THE EFFECT OF APPLYING COGNITIVE CODE LEARNING METHOD ON THE STUDENTS' ACHIEVEMENT IN SPEAKING

SKRIPSI

Submited In Partial Fulfillment of the Requirements
For the Degree of Sarjana Pendidikan (S.Pd)
English Education Program

OLGA MEYTRI PANGESTIKA
NPM.1302050200

FACULTY OF TEACHER TRAINING AND EDUCATION
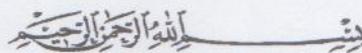## UNIVERSITY OF MUHAMMADIYAH SUMATERA UTARA
MEDAN
2017

BERITA ACARA

Ujian Mempertahankan Skripsi Sarjana Bagi Mahasiswa Program Strata 1
Fakultas Keguruan dan Ilmu Pendidikan Universitas Muhammadiyah Sumatera Utara

بِسْمِ اللهِ الرَّحْمٰنِ الرَّحِيمِ

Panitia Ujian Sarjana Strata-1 Fakultas Keguruan dan Ilmu Pendidikan dalam Sidangnya yang diselenggarakan pada hari Jumat, Tanggal 27 Oktober 2017, pada pukul 09.00 WIB sampai dengan selesai. Setelah mendengar, memperhatikan dan memutuskan bahwa:

Nama   : Olga Metri Pangestika
NPM   : 1302050200
Program Studi   : Pendidikan Bahasa Inggris
Judul Skripsi   : The Effect of Applying Cognitive Code Learning Method on the Students' Achievement in Speaking

Dengan diterimanya skripsi ini, sudah lulus dari ujian Komprehensif, berhak memakai gelar Sarjana Pendidikan (S.Pd).

Ditetapkan   : (   ) Lulus Yudisium
                  (   ) Lulus Bersyarat
                  (   ) Memperbaiki Skripsi
                  (   ) Tidak Lulus

PANITIA PELAKSANA

Ketua   Sekretaris

Dr. Elfrianto Nasution, S.Pd, M.Pd   Dra. Hj. Syamsuyurnita, M.Pd

ANGGOTA PENGUJI:

1. Ariful Haq Aceh, S.Pd, M.Hum   1.

2. Habib Syukri Nst, S.Pd, M.Hum   2.

3. Mandra Saragih, S.Pd, M.Hum   3.

LEMBAR PENGESAHAN SKRIPSI

بِسْمِ اللهِ الرَّحْمَنِ الرَّحِيْمِ

Skripsi ini diajukan oleh mahasiswa di bawah ini:

Nama Lengkap	:	Olga Meytri Pengestika
N.P.M	:	1302050200
Program Studi	:	Pendidikan Bahasa Inggris
Judul Skripsi	:	The Effect of Applying Cognitive Code Learning Method on the Students' Achievement in Speaking

sudah layak disidangkan.

Medan,   Oktober 2017

Disetujui oleh:

Pembimbing

Mandra Saragih, S.Pd, M.Hum

Diketahui oleh:

Dekan

Dr. Elfrianto Nasution, S.Pd., M.Pd.

Ketua Program Studi

Mandra Saragih, S.Pd, M.Hum

SURAT PERNYATAAN

بِسْمِ اللهِ الرَّحْمٰنِ الرَّحِيْمِ

Saya yang bertandatangan dibawah ini :

Nama Lengkap   : Olga Meytri Pangestika
N.P.M   : 1302050200
Program Studi   : Pendidikan Bahasa Inggris
Judul Proposal   : The Effect of Applying Cognitive Code Learning Method on the Students' Achievement in Speaking

Dengan ini saya menyatakan bahwa:

1. Penelitian yang saya lakukan dengan judul di atas belum pernah diteliti di Fakultas Keguruan dan Ilmu Pendidikan Universitas Muhammadiyah Sumatera Utara
2. Penelitian ini akan saya lakukan sendiri tanpa ada bantuan dari pihak manapun dengan kata lain penelitian ini tidak saya tempahkan (dibuat) oleh orang lain dan juga tidak tergolong **Plagiat**.
3. Apabila point 1 dan 2 di atas saya langgar maka saya bersedia untuk dilakukan pembatalan terhadap penelitian tersebut dan saya bersedia mengulang kembali mengajukan judul penelitian yang baru dengan catatan mengulang seminar kembali.

Demikian surat pernyataan ini saya perbuat tanpa ada paksaan dari pihak manapun juga, dan dapat dipergunakan sebagaimana mestinya.

Medan,   Agustus 2017
Hormat saya
Yang membuat pernyataan,

Olga Meytri Pangestika

Diketahui oleh Ketua Program Studi
Pendidikan Bahasa Inggris

Mandra Saragih, S.Pd, M.Hum

ABSTRACT

Olga Meytri Pangestika.NPM: 1302050200. The Effect of Applying Cognitive Code Learning Method on The Students Achievement in Speaking";Skripsi: English Education Program of Faculty Teachers' Training and Education. University of Muhammadiyah Sumatera utara.

This study aims to investigate the significant effects of Applying Cognitive Code Learning Method on Students' Achievement in Speaking. The objectives of this study is to find out the significant effect of applying cognitive code learning method on the students' achievement in english speaking skill. This research was an experimental research and was conducted in SMP TRIDHARMA SUNGGAL.Eight grade during 2017/2018 Academic years. The population was 44 students and the sample were 44 students.Random sampling technique was applied to take the sample. Class VIII B by using conventional Method. The instrument in collecting the data by using oral test : The students will be asked to make a conversation with pair about making,accepting and declining an invitation and the students Practice in front of the class. The finding indicated that t observed (37,96) was higher than t tavle (2,22). The result show that the hypothesis that there was significant effect of applying cognitive code learning method on the students' achievement in speaking in junior high school.

Keywords : Cognitive code Learning, Speaking achievement

ACKNOWLEDMENTS

5. All lectures, especially those of english departement for their guidance, advice, suggestion and encouragement during her academic years at UMSU.

6. All staffs of biro fakultas keguruan dan ilmu pendidikan Universitas Muhammadiyah Sumatera Utara.

7. Tiwi Suharti S.Pd the Headmaster of SMP TRIDHARMA SUNGGAL, who had given permission for her to conduct the research at that school.

8. Her special dearest Muhammad Rendy Pratama S.H, who always giving support and motivation in writing the research,

9. Her lovely friends Ira Anggraini S.Pd, Suci Syuhada S.Pd, Aisyah Octaweni S.Pd, Suci Ramadhani S.Pd, who always giving support and motivation in finishing her study at FKIP UMSU.

