

**THE USE OF MODIFIED COGNITIVE ACADEMIC  
LANGUAGE LEARNING APPROACH (CALLA) TO  
IMPROVE STUDENTS' COGNITIVE READING  
STRATEGIES AND READING COMPREHENSION AT SMA  
NEGERI 8 BANDAR LAMPUNG**

**(A Thesis)**

**By  
Gita Hilmi Prakoso**



**MASTER IN ENGLISH LANGUAGE TEACHING STUDY PROGRAM  
LANGUAGE AND ARTS EDUCATION DEPARTMENT  
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LAMPUNG UNIVERSITY  
BANDAR LAMPUNG  
2016**

## **ABSTRACT**

### **THE USE OF MODIFIED COGNITIVE ACADEMIC LANGUAGE LEARNING APPROACH (CALLA) TO IMPROVE STUDENTS' COGNITIVE READING STRATEGY AND READING COMPREHENSION AT SMA NEGERI 8 Bandar Lampung**

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This research aims to discover students' Cognitive reading strategies and reading comprehension after being taught by using modified Cognitive Academic Language Learning Approach (CALLA). The design of this research was non randomized control group pretest-posttest design. Two classes of second grader students of SMAN 8 Bandarlampung became the sample of this research. Students in experimental class were taught by using modified CALLA explicitly. In the other hand, students in control class were taught by using modified CALLA implicitly. To gather the data, the researcher employed two kinds of instruments, reading test and questionnaire. Reading test was employed to get the data of students' reading comprehension. Meanwhile, questionnaire was used to gather the data of students' Cognitive reading strategy and students' perception toward the implementation of modified CALLA. The results showed that out of ten strategies, there were two strategies which differ significantly before and after the treatment, deduction and getting idea quickly strategy. Furthermore, there are four strategies which differ significantly between students who were taught by using modified CALLA explicitly and implicitly, repetition, deduction, imagery and getting idea quickly strategy. In terms of students' reading comprehension, the result showed that there was significant difference of students' reading comprehension between students who were taught by using modified CALLA explicitly and implicitly. Besides, the data from questionnaire revealed that students' perception toward the implementation of modified CALLA was positive.

**Keywords:** CALLA, Cognitive reading strategies, reading comprehension

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**By:  
GITA HILMI PRAKOSO**

A Thesis

Submitted in a partial fulfillment of  
The requirements for S-2 Degree



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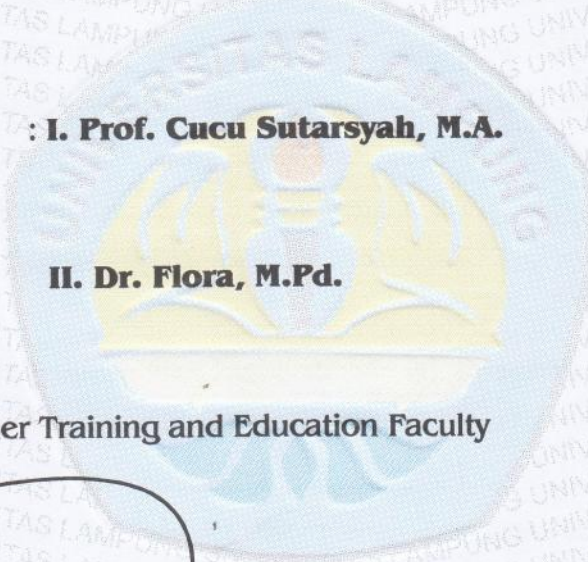
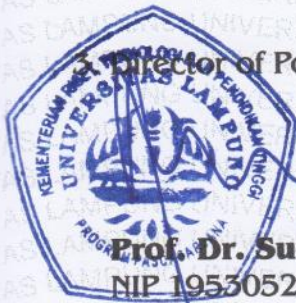
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## LEMBAR PERNYATAAN

Dengan ini saya menyatakan dengan sebenarnya bahwa:

1. Tesis dengan judul “The Use of Modified Cognitive Academic Language Learning Approach (CALLA) to Improve Students’ Cognitive Reading Strategies and Reading Comprehension at SMA Negeri 8 Bandar Lampung” adalah hasil karya sendiri dan saya tidak melakukan penjiplakan atau pengutipan atas karya penulis lain dengan cara tidak sesuai tata etika ilmiah yang berlaku dalam masyarakat akademik atau yang disebut plagiatisme
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Yang membuat pernyataan,



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## **CURRICULUM VITAE**

Gita Hilmi Prakoso is the second child of Mr. Aman Toto and Mrs. Renny. He was born in Bandung on 22<sup>nd</sup> October 1991. When he was five years old, he started his formal education at the first time by entering TK Dharmawanita and graduated in 1997. After that he continued his study at SD Al-Kautsar and graduated in 2003. Then he went to SMP N 8 Bandar Lampung to continue his study and graduated in 2006. Therefore, he entered SMA N 5 Bandar Lampung and graduated in 2009. At the same year, he was accepted at Universitas Pendidikan Indonesia majoring at English department. He spent four years to finish his study and graduated in 2013.

