (3) face validity, (4) criterion-related validity.
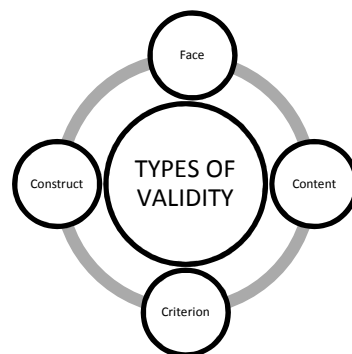

Figure 3.2 *Validity in Research*

In this research, the researcher used content validity they are: pre-test and post-test were given to both classes (experimental and control class). In both the pre-test and post-test, the researcher gave a test in which the test was made in the form of essay questions and the questions were taken from Junior High School textbooks that had proven validity. Content validity refers to the extent to which an assessment instrument is relevant to, and representative of, the targeted construct it is designed to measure.

2. The Reliability of the Test

Creswell (2012: 159) reliability means that scores from an instrument are stable and consistent. Not only that, Arikunto (2006: 178) says that reliability shows an instrument that can be trusted and used as a tool for collecting the data because it has already well enough. Reliability refers to the consistency of the measurement. To examine the reliability, Arikunto (2006: 189) recommends a formula for computing the reliability by using Kurder Richardson (KR-21) formula, the formula is as follows:

$$KR_{21} = \left(\frac{n}{n-1}\right)\left(1 - \frac{M\,(n-M)}{nS^2}\right)$$

Notes :
KR_{21} = The reliability of the test
n = The number of the test items
M = The mean score
S = Standard deviation of the test score
The categories of coefficient correlation are as the following:

0.00-0.20 = The reliability is very low
0.21-0.40 = The reliability is low
0.41-0.60 = The reliability is fair
0.61-0.80 = The reliability is high
0.81-1.00 = The reliability is very high

3.8 Technique of Analyzing Data

This research applied the experimental-quantitative data. The experimental-quantitative data is used to analyze the score of students. It collects and analyze by computing the score of students' listening ability during the listening test. The data will be analyzed by using some steps, namely:

1. Calculating the scoring of the pre-test and post-test in experimental and control class.

2. Comparing the scores of the students in experimental and control class.

3. Tabulating the data of the students pre-test and post-test in experimental class and control class

4. Calculating the mean of two classes, experimental class and control class

$$\bar{X} = \frac{\sum f_i x_i}{\sum f_i}$$

(Sudjana, 2005:67)

Note:
$\bar{X}$ = Mean
f_i = Frequency Data to-i
x_i = Interval Class

5. Calculating the standard deviation and variance by using the following formula:

$$S^2 = \frac{n \sum f_i x_{i^2} - (\sum f_i x_i)^2}{n(n-1)}$$

(Sudjana, 2005:95)

Note:
n = Amount of Data
x_1 = Interval Class

6. Normality test by using Liliefors test, the steps consisted of:

a) Observing X_1, X_2, …, …, X_n should be raw numbers Z_1, Z_2, …, Z_n by using this formula:

$$Z_1 = \frac{X_1 - \bar{x}}{s}$$

(Sudjana, 2005: 466)

Note:

X_1 = Data to-i

$\bar{x}$ = Mean

s = Standard Deviation

b) Calculate the opportunity $F_{(z_1)}$ = F $(Z \leq Z_1)$ by using list of the standard normal distribution

c) Calculate $Z_1, Z_2,\ldots, Z_n$ that stated with $S(Z_1)$

d) Calculate $F_{(z_1)}$ - $S_{(z_1)}$ and determine the absolutte value

e) To receive and reject the normal distribution in this research, it can be compared with L_o and criticism L that taken from table of Liliefors test with $\alpha = 0,05$ and the criterium of testing $L_o < $ L

7. To decide the data was homogeny or not, used variant homogeneity test by using Bartlett's Test as following

$$X^2 = In\ 10 \left\{ B - \sum (n_1 - 1)\ Log\ S_1{}^2 \right\}$$

(Sudjana, 1989:261)

Criteria of testing :

If $x^2{}_{count} < x^2{}_{table}$, it proved the variance was homogeneity

8. Testing the hypothesis of the two classes using the formula t-test

$$t = \frac{\bar{X}_1 - \bar{X}_2}{S_{comb} \sqrt{\frac{1}{f_{i_1}} + \frac{1}{f_{i_2}}}}$$

Sudjana (2005: 239):

The hypothesis to be tested is formulated as follows:

$$H_o : \mu_1 = \mu_2$$

$$H_o : \mu_1 \neq \mu_2$$

Note:
t = t-observed
$\overline{x_1}$ = The students' mean score of experimental class
$\overline{x_2}$ = The students' mean score of control class
S = Standard deviation
f_{i_1} = The total students of experimental class
f_{i_2} = The total students of control class

9. Concluding the research finding.