10. All friend especially A-Afternoon English Clash Faculty of Education University of Muhammadiyah Sumatera Utara.

Finally, she hope contrastive criticism and advice for the improvement of this research because she realizes this research was still far from being perfect although she has tried to do the best.

Medan,   Oktober 2017

The Researcher

<u>Olga Meytri Pangestika</u>
NPM.1302050200

TABLE OF CONTENT

LIST OF TABLE

LIST OF APPENDIX

CHAPTER I

INTRODUCTION

A.THE BACKGROUND OF THE STUDY

In teaching english, those skill must be served integratedly as much as possible. One of those language skill that influence the language ability is speaking. Teaching speaking is According to Kayi (2006) speaking refers to the gap between linguistic expertise and teaching methodology. Linguistic expertise concerns with language structure and language content. Teaching speaking is not like listening, reading, and writing. It needs habit formation because it is a real communication and speaking is a productive skill so it needs practicing as often as possible.People who have ability in speaking will be better in sending and receiving information or message to another. Teaching speaking is a very important part of foreign language learning. The ability to communicate in a foreign language clearly and efficiently contributes to the success of the learner in school and success later in every phase of life.

Speaking is one of skills that should be learned by students in learning English. Through speaking, they can express their ideas and communicate with others. In speaking, the student learn how to organize the idea, express the language in spoken form with good pronounciation and stressing, they also learn about how to convey the meaning of the language continiously the students will not be able to master the skill. According to Cameron (2001:40), speaking is the activity to use th language to express meanings, so other people can make sense of

1

them. In the international relationship, english speaking ability is very important to be able to participate in the wider world of work.

Based on the experience in PPL , researcher found the problem in the speaking class, that the students is still low in Speaking. They have problem lack of confidence to perform in front of the class, many student still low in vocabulary, and the student afraid to make mistakes express their idea in speaking. The second problem are from teachers. Teachers use the conventional method in teaching speaking in the classroom. It is questioning the author me thod. Consequently, the students are difficult to understand how to speaking because the teacher method is less atractive.

Understanding the language is not only knowledge of how to read, how to speak and how to write but how to use it for communicating. English has been implemented by the government to be learned from primary school to senior high school, in hopes that by learned English from an early age, students are able to speak English fluently after graduating from high school. and the presence of MEA (Asean Economic Community) government encourages the public to be able to speak English on facing the job to the international level.

Based on the problems above inspired the researcher to conduct a research by applying cognitive code learning that has never been applied in classroom. Some of innovative learning method after developed by experts, one of learning method available to teachers is a cognitive code learning method. It attaches more importance to the learner's understanding of the structure of the foreign language.

Rule – deduction is a facility, which develops automatically with use of the language in meaningful situations within meaningful drillings.

Brown (2001:24) notes that proponents of a cognitive code learning methodology injected more deductive rule learning into language classes.This theory underlies the notion that the real learning process of speaking is not enough simply applied to the relationship of stimulus and response, as well as the reinforcement or reinforcement as described in the theory of learning or behavior Bihavioral Theories of Learning, but also deals with relationships logically and rationally involving the acquisition or change from within (insight), view (outlook), expectations or patterns of thinking.

It why, the researcher submitted this research, which is the tittle of " **The Effect of Applying Cognitive Code Learning Method on The Students' Achievement in Speaking".**

B. The Identification of The problem

The problem of this research was identified as follows :

1. The teacher still use monolingual and traditional way when teach in the classroom.
2. The student are afraid to make mistakes to express their idea in speaking.
3. The student still had lack of vocabulary.

C. Scope and Limitattion

Based on the problems above, the scope of this research is about speaking achievment. It was limited on applying cognitive code learning method in Making, accepting and declining an invitation.

D. The Formulation of The Problem

The problem were formulated as the following

1. Is there any significant effect of applying cognitive code learning method on the students' achievement in speaking ?

E. The Objectives of the Study

The objectives of the study was stated as follows

1. To investigate the significant effect of applying cognitive code learning method on the students' speaking achievement.

F. The Significant of the Study

The findings of this research are expected to be useful and relevant to :

1. Theoritically

To add knowledge and experience, as well as in the application of materials research using Cognitive Code Learning, especially regarding our knowledge about speaking skill.

2. Practically

It is expected to be useful practically for :

1. Students, to add their knowledge about cognitive code learning method and this method use help them easier especially in speaking

2. Teachers, to give them more information about another method and how to apply it in teaching, especially in speaking.

3. Readers, especially the candidate of English teacher, as an imput for them when someday they go to field of teaching English in the classroom.

CHAPTER II

REVIEW OF RELATED LITERATURE

A. Theoritical Framework

This study with theories that will support the concept. In this case, theoritical frameworks to give some clear concept apply in this research in intend to define the boundary of this study. There are many points in this study will be discuss as follows :

1. Description of Speaking

Speaking is an interactive process of constructing meaning that involves producing *and* receiving and processing information. Its form and meaning are dependent on the context in which it occurs, including the participants themselves, their collective experiences, the physical environment, and the purposes for speaking. Luoma (2004: 2) defined speaking as an interactive process of constructing meaning that involves producing, receiving and processing information. Its form and meaning are dependent on the context in which it occurs, including the participants themselves, the physical environment, and the purposes for speaking. Brown and Yule (2012 : 2) Talking is the ability to pronounce the sounds of language to express or convey thoughts, ideas or feelings verbally. based on the explanation above, speak related to the pronunciation of words that will be processed to communications with each other

According to brown (2004:141-142), there are five basic types of speaking, they are imitative,responsive, interactive and extensive. Imitative speaking is ability to imitate (parrot back) a word or phrase or possibily a sentence. Imitation of this kind is carried out not purpose of meaningful interaction, but for focusing on some particular element of language form. Ntensive speaking goes one step beyond imitative to include any speaking performance, that is design to practice some phonologcal and gramatical aspect of language. Response speaking is interactional at some what limited level of very short conversation, standard greeting and small talk, simple comment and request, and the like. Interactive speaking is complex interaction which sometimes include multiple exchange and multiple participants. And the last is extensive speaking; extensive speaking is oral production, include speeches, oral, presentation, and story-telling.

Speaking is an interaction between a speaker and listener. In speaking there is a process of communication which conveys the message from a speaker to listener. A speaker has to encode the message and listener has to encode the message and listener has to encode for interpret the message which contains information. Encoding is a process or receiving information given by speaker. So, in communication the process of encoding exist between speaker and listener.