There are several organization which were followed by him during his education; when he was in senior high school, he joined as the radio announcer at G5 radio and he also registered as the member of band of SMA N 5 Bandar Lampung. In addition, he also joined in English Students Association (ESA) and involved in some events held by ESA as the committee.

## **DEDICATION**

By offering my praise and gratitude to Allah SWT for the abundant blessing to me. I would proudly dedicate this piece of work to:

- ❖ My beloved Father & Mother: Mr. Aman Toto Dwijono and Mrs. Renny Siti Mulyanah
- ❖ My lovely Brothers: Hawan Mughni Raharjo and Jaka Mufti Wibowo
- ❖ My lovely Grandma: Kurniasih and Sukini
- ❖ My lovely partner: Annisa Nur Rahmawanti
- ❖ My lovely adopted brother: Asep Hardiyanto
- ❖ My beloved family in MPBI '14



## **MOTTO**

“Nothing worth having comes easy”  
(Anonim)

“Give your best and you’ll get the best”(Anonim)

“Imagination is more important than knowledge”(Albert Einstein)

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The Writer

Gita Hilmi Prakoso  
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## **CHAPTER I INTRODUCTION**

This chapter provides a brief description of whole contents of the research including background, research questions, objectives of the research, significance of the research, scope of the research, clarification of terms.

### **1.1. Background of the Research**

Reading skill is an important skill to master. Reading is a receptive skill which becomes an input for English language learner. It provides good model for English writing, provides opportunities to study vocabulary, grammar, and punctuation, and demonstrate the way to construct sentences, paragraphs, and whole texts. It can be said that reading is an inseparable part of any English course.

In fact, learning reading is not easy especially for Indonesian students. English taught as foreign language in Indonesia. It means that students only learn and use English in classroom not in daily activities. The reading difficulties faced by students in EFL setting come from different sources: poor interpretation of the texts, poor vocabulary, the use of inappropriate reading strategies, and poor grammatical competence (Behroozizad & Bakhtiyarzadeh, 2012:28). Some research results (Hamra & Satriyana, 2012; Riswanto, 2014) indicated that the ability of Indonesian students to read English texts was very low.

This condition also faced by the students in SMA N 8 Bandar Lampung. Most of eleventh grader students of SMAN 8 Bandar Lampung have poor reading comprehension. It can be seen from their English test score. Only few of them can pass the test. Knowing this fact, preliminary research was done to know what is faced by the students in learning reading.

Based on the interview which is done with some students, the problems in learning reading lies on identifying main idea, identifying supporting details, vocabulary and the way they read the text. It seems that the important problem which should be solved is the effective way to read the text. If students can read the text effectively, they aren't going to face problems like, identifying main idea, identifying supporting details and vocabulary. In order to make students read effectively, teacher should teach the students about reading strategies that help them in reading the text. Teaching learning strategies, especially reading strategies, is different with regular teaching. The difference is in the teaching and learning process in classroom. The way teacher teach learning strategies will be different with the regular teaching. Because of that, an approach to teach learning strategy, especially reading strategy, will be proposed in this research.

Learning strategies are “specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations” (Oxford, 1990:8). In addition, Wenden & Rubin (1987:23) says learning strategies are strategies which contribute to the development of the language system which the learner constructs and affect learning directly. In

other words, when learners start to learn something, they have ability to respond to particular learning situations so that they can decide the most appropriate way to handle those situations. Learners use strategy in order to learn something successfully.

Many researchers have defined language learning strategies from different points of view. According to O'Malley & Chamot (1990:50), language learning strategies were divided into three main categories, metacognitive, cognitive, and social affective which refer to learners' planning their learning, thinking about the learning process, monitoring their own comprehension or production, and evaluating the outcomes of their own learning. Moreover, the definition by Oxford (1990:8) also included cognitive, emotional, and social aspects of language learning strategies that enhance learners' language learning proficiency and self-confidence. Based on the definition above, it can be said that there are some aspects that affect learners in learning language. Because of that, learners should choose strategy appropriately to face the problem when they learn a language since every strategy does not always fit to every problem.