To increase students' speaking competence, it is necessary to use acceptable form of correct language. The form involves grammar, vocabulary,pronanciation, and intonation. Learning should be able to produce

basic structure correctly. Besides, they need to understand words and the correcting from of language, the students need to practice the language they are learning. This needs reflect that practice in producing the spoken form correctly is important.

Therefore. In order to speak fluently the students need practice the language, which is being learned. It is reasonable that the more student practice. The more fluently they can speak. This condition does not only increase the students' speaking competence but also their pronounciation, in addition, they would be able to produce correct structure.

To building on to achieve a more complex skill. So, it would be clear that the students be responsible for the correct response, the teacher could consider wether there are strategies,the teacher may be able to design a course and student could learn a simple skill before increase their speaking skill.

According to Fulcher (2003 : 23) states that speaking is the verbal use of language to communicate with other. Speaking is tool to make communication through verbal skill. Speaking is a way to express feeling, thought , idea, opinion

by using language. Speaking is the productive skill in the oral mode. It like other skill more complicated than it seems at first and in values more than just pronouncing words, speaking skill should be practiced by speakin and expression drills or stated by thinking and feeling orally where lexical and semantic system is orderly use by intonation

1.1 Teaching Speaking Process

The goal of teaching speaking skills is communicative efficiency. Learners should be able to make themselves understood, using their current proficiency to the fullest. They should try to avoid confusion in the message due to faulty pronunciation, grammar, or vocabulary, and to observe the social and cultural rules that apply in each communication situation. To help students develop communicative efficiency in speaking, instructors can use a balanced activities approach that combines language input, structured output, and communicative output.

In everyday communication, spoken exchanges take place because there is some sort of information gap between the participants. Communicative output activities involve a similar real information gap. In order to complete the task, students must reduce or eliminate the information gap. In these activities, language is a tool, not an end in itself.

In a balanced activities approach, the teacher uses a variety of activities from these different categories of input and output. Learners at all proficiency levels, including beginners, benefit from this variety; it is more motivating, and it is also more likely to result in effective language learning. Burkart & Sheppard (2004) argue that success in learning a language is measured in terms of the ability to carry out a conversation in the target language.

The Assesment of Speaking

Many classroom activities which are currently innuse fall at or near the communicative end of communication continuum. In this section we will look at some of the most widely used (Harmer, 2001: 271-274) :

a. Acting from script

We can act out scenes from plays and their course books, sometimes filming the result. Students will often act out dialogue they have written by themselves. This frequently involves them in coming out to the front of the class.

b. Communication games

Game which are designed to provoke communication between students frequently depend on the information gab. So that one student has to a partner in order to solve a puzzle, draw a picture (describe and draw), put thing in the right order (describe and arrane), or find similarities and differences between pictures.

c. Discussion

After a content-based lesson, a discussion can be held for various reason. The students may aim to arrive at conclution, share ideas about an even, or find solution in their discussion groups. Before discussion, it is essential that the purpose of the discussion activity is set by the teacher. In the way, the discussion point are relevant to this purpose, so that the student do not spend their time chatting with each other about irrelevant things. For example, students can be become involved in agree/disagree discussion. In this type of discussion, the teacher can form groups of students, preferably 4 or 5 in each group, and provid

controversional sentence like "people learn best when they travel". Then each group works on their topic for a given time period, and present their opinions to the class. It is essential that the end, the class decide on the winning group who defended idea in the best way. This is activity fosters critical thinking and quick decision making, and the students learn how to express and justify themselves in polite ways while disagree with other. For efficient group discussion, it is always better not form large groups, because quite students many avoid contributing in large groups. The group memebers can be either assigned by the teacher or the students may determine it by themselves, but group should be rearraged in every discussion activity so that students can work with various people and learn to be open to different ideas. Lastly, in class or group discussion, whatever the aim is the students should always be encouraged to ask question paraphrase ideas, express support, check for clarification, and so on.

1.3 Student Acievement in Speaking

According to Harmer (2007:343) speaking is a complex skill because at least it isconcerned with components of grammar, vocabulary, pronunciation, fluency and comprehension. Speaking has some important components, there are:

a. Fluency

This refers to how good the students are keeping talking at the right a peed and how good they are connecting their ideas together. There are many factors that

influence the fluency of speaker. For instance, the ability to combine the sentence can interpret with the fluency. Besides, when the listener listens to the speaker, he may not concentrate on the sound to the message.

b. Vocabulary

The word vocabulary is used to indicate that they are list of words, which should be understood in order communication well. It means the whole stock of words used by nation, by any set of person or by an individual.

Grammatical of range and accurancy

Grammar refers to the grammatical mattery in speaking. It is important because the languange is a system that would be followed.

c. Proununcation

This refers to how well student prounounce the language. As well as considering the communicative effect of the students' pronunciation, there is contribution how much strain it causes on a listener, and how not cable accent is although accent it self is not to be aable to produce the phonological of speech.

d. Comprehension

This refers to how good the students understand the meaning of something. The 'word comprehension' refers to ability to make sense of something or to understand something. It can also be defined as the art of comprehending one perceiving. Comprehension also describes information or knowledge that is acquired through understand about information or mesagge that they say.

e. Grammar.

grammar is a set of rules which describe how we use a language. The aim of grammar is also to learn the correct way to gain expertisein language in oral

written form. Therefore, grammar is needed for students to arrange a correct sentence in conversation.

2. Applying Cognitive Code Learning Method

2.1. Description Cognitive Code Learning

The cognitive-code approach that language learning involved active mental processes, that it was not just a process of habit formation (the assumption underlying the audiolingual method that came before it). Lessons focussed on learning grammatical structures but the cognitive code approach emphasised the importance of meaningful practice, and the structures were presented inductively. Richards & S. Rodgers (2014:26) indicated that Situational Language Teaching can be linked to cognitive-code learning. Moreover, PPP (presentation Practice Production)used in situational language teaching can be linked to cognitive-code learning, called cognitive code learning within the influence of cognitive psychology it was intended as an alternative to the audio-lingual method with habit information as a learn by doing activity.