The strategy which will be employed in this research is cognitive reading strategies. Cognitive strategies refer to the steps or operations used in learning or problem-solving, which require direct analysis, transformation, or synthesis of learning materials (O'Malley and Chamot, 1990:229). They operate directly on new information and control it to promote learning (O'Malley and Chamot, 1990:44). They help a student to understand and produce the new language by repeating, summarizing, reasoning deductively, predicting, analyzing, using context clues, note

taking, and practicing with the specific aspects of the target language such as sentence structure and unknown vocabulary. The advantages of cognitive reading strategies above become the consideration why the strategy was chosen. Some previous research also have revealed that the use of cognitive learning strategies in classroom instruction and learning is fundamental to successful learning (Ozek & Civelek, 2006; Ratna, 2014).

One of the approaches that can be used by teacher to teach learning strategy is Cognitive Academic Language Learning Approaches (CALLA). Cognitive Academic Language Learning Approach (CALLA) was developed in the United States in 1986 by Chamot and O'Malley in order to overcome the academic problems that secondary education students who were learning English as L2 were having in their other classes. In this approach, students are taught to use learning strategies derived from a cognitive model of learning as aids to comprehension and retention of language skills and content area concepts.

CALLA has three main components; content topics, academic language development, and explicit instruction in learning strategies for both content and language acquisition (O'Malley & Chamot, 1990:193). According to (O'Malley & Chamot, 1986:5), CALLA is designed to: (1) meet the academic development needs in English of elementary and secondary students. (2) provide a program of content based that can serve as a bridge between the ESL or bilingual program and mainstream education; and (3) develop a curricular and instructional approach for LEP students based on cognitive model of training. It shows that CALLA can be

implemented in Indonesia since students in Indonesia categorize as Limited English Proficient (LEP) students. But, since English taught as foreign language in Indonesia, the implementation of this approach will be different from the original one. It should be adjusted with the students' condition in Indonesia since ESL and EFL context are different. The adjustment will be on the steps of implementation of CALLA in classroom and the materials which are used by the teacher. In addition, the explicit instruction of CALLA is the consideration of writer to implement this approach in the classroom.

There are some previous studies dealing with CALLA. The result of those studies indicate that strategy instruction based on CALLA has positive effect on reading performance (Cubukcu, 2008; Phuakpong, 2011; Marimuthu & Muthusamy, 2011). Their studies revealed that CALLA can improve students' reading comprehension. In addition, CALLA also improve students' strategy awareness (Phuakpong, 2011). On listening performance (Coskun, 2010), students in experimental group got better listening score than control group. It means that CALLA also has positive effect in listening skill. The last is on students' perception (Adiguzel & Gurses, 2013). The findings generally indicated that students hold positive opinions about the effect of reading strategies instruction over their reading skills and strategy use. Furthermore, after the strategy instruction, a certain variation among the strategies applied by students was detected and students were noted to have higher levels of awareness concerning their reading skills and strategy use.



However, it seems that there are no studies that focus on investigating the implementation CALLA in developing students' cognitive reading strategies and reading comprehension especially in Indonesia. Moreover, since the strategy and skill employed in this research are specific, cognitive reading strategy and reading skill, CALLA which is going to be employed in this research will be modified to fit on those two aspects. It should be useful to know whether or not the application of modified CALLA can help students in developing their cognitive reading strategies and reading comprehension.

## **1.2. Identification of the Problems**

In line with the background of the problems above, the researcher identifies the problems as follows.

1. Students' ability to read is still poor
2. Students are lack of vocabulary
3. Students find difficulties in identifying the topic sentences
4. Students find difficulties in interpreting the supporting topic
5. Students find difficulties in determining the main idea
6. Students can not read the text effectively
7. Students do not know about the learning strategies

## **1.3. Limitation of the Problems**

Having identified all the problems occurring in the field of study above, this research concerns on the students' low reading comprehension problem and also the teaching of learning strategies. By knowing how to teach learning strategies

appropriately, hopefully teacher can make students become a strategic learner. More over, after the students known about the strategies, they can use it to help them improve their reading comprehension.