Cognitive code learning method also tell us that good thinkers are knowledgeable about and aware of their own thinking. They recognize when they are in a situation that demands the use of cognitive strategies. Good thinkers have cognitive strategies for finding out and organizing information and remembering when and where to use such strategies. In other words, good thinkers think about their own thinking. Tasks aim at giving learners confidence in trying out whatever language they know and give them experience of spontaneous interaction (Ellis, 2003: 80 and Feneey,2006: 199). cognitive learning not only in what learners do

at the end of a lesson (outcome performance), but also in the content of their thinking (cognitive outcomes), and in how this content is altered by the processes of thinking. This method is also extremely good for teaching speaking, due to the processing of information in their thinking, they could continue to remember something in the long term memory

2.2. Procedure of Cognitive Code Learning Method

a . step one : Go to in front of the class

The first step they will be given an explanation of how to learn in this method. Students go to in front of the class to present their classes learning with the group to inviting someone. students Allowed to explore the results of the discussion with the group's friends and other students can hear.

b . Step two ; observe

When there was a group has in front of the class to the presentation. The other group had to listen and report on how the advantages and disadvantages of these groups and will be presented as well.

c . Step Three : Reflection and Evaluate

After applying cognitive code learning , give student reflection and evaluation of their performances. This might be homework for students. You can make an evaluation by asking the students to find out did inviting someone while performing is correct or not. and then they can redescribe the image in front of the class with better.

2.3. Advantage and Disadvantage Cognitive Code Learning Method

a. Advantage of Cognitive Code Learning :

1. It practically focuses on the individual student and his/her learning process and progress.

2. It involves very frequent assessment (like pop-quizzes) of the student's learning and retention since new skills and experiences build directly upon previous one.

3. Most of the educational curriculum of Indonesia more emphasis on cognitive method that promotes the development of knowledge in each individual.

4. By applying cognitive method is that educators can maximize the memory owned by learners to remember all materials given for the cognitive learning one of which emphasizes the learner's memory will always remember the material that has been given.

5. According to experts it is same with the cognitive creation or manufacture of new things or make something new from something that already exists, and therefore the method of cognitive learning students should be able to creation of new things missing or things menginovasi the existing become better again.

6. The method of this cognitive easy to apply and has also been widely applied to education in Indonesia on all levels

7. in this method attention to how learners in exploring or developing knowledge and ways of their students in the search for it, because basically each learner has different ways.

b. Disadvantage of Cognitive Code Learning

1. The teacher must be constantly evaluating and recording the needs of the student in different skills. She /he has to tailor learning drills and activities that improve the involving educational needs and levels of the students. Therefore, such a procedure requires a great deal of time, strain, recordkeeping in form of

portofolios, and practicality in adjusting daily, weekly, and monthly in lesson plans.

2. This method had limited as the cognitive emphasis on rules and paradigms proved as unattractive as behaviorist rote drilling. There is also confusion for practioner, that proponents of a cognitive code learning methodology injected more deductive rule learning into language classes.

3. Basically cognitive theory is more emphasis on memory abilities of learners, and memory abilities of each learner, so the weakness that occurs here is always assumed that all learners have the same memory skills and undifferentiated.

7. In applying cognitive learning method to note the ability of learners to develop a material that has been received.

B. Conceptual Framework

Speaking is the productive skill in the oral mode. It is not likr other skill, it is more complicated that is seems at first and involves more, than pronouncing words. In speaking, there is a process of communication, which convey message from a speaker to a listener. Then, a speaker has to encode the message and

listener has to decode or interpret the message of information. Encoding is the process of conveying the message of information given by the speaker.

In teaching speaking, cognitive code learning method is able to make a good progress and increase the student achievement in speaking because cognitive code learning method are enjoyable method enable students to create reminders to use what they have learned. By using cognitive code learning method, teachers give priority to the development of knowledge in each individual and educators need only giving out the basics of what is taught to the development and continuation deserahkan learners and educators need only to monitor and explain of the groove material development that has been given. So, the students will be very exciting in learning speaking by this strategy.

C. Hypotesis

Based on the previous discussion on the background of this study, the hypothesis is formulated as follows :

Ha : is accepted, it's mean there is a significant effect of independent variable toward dependent variable.

Ho : is rejected, mean if there is a significant effect of independent variable toward dependent variable.

CHAPTER III

METHOD OF RESEARCH

A. Location and Time

This research was conduct at SMP Swasta TRI DHARMA JL. PASAR BESAR KM 13,8 SEI SEMAYANG This research was conducted during the academic year 2016/2017. The reason of choosing the school because from the experience of researcher when PPL in this school, the researcher found their difficulty in learning speaking.

B. Population and Sample

1. Population

The population of this research was taken from the eight grade student of SMP Swasta Tri Dharma Medan. There are two paralel classes consist of VIII-A (25 students), and VIII-B (25 students). So the population consist of 50 students.

Table 3.1
Population

No	Classes	Population
1	VIII-A	22
2	VIII-B	22
Total		44

2. Sample

The researcher would used total sampling. Sample in this research are 50 students in two classes, there are VIII-A and VIII-B. These two classes divided in

two groups. Class VIII-A as experimental group and class VIII-B as control group

Table 3.2
Sample

No	Classes	Sample
1	VIII-A	22
2	VIII-B	22
Total		44

C. Research Design

This study was conducted by using an experimental design which applied quantitative method. This means that treatments is follow the concept. This study was conducted two groups, namely : an experimental and control group. The experimental group received treatmen using by cognitive code learning method, while the control group received by direct method.

Table 3.3
Research Design

Group	Pre - test	Treatment	Post – test
Experimental (X)	√	Using Cognitive Code Learning Method	√
Control (Y)	√	Direct Method	√

The test and the source of material will be taken from english book for junior high school.

1.   Pre- test

    Both groups, the experimental and control group was give pre- test before the treatment. The function of the pre- test is to know the mean scores of experimental and control group.

2.   Treatment

    Experimental and control group was taught by the same materials but in different way in teaching. Treatment gave to both experimental and control group. The experimental group will be taught by applying Cognitive Code Learning Method, while the control group will be taught by using the direct method.

3.   Post- test

    The post test was given to both group, experimental and control group after the treatment. It would use to find out the differences of their mean scores.

D. The Instrument of Research

    The instrument for collecting data of this research was Given by oral test with using oral test as a treatment. The students was asked to make a conversation with pair about Making, accepting and declining an invitation and the students practice in front of the class.

In scoring the test, the researcher use five indicators of measure the speaking achievement.according to brown (2001: 406-407) there were five indicators in assessing speaking.