#### **1.4. Research Questions**

The writer would like to formulate the research questions as follows :

- (1) Is there any significant difference of the usage of strategies before and after the treatment of CALLA?
- (2) Is there any significant difference of students' cognitive reading strategies who are taught by modified CALLA explicitly and implicitly?
- (3) Is there any significant difference of students' reading comprehension who are taught by modified CALLA explicitly and implicitly?
- (4) How is students' perception during the implementation of modified CALLA?

#### **1.5. Objectives of the Research**

The objectives of the study are to find out: (1) whether or not there is a significant difference of the usage of the strategies before and after the treatment. (2) whether or not there is a significant difference of students' strategy who are taught by modified CALLA explicitly and modified CALLA implicitly. (3) whether or not there is a significant difference of students' reading comprehension who are taught by modified CALLA explicitly and modified CALLA implicitly.(4) students perception about the implementation of CALLA.

### **1.6. Significance of the Research**

The research is expected to make contribution to the improvements of the third grader students' reading comprehension by using CALLA. Furthermore, The research can also become valuable information for teachers of English to teach strategy especially in reading. Hopefully, after the implementaton of the approach, students are more aware to some strategies that they can use to help them learn reading.

### **1.7. Scope of the Research**

Relating to the significance of Cognitive Academic Language Learning Approach (CALLA) towards students' cognitive reading strategies and reading comprehension, the writer would like to investigate further about the benefits of Cognitive Academic Language Learning Approach (CALLA) for the second grader students of SMA Negeri 8 Bandar Lampung. The perception of the students about the implementation of CALLA also become the focus of this research. In addition, narrative text is used in the research as a text that learnt by the students.

### **1.8. Definition of Terms**

#### **1. CALLA (Cognitive Academic Language Learning Approach)**

CALLA is a model which focuses on explicit instruction in learning strategies. Its model is recursive and this allows teachers and students to have the flexibility to revisit prior instructional phases as needed.

## 2. Modified CALLA

Modified CALLA is the modification of CALLA to make this approach suitable for certain strategies and skill. In this case, CALLA was modified to make it suitable to teach cognitive strategy for reading skill.

## 3. Cognitive Reading Strategy

Cognitive strategies refer to the steps or operations used in learning or problem-solving, which require direct analysis, transformation, or synthesis of learning materials. In this case, it helps students in reading a text.

## 4. Reading Comprehension

Reading comprehension is the activity to understand deeply reading material by using active thinking process. It is done by people which need high level process to get the gist or messages from certain printed materials.

## **CHAPTER II LITERATURE REVIEW**

This chapter presents several theories which are relevant to this study. In detail, this chapter will explore some theoretical foundations about, cognitive reading strategy, Cognitive Academic Language Learning Approach (CALLA), explicit and implicit training, concept of reading, some related studies and hypothesis of the research.

### **2.1. Cognitive Reading Strategy**

Cognitive strategies become the focus on this research. These strategies will be taught by using modified CALLA to make students know and understand about the strategies. Cognitive strategies refer to the steps or operations used in learning or problem-solving, which require direct analysis, transformation, or synthesis of learning materials (O'Malley and Chamot, 1990:229). They operate directly on new information and control it to promote learning (O'Malley and Chamot, 1990:44). Students will be helped to understand and produce the new language by repeating, summarizing, reasoning deductively, predicting, analyzing, using context clues, note taking, and practicing with the specific aspects of the target language such as sentence structure and unknown vocabulary. Unlike metacognitive strategies,

cognitive strategies may not be applied to all types of learning tasks. Rather, they seem to be directly connected to specific learning tasks.

Cognitive strategies are typically found to be the most popular strategies with language learners (Oxford, 1990:43). The importance of cognitive strategies increases with the age of learners in EFL. Learners need to be provided with appropriate ways of instruction to use this strategy as efficiently as possible. These strategies refer to the steps or operations used in learning or problem-solving that require direct analysis, transformation, or synthesis of learning materials. Rubin (1981) cited in Wenden & Rubin, 1987:23) identified 6 main cognitive learning strategies contributing directly to language learning:

- Clarification / Verification
- Guessing / Inductive Inferencing
- Deductive Reasoning
- Practice
- Memorization
- Monitoring

The cognitive reading strategies mentioned above are also in line with those identified by O'Malley & Chamot (1990:119-120) which include resourcing, repetition, grouping, deduction, imagery, getting idea quickly, elaboration, inferencing, note-taking and summarizing. The detail explanation about the strategies will be explained below.

### **2.1.1. Resourcing**

Resourcing is using target language reference materials such as dictionaries, encyclopedias, or textbooks (O'Malley & Chamot, 1990:119). This strategy is useful for both and production. As Oxford (1990:45) states that to better understand what is heard or read, printed resources such as dictionaries, word lists, grammar books, and phrase books may be valuable. In this study, this strategy is represented by the strategy of using dictionary for important words.