1. Vocabulary (20)

Score	explanation
16-20	Very good ; rarely has trouble
11-15	Good; something using inappropriate term about language
6-10	Fair ; frequent using wrong speech limited to simply vocabulary
1-5	Unsatisfactory; very limited vocabulary and make the comprehension quite difficult

2. Comprehension (20)

Score	explanation
16-20	Very good ; rareley noticeable errors
11-15	Good ; occasionally grammatical errors which do not obscure meaning
6-10	Fair ; error the basic structure, meaning occasionally obscure by grammatical errors
1-5	Unsatisfactory ; usage definitely unsatisfactory frequently needs to rephrase cunstruction on district itself to basic

3. Pronunciation (20)

Score	explanation
16-20	Very good ; understand able
11-15	Good ; few noticeable errors
6-10	Fair ; error of the basic pronunciation

Score	
1-5	Unsatisfactory ; hard to understand because sound, accent, pitch, difficulties and incomprehensible.

4. Fluency (20)

Score	explanation
16-20	Very good ; understand able
11-15	Good ; speech is generally natural
6-10	Fair ; some definite stumbling but manager to rephrase and continue
1-5	Unsatisfactory ; speed of speech and length of utterances are for below normal, long, pauses, utterances left unfinished

5. Grammar (20)

Score	explanation
16-20	Very good ; error in grammar are quite rare
11-15	Good ; control of grammar is good
6-10	Fair ; construction quite accurately but does not have through or confident control of the grammar.
1-5	Unsatisfactory ; errors in grammar frequent to speak language.

E. Technique for Collecting Data

In collect the data,some steps would be applied as follows :

1. Giving pre – test to both classes

2. Giving treatment to the experimental group by applying Cognitive code learning.

3. Giving treatment to the control group by using direct method

4. Giving post-test to both classes

5. Evaluating the effect of Cognitive Code Learning.

F. Technique of Data Analysis

The data will be analyzed by the following procedures

1. Scoring the students answer for value of the test.

2. Listing their score in two tables, first for experimental class score and the second for control class score.

3. Calculating the total score post-test in experimental group and control group :

   a. $y + b$ where a and b where got by :

   $$a = \frac{(\sum Y)(\sum X) - (\sum X)(\sum XY)}{N(\sum Y^2) - (\sum Y)^2}$$

   $$b = \frac{N(\sum XY) - (\sum X)(\sum Y)}{N(\sum Y^2) - (\sum Y)^2}$$

   b. Determining coeficient r^2 by formulation (sudjana,2005)

   $$r \frac{b\{N(\sum XY - (\sum X)(\sum Y)}{N \sum Y^2 - (\sum Y)^2}$$

   c. The statistical hypothesis could be determining by using :

   $$t = \frac{r \sqrt{n-2}}{\sqrt{1 - r^2}}$$

   d. Percentages of the use of method

   D= R^2 x 100%

G. Statistical Hypotesis

Based on the problem of the study, the hypothesisbis formulated as the following :

If test ≥ Ttable = Ha is accepted and Ho is rejected

If test ≤ Ttable = Ha is accepted and Ho is accepted.

Ha : there is significant effect of teaching speaking by cognitive code learning method for junior high school students.

Ho :there is not significant effect of teaching speaking by cognitive code learning method

CHAPTER IV

DATA COLLECTION AND DATA ANALYSIS

A. Data Collection

The data was collected by giving oral test to the student. In this research, the samples were devided into two groups, the experimental group and control group. Each group was given pre-test and post-test.

The data of this study was the scores of pre-test and post test of two group, experimental and control group, as seen in table 4.1

Table 4.1

The Score of Pre-Test in Experimental Group

No	Students' Initial Names	The Component of Evaluate					Total
		Vocab	Compre	Pronoun	Fluen	Gram	
1	ASP	11	12	13	16	12	64
2	AF	12	11	10	12	12	57
3	DF	12	12	13	13	13	65
4	DP	16	11	12	13	18	76
5	FEN	16	10	12	14	17	69
6	JR	13	13	12	13	15	65
7	MG	17	11	12	13	19	72
8	MA	15	11	13	14	17	70
9	MI	18	11	12	13	18	72

10	PR	15	15	15	15	15	75
11	PY	16	10	12	14	15	68
12	PT	12	12	11	12	13	60
13	RSM	18	11	11	4	18	72
14	RST	13	11	11	12	13	60
15	RBA	15	10	12	14	14	65
16	ROS	15	11	13	14	16	69
17	RON	12	12	11	12	13	60
18	ST	14	15	14	14	15	72
19	THA	12	11	11	11	12	57
20	TDS	14	14	14	15	14	71
21	TCW	15	10	11	14	14	65
22	YON	15	14	15	15	15	74
Total							$\sum T_1 =$ **1478**

The data in table 4.1 above show that the lowest score of the pre test in the experimental group was 57, because the student lack of understanding to learning speaking in the classroom, while and highest score of the pre-test was 75. In this case the students' score in speaking was calculated bases on oral test, they are vocabulary,pronunciation,fluency,comprehension and grammar.

Based on the data in table 4.1, there is vocabullary,pronunciation, fluency, comprehension and grammar. Between five indicators, the lowest score in pretest

experimental group is within comprehension. In comprehension there are 4 students with the lowest score that is 10,and 9 students with a moderate score that is 11, and 2 students with the highest score that is 15.

Table 4.2

The Score of Post-test in Experimental Group

No	Students' Initial Names	The Component of Evaluate					Total
		Vocab	Compre	Pronoun	Fluen	Gram	
1	ASP	14	17	18	16	15	80
2	AF	12	12	17	18	12	71
3	DF	18	19	18	11	17	83
4	DP	18	18	19	16	18	89
5	FEN	16	15	18	19	17	85
6	JR	15	16	17	15	18	79
7	MG	17	18	18	19	18	90
8	MA	17	18	18	18	18	89
9	MI	18	19	17	19	18	91
10	PR	19	19	20	19	20	97
11	PY	18	18	19	18	18	91
12	PT	16	13	13	16	15	73
13	RSM	18	18	17	19	18	90
14	RST	18	19	19	19	18	93
15	RBA	15	15	14	18	13	75
16	ROS	15	17	18	17	16	83

17	RON	20	18	19	19	20	96
18	ST	17	16	17	17	18	85
19	THA	14	13	14	16	16	73
20	TDS	19	19	18	18	20	94
21	TCW	16	10	14	16	15	71
22	YON	16	13	14	17	18	78
Total							$\sum T_1 =1856$

The data in the table above showed that lowest score of pre-test was 71 while score of the post-test was 97. In the post-test in experimental group, the student experienced an increase with the scores obtained that is with 1 student got the lowest score of 10, 2 student with a medium score of 15 and 5 students got the highest score of 19 in the comprehension. In this case the students' score speaking was calculated based on oral test. As seen in table 4.3 :

Table 4.3
The Scores of Pre-Test in Control Group

No	Students' Initial Names	The Component of Evaluate					Total
		Vocab	Compre	Pronoun	Fluen	Gram	
1	AE	14	11	11	13	15	64
2	AADS	15	11	11	12	13	62
3	AND	13	12	13	12	14	64
4	CN	13	11	12	11	12	59

5	DS	13	12	12	13	14	64
6	DA	14	10	12	12	15	63
7	DM	16	11	12	11	15	65
8	DR	13	11	12	12	14	62
9	FEB	14	11	12	12	15	64
10	FIB	15	12	11	11	14	63
11	FB	16	10	10	12	14	62
12	JG	15	11	11	12	15	64
13	MI	14	11	10	13	15	63
14	MEY	14	11	12	12	15	64
15	RR	13	11	12	12	14	62
16	RDP	13	10	13	12	15	63
17	SW	16	11	12	11	15	65
18	WA	15	11	11	13	14	64
19	WS	15	11	10	10	14	60
20	WH	15	13	12	13	10	63
21	YR	12	14	12	13	11	62
22	YA	11	14	11	14	10	60
Total							$\sum T_1 = 1197$

The data on table above showed that the lowest score of the pre-test in the control group was 59, because the scores obtained from the five indicators are not to high so the final result is low, while the highest score of the pre-test was 65.

In the pre-test in control group the lowest score is in the pronunciation indicator that is with 2 students got the lowest score is 10. 6 students with the medium score is 11 and 2 students with the highest score is 13.

Table 4.4
The Scores of Post-Test in Control Group

No	Students' Initial Names	The Component of Evaluate					Total
		Vocab	Compre	Pronoun	Fluen	Gram	
1	AE	15	13	13	15	17	69
2	AADS	16	12	12	13	14	64
3	AND	14	12	13	13	15	64
4	CN	16	12	11	11	15	62
5	DS	15	13	12	13	15	64
6	DA	16	12	14	14	15	67
7	DM	18	13	14	13	17	71
8	DR	14	12	12	12	15	62
9	FEB	15	12	13	13	16	66
10	FIB	16	13	12	12	15	65
11	FB	18	12	12	13	15	67
12	JG	16	12	12	13	17	67
13	MI	16	12	12	13	17	67
14	MEY	15	12	14	13	15	69
15	RR	15	12	13	13	16	66
16	RDP	15	12	13	13	16	66

17	SW	18	13	14	13	17	71
18	WA	17	12	13	15	16	69
19	WS	16	12	11	11	15	62
20	WH	15	14	13	13	14	69
21	YR	16	13	11	11	14	65
22	YA	16	12	12	12	13	65
Total							$\sum T_1 = 1258$

Data in table above showed that the lowest score of the post test in control group was 62 obtained by 3 students and they have the same weakness in pronunciation and fluency but still have improvement compare to pre-test. While the highest score of the post-test was 71. In this case the students score in speaking was calculated based on oral test.

In the post-test in control group, the lowest in pronunciation indicator is 3 students got score 11, 7 students got medium score 13, and 4 students got the highest score 14.

B. The Data Analysis

Based on the data, the table 4.1 and 4.2 showed that the different scores between pre-test and post-test in both experimental and control group as presented in table 4.5

Table 4.5

The differences score between pre-test and post-test in experimental group

No	Students Initial Name	Score				
		Pre-test (T_1)	$T1^2$	Post-test (T_2)	$T2^2$	$X=(T_1 - T_2)$
1	ASP	64	4096	80	6400	16
2	AE	57	3249	71	5041	14
3	DF	65	4225	83	6889	18
4	DP	76	5776	89	7921	13
5	FEN	69	4761	85	7225	16
6	JR	65	4225	79	6241	14
7	MG	72	5184	90	8100	18
8	MA	70	4900	89	7921	19
9	MI	72	5184	91	8281	19
10	PR	75	5625	97	9409	22
11	PY	68	4624	91	8281	23
12	PT	60	3600	73	5329	13
13	RSM	72	5184	90	8100	18
14	RST	60	3600	93	8649	33
15	RBA	65	4225	75	5625	10
16	ROS	69	4761	83	6889	14

17	RON	60	3600	96	9216	36
18	ST	72	5184	85	7225	13
19	THA	57	3249	73	5329	16
20	TDS	71	5041	94	8836	23
21	TCW	65	4225	71	5041	6
22	YON	74	5476	78	6084	4
Total		$\sum T_1 = 1478$	$\sum (T_1)^2 = 99994$	$\sum T_2 = 1856$	$\sum (T_2)^2 = 160342$	$\sum (T_1 - T_2) = 378$

Table 4.5 above showed that the total score pre-test in experimental group was 1478 with the highest score is 76 and the lowest score is 57, while the total score of post-test was 1856 with the highest score is 97 and the lowest score is 71. That means an increase before and after experimental group class.