### **2.1.2. Repetition**

Repetition is repeating a chunk of language (a word or phrase) in the course of performing a language task (O'Malley & Chamot, 1990:119). As Oxford (1990:45) states that in reading, the strategy of repeating can be reading a passage more than once to understand it more completely. In this study, repetition strategy is represented by two strategies: re-reading a sentence and re-reading the text to remedy failures.

### **2.1.3. Grouping**

According to O'Malley & Chamot (1990:119), grouping is classifying words, terminology, or concepts according to their attributes or meaning. Oxford (1990:58) adds that grouping strategy in reading involves classifying or reclassifying what is read into meaningful groups, thus reducing the number of unrelated elements. In this study, this grouping strategy is represented by the strategy of classifying the unfamiliar words before the students read the text.

#### **2.1.4. Deduction**

According to O'Malley & Chamot (1990:119), deduction strategy is applying rules to understand or produce the second language or making up rules based on language analysis. As Oxford (1990:46) states that this is a top-down strategy leading from general to specific. In this study, this strategy is represented by reading the first line of every paragraph to get the main idea of the paragraph.

#### **2.1.5. Imagery**

According to O'Malley & Chamot (1990:119) imagery is using visual images (either mental or actual) to understand or remember new information. Meanwhile, Oxford (1990:61) states this strategy as a good strategy to remember what has been read in the new language to create a mental image of it. In this study, imagery strategy is represented by two strategies: looking at illustration / picture of the events in mind.

#### **2.1.6. Getting the Idea Quickly**

In this study, the strategy of getting the idea quickly involves skimming strategy and scanning strategy. As stated by Oxford (1990:46), the strategy of getting the idea quickly constitutes with skimming strategy and scanning strategy. When skimming, one goes through the reading material quickly in order to get the gist of it, to know how it is organized, or to get an idea of the tone or intention of the writer (Grellet, 1981:19). In other hand, in doing scanning, someone only try to locate specific information and often do not even follow the linearity of the passage to do so (Grellet, 1981:19). It can be concluded that skimming is used to find out the main



idea of the paragraph. However, scanning is used to find out supporting details of the text.

#### **2.1.7. Elaboration**

Elaboration, according to O'Malley & Chamot (1990:120), is relating new information to prior knowledge, relating different parts of new information to each other or making meaningful personal associations with the new information. Readers must build meaning by linking text information to what they already know. The more prior knowledge they have, the better they can understand the new information. In this study, this strategy is represented as thinking about previous knowledge on the topic of the text or associating to background's knowledge.

#### **2.1.8. Inferencing**

Inferencing strategy is using available information to guess the meaning of new items, predict outcomes, or fill in missing information (O'Malley&Chamot, 1990:120). This strategy can be used as students attempt to comprehend the text. In this study, inferencing strategy is represented by the strategy of using the available clues in the text to find the meaning of some unfamiliar words and using title to predict the content of the text and paying attention to words or phrases that show how text is organized.

#### **2.1.9. Note-Taking**

O'Malley & Chamot (1990:120) defines note-taking strategy as writing down key words and concepts in abbreviated verbal, graphic, or numerical form while listening or reading. Note-taking strategy is a good reading strategy. Note-taking

makes students to be active participants in their learning, helps them organize important concepts, remember information, and becomes one of their study aids. In this study, this strategy is represented by underlining the important sentences and after that students should write the important point of those sentences.

#### **2.1.10. Summarizing**

According to O'Malley & Chamot (1990:120), summarizing is making a mental, oral, or written summary of new information gained through listening or reading. Summarizing can be a useful technique. The process of summarizing enables students to grasp the original text better, and the result shows the reader that students understand it as well. In addition to this, the knowledge that students got by summarizing makes it possible for them to analyze and critique the original text.

In this research, all of cognitive reading strategies will be taught by using modified CALLA. The strategies will be given in some sessions in order to make students easier in understanding the strategies. At the end of the research, the improvement of students, cognitive reading strategies will be investigated by the researcher.

#### **2.2. Cognitive Academic Language Learning Approach (CALLA)**

Cognitive Academic Language Learning Approach (CALLA) was developed in the United States in 1986 by Chamot and O'Malley in order to overcome the academic problems that secondary education students who were learning English as L2 were having in their other classes. In this approach, students are taught to use learning strategies derived from a cognitive model of learning as aids to

comprehension and retention of language skills and content area concepts ( O'Malley & Chamot, 1986:5).