1. **The Calculation in Experimental Group**

    a. The Calculation for Pre-test in Experimental Group

    1. Mean

$$M(T_{2-}T_1) = \frac{\sum T_1}{N}$$

$$= \frac{1478}{22}$$

$$= 67,18$$

    2. Variances

$$S^2 = \sum T_1{}^2 - \frac{(T_1)^2}{N}$$

$$=99994 - \frac{(1478)^2}{22}$$

$$=99994 - \frac{2184484}{22}$$

$$=99994 - 99295$$

$$S^2=699$$

$$S = \sqrt{699}$$

$$=26,4$$

3. Standard Deviation

$$SD = \sqrt{\frac{\sum T_{1-} T_2}{N}}$$

$$= \sqrt{\frac{(99994)^2}{22}}$$

$$= \sqrt{\frac{9998800036}{22}}$$

$$= \sqrt{454490911}$$

$$= 21318$$

b. The Calculation for Post-test in Experimental Group

1. Mean

$$M (T_2 - T_1) = \frac{\sum T_2}{N}$$

$$= \frac{1856}{22}$$

$$= 84.36$$

2. Variances

$$S^2 = \sum T_2 2 - \frac{(T_2)^2}{N}$$

$$= 160342 - \frac{(1856)^2}{N}$$

$$= 160342 - \frac{3444736}{22}$$

$$= 160342 - 156579$$

$$= \sqrt{3763}$$

$$= 61,3$$

3. Standard Deviation

$$SD = \sqrt{\frac{(\sum T_2)^2}{N}}$$

$$= \sqrt{\frac{(140342)^2}{22}}$$

$$= \sqrt{\frac{19695876964}{22}}$$

$$= \sqrt{895267135}$$

$$= 94,6$$

c. The calculation for total Pre-Test and Post-test in experimental group

1. Mean

$$M(T_2 - T_1) = \frac{\sum(T_2 - T_1)}{N}$$

$$=\frac{378}{22}$$

$$=17{,}18$$

2. Standard Deviation

$$SD = \sqrt{\frac{(\sum T_2 - T_1)^2}{N}}$$

$$=\sqrt{\frac{(378)^2}{N}}$$

$$=\sqrt{\frac{142884}{22}}$$

$$=\sqrt{6494}$$

$$= 80{,}5$$

Table 4.6

The Differences Score of the Pre-test and Post-test in Control Group

No	Students Initial Name	Score				
		Pre-test (T_1)	$T_1{}^2$	Post-test (T_2)	$T_2{}^2$	$Y=(T_2 - T_1)$
1	AE	64	4096	69	4761	5
2	AADS	62	3844	64	4096	2
3	AND	64	4096	64	4096	0
4	CN	59	3481	62	3844	2
5	DS	64	4096	64	4096	0
6	DA	63	3969	67	4489	4
7	DM	65	4225	71	5041	6
8	DR	62	3844	62	3844	0
9	FEB	64	4096	66	4356	2

10	FIB	63	3969	65	4225	2
11	FB	62	3844	67	4489	5
12	JG	64	4096	67	4489	3
13	MI	63	3969	67	4489	4
14	MEY	64	4096	69	4761	3
15	RR	62	3844	66	4356	4
16	RDP	63	3969	66	4356	3
17	SW	65	4225	71	5041	6
18	WA	64	4096	69	3969	5
19	WS	60	3600	62	3844	2
20	WH	63	3696	69	4761	3
21	YR	62	3844	65	4225	3
22	YA	60	3600	65	4225	5
Total		$\sum T_1 =$ 1197	$\sum (T_1)^2 =$ 63546	$\sum T_2 =$ 1258	$\sum (T_2)^2 =$ 83642	$\sum (T_1 - T_2)) =$ 58

Table 4.6 show that the total score pre-test in cintrol group was 1197 while the total score of post-test was 1258.

2. The Calculation in Control Group

a. The Calculation for pre-test in Control Group

1. Mean

$$M (T_1 - T_2) = \frac{\sum T_1}{N}$$

$$= \frac{1197}{19}$$

$$= 63$$

2. Variances

$$S^2 = \sum T_{2^2} - \frac{(T_1)^2}{N}$$

$$= 83642 - \frac{(1197)^2}{19}$$

$$= 83642 - \frac{1432809}{19}$$

$$= 83642 - 75411$$

$$= 8231$$

$$S = \sqrt{8231}$$

$$= 90,037$$

3. Standard Deviation

$$SD = \sqrt{\frac{(\sum T_1)^2}{N}}$$

$$= \sqrt{\frac{(63546)^2}{19}}$$

$$= \sqrt{\frac{4038094116}{19}}$$

$$= \sqrt{212531269}$$

$$= 14578,4$$

b. The calculation for post-test in control group

1. Mean

$$M (T_2 - T_1) = \frac{\sum T_2}{N}$$

$$= \frac{1258}{19}$$

$$= 66,2$$

2. Variances

$$S^2 = \sum T_{2^2} - \frac{(T_2)^2}{N}$$

$$= 83642 - \frac{(1258)^2}{19}$$

$$= 83642 - \frac{1582564}{19}$$

$$= 83642 - 83292$$

$$= 350$$

$$S = \sqrt{350}$$

$$= 18{,}7$$

3. Standard Deviartion

$$SD = \sqrt{\frac{(\sum T_2)^2}{N}}$$

$$= \sqrt{\frac{(83642)^2}{19}}$$

$$= \sqrt{\frac{6995984164}{19}}$$

$$= \sqrt{368209692}$$

$$= 19188$$

C. The calculation for total pre-test and post-test in control group

1. Mean

$$M(T_2 - T_1) = \frac{\sum(T_2 - T_1)}{N}$$

$$= \frac{58}{19}$$

$$= 3{,}5$$

2. Standard Deviation

$$SD = \sqrt{\frac{(\sum T_2 - T_1)^2}{N}}$$

$$= \sqrt{\frac{(58)^2}{19}}$$

$$= \sqrt{\frac{3364}{19}}$$

$$= \sqrt{177}$$

$$= 13,3$$

No	X	Y	X²	Y²	XY
1	80	69	6400	4761	5520
2	71	64	5041	4096	4544
3	83	64	6889	4096	5312
4	89	62	7921	3844	5518
5	85	64	7225	4096	5440
6	79	67	6241	4489	5293
7	90	71	8100	5041	6390
8	89	62	7921	3844	5518
9	91	66	8281	4356	6006
10	97	65	9409	4225	6305
11	91	67	8281	4489	6097
12	73	67	5329	4489	4891
13	90	67	8100	4489	6030
14	93	69	8649	4761	6417
15	75	66	5625	4356	4950

16	83	66	6889	4356	5478
17	96	71	9216	5041	6816
18	85	69	7225	4761	5865
19	73	62	5929	3844	4526
20	94	65	8836	4225	6110
21	71	68	5041	4624	4828
22	78	69	6084	4761	5382
Total	$\sum X$ =1856	$\sum Y=$ 1460	$\sum X^2=$ 160342	$\sum Y^2=$ 97252	$\sum XY =$ 123326

D. Testing The Hypothesis

a. The equation of linear Regression

y= a + b where a and b got by :

$$a= \frac{(\sum Y)(X^2)-(\sum X)(\sum XY)}{N(\sum X^2)-(\sum X)^2}$$

$$= \frac{(1460)(160342)-(1856)(123326)}{(22)(160342)-(1856)^2}$$

$$= \frac{234099320-228893056}{3527524-3444736}$$

$$= \frac{5206264}{82788}$$

$$=62,88$$

$$b= \frac{N(\sum XY)-(\sum X)(\sum Y)}{N(\sum X^2)-(\sum X)^2}$$

$$= \frac{(44)(123326)-(1856)(1460)}{(44)(160342)-(1856)^2}$$

$$=\frac{5426344-2709760}{7055048-3444736}$$

$$=\frac{2716584}{3610312}$$

$$=0,75$$

$$y= a+b$$

$$= 62,88 + 0,75$$

$$= 68,31$$

b. Coeficient r

$$r^2=\frac{b\{N(\sum XY-(\sum X)(\sum Y))\}}{N\sum Y^2-(\sum Y)^2}$$

$$=\frac{0,75\{(44)(123326)-(1856)(1460)\}}{44(97252)-(1460)^2}$$

$$=\frac{0,75\{5426344-2709760\}}{4279088-2131600}$$

$$=\frac{0,75(2716584)}{2147488}$$

$$=\frac{2037438}{2147488}$$

$$r^2=0,648$$

$$r=\sqrt{0,648}$$

$$= 0,804$$

c. Examining the statistic hypothesis

H_a : P # 0 there is significant effect of applying cognitive code learning method on the students achievement in speaking.

H_0 : P = 0 there is no significant effect of applying cognitive code learning method on the the students achievement in speaking.

The statistical hypothesis could be determined by using :

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

with a criteria examination a H_0 is accepted if $t_{observed} > T_{table}$ or H_0 is rejected if $t_{observed} > T_{table}$ with degree of freedom or df = N-2= 58, α = 5% = 0,05

$$t_{observed} = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

$$= \frac{0,973\sqrt{44-2}}{\sqrt{1-0,973^2}}$$

$$= \frac{0,973\sqrt{42}}{\sqrt{1-0,946}}$$

$$= \frac{0,973(6,4)}{\sqrt{0,027}}$$

$$= \frac{6,227}{0,164}$$

$$= 37,96^{df}$$

$$t_{table} = t\ (1-\frac{1}{2}\ 0,05)^{df}$$

$$= t\ (1-\frac{1}{2}\ 0,05)^{44}$$

$$= t\ (1-\ 0,025)^{44}$$

$$= 2,22$$

Based on the calculation above where $t_{observed} > t_{table}$ (37,96 > 2.22) it could be concluded than H_0 is rejected. Its means that H_0 is accepted or " there is significant effect of applying cognitive code learning method on the students' achievement in speaking."

The perscentage of the effect of peer assisted learning technique on the students' achievement in speaking.

In determining of the percentage the effect of applying cognitive code learning method.formula was use :

D= R^2 x 100%

= 0,648 x 100%

= 64,8%

X= 100% - 64,8%

= 35,2%

Its mean that the effect of applying cognitive code learning method on the students' achievement in speaking was 64,8% and 35,2% was influence by other factor

E.   Research Finding

After the pree-test and post-test were conducted, then the finding could be report us follow :

1.   There is a significant effect of applying cognitive code learning method on the students'achievement in speaking, which was proven from the result of the test $t_{observed}> t_{table}$ or 37,96 >2,22

2.   The percentage of the effect of applying cognitive code learning method on the students achievement in speaking was 64,8 % and 35,2% was influenced by another factor.

CHAPTER V

CONCLUSION AND SUGGESTION

A.   Conclusion

Based on findings and analyzing the data, so the researcher could make the conclusion as follows

1.   There was significant effect of applying cognitive code learning method in students' achievement in speaking in learning making, accepting and declining invitation. Which is proved from the result test $t_{observed} > t_{table}$ or $37,96 > 2,22$ it means, null hypothesis was rejected and the alternative hypothesis was accepted.

2.   The percentage of the effect of applying cognitive code learning method on the students' achievement in speaking was 64,8% and 35,2% was influenced by another factor.

B.   Suggestion

Based on the result of this study, suggestion put forward as follows:

1.   For the students achievement in speaking especially making, accepting and declining invitation, so the english teacher can apply Cognitive Code Learning method because this method can help teacher.

2.   The englisg teacher can teach the students how to express their ideas or thoughts in speak systematically. Because of applying cognitive code learning has point of views can help students speak automatically.

3.   For the students, the students should be able to speak in english. At least a simple conversation, especially making, accepting and declining invitation.

REFERENCE

Brown,G. 2004. five basic types of speaking. The Preparation,Administration And Scoring Of English Speaking Tests At Tertiary Education Levels, Universitas Pendidikan Indonesia

Brown, G. & G. Yule. 2012. states "talking is the ability to pronounce the sounds to express or convey thoughts, idea or feelings verbally".

Burkat, G. & Sheppard, K. 2004. States tasks aim at giving learners confidence in trying out whatever language they know and give them experience of spontaneous interaction

Ellis, R . 2003 & Feneey, A. 2006 Ain Shams UniversityWomen's college Curricula and Methods of teaching Department

Fulcher, G. 2003:23. speaking is the verbal use of language to communicate with other. Reevaluating the test specifications of an oral proficiency test.

Harmer, J . 2001. *the assessment of speaking*. English Department Faculty of Letters and Culture State University of Gorontalo

Harmer, J. 2007,p.343. *Components of Speaking*. English Department Faculty of Letters and Culture State University of Gorontalo

Kayi. 2006. *speaking refers to the gap between linguistic expertise and teaching methodology*. teaching speaking of english as a foreign language

Luoma, S . (2004: 2) *define speaking as an interactive process of constructing meaning*. Ain Shams UniversityWomen's college Curricula and Methods of teaching Department

Richards, J. C. & S. Rodgers, T. S. 2014. *Approaches and methods in language teaching*. International Online Journal of Education and Teaching , 1(5). 309-317

Sugiyono. 2013. *repository.upi.edu* . Perpustakaan Universitas Pendidikan Indonesia

Daftar Riwayat Hidup

A. Identitas Pribadi

Nama   : Olga Meitri Pangestika

Tempat Tanggal Lahir: Medan,16 Mei 1996

Jenis Kelamin   : Perempuan

Status   : Belum Menikah

Agama   : Islam

Alamat   : Jalan starban no 171 kecamatan medan polonia

No Telp/hp   : 081262140655

Email   :olgapangestika@gmail.com

B. Pendidikan Formal

SD   : 2001-2007   SD Angkasa 2 Lanud Medan

SMP   : 2007-2010   SMP Angkasa Lanud Medan

SMA   : 2010-2013   SMK Negeri 7 Medan

Perguruan Tinggi   : 2013-2017   Universitas Muhammadiyah

                                                  Sumatera Utara

Medan,29 Maret 2018

Peneliti

Olga Meitri Pangestika
NPM.1302050200