### **2.2.1. Components of CALLA**

CALLA has three main components; content topics, academic language development, and explicit instruction in learning strategies for both content and language acquisition (O'Malley & Chamot, 1990:193).The content is chosen among the topics that are appropriate with students' levels and field of study. Beside that, it is suggested that students' interest and motivation should also be considered as important during topic selection. Content helps students enlarge their repertoire across different topics and influences their motivation positively.

Academic language development involves all four language skills: speaking, listening, reading and writing. Chamot and O'Malley (1994: 40-42 cited in Adiguzel & Gurses, 2013:35) divide language skills into two as academic and social language skills. Social language refers to a specific type of language used to socialize in a given environment whereas academic language means the one used while teaching and learning by teachers and students. Social language functions cover those such as meeting someone or initiating a social conversation with a stranger. On the other hand, academic language functions include searching for information, informing, comparing, ordering, classifying, analyzing, synthesizing, and evaluating and bears importance in terms of turning students into effective learners (O'Malley & Chamot, 1994: 184 cited in Adiguzel & Gurses, 2013:35).

The last feature of the model is that teaching of language learning strategies takes place explicitly, interwoven with the language topics. The goal of explicit strategy instruction is to offer students a list of strategies which can be used as a menu to choose in accordance with different learning activities and tasks (O'Malley & Chamot, 1994: 11 cited in Adiguzel & Gurses, 2013:35).

### **2.2.2. Objectives of CALLA**

According to O'Malley & Chamot, (1986:5), CALLA is designed to: (1) Meet the academic development needs in English of elementary and secondary students. (2) Provide a program of content based that can serve as a bridge between the ESL or bilingual program and mainstream education; and (3) Develop a curricular and instructional approach for LEP students based on cognitive model of training. Moreover, (Chamot & Robbins, 2006:6) also add some of the principal objectives of CALLA, they are :

1. To value their own prior knowledge and cultural experiences, and relate this knowledge to academic learning in a new language and culture.
2. To learn the content knowledge and the language skills that are most important for their future academic success.
- 3.. To develop language awareness and critical literacy.
4. To select and use appropriate learning strategies and study skills that will develop academic knowledge and processes.
5. To develop abilities to work successfully with others in a social context.
6. To learn through hands-on, inquiry-based, and cooperative learning tasks.

7. To increase motivation for academic learning and confidence in their ability to be successful in school.
8. To evaluate their own learning and planning to become more effective and independent learners.

### **2.2.3. Implementation Procedures of the Modified CALLA**

As mentioned before that CALLA emerged in United States where English is taught as second language (ESL), the implementation of CALLA in Indonesia should be adopted from the original one. In Indonesia, English is taught as foreign language where students have limited exposure to use the language. It is different from ESL students that have more extensive daily exposure to English-speaking culture, although their understanding may be limited by their language skills. Seeing this difference, it seems that the process of CALLA should be adjusted with the condition of Indonesian students. In addition, the use of material also should take into account that it should be appropriate with the students' condition in Indonesia.

In this research, CALLA is modified to be more specific. The original CALLA only provides the instruction in teaching generally. It does not provide specific instruction how to teach all skills in English like, reading, writing, listening and speaking. Furthermore, CALLA also designed not to specific learning strategies. CALLA seems to collaborate the learning strategies, metacognitive, cognitive, and social strategies, in the process of implementation in the classroom. In order to meet the purpose of the research, CALLA here is modified to teach cognitive reading strategies and reading. The modification causes the realization of CALLA in the

classroom different from the original one. The process of implementation of CALLA will briefly described below.

In the preparation phase, teachers provide advance organizers about the lesson, and students identify what they already know about a topic. This phase is aimed to know students' prior knowledge so the teacher can arrange the plan to teach the students. In the presentation phase, teacher provides new information to students, in this case teacher introduce Cognitive reading strategies to students. In the practice phase, students engage in activities in which they apply the Cognitive reading strategies that they have learnt in some text. In the evaluation phase, students reflect on their individual learning and plan to remedy any deficiencies they may have identified Finally, in the expansion phase, students are provided with opportunities to relate and apply the new information to their own lives, call on the expertise of their parents and other family members, and compare what they have learned in school with their own cultural experiences. In this case, students can apply the strategies to different narrative stories and later on students can apply the strategies to different genre of the texts.

### **2.3. Explicit and Implicit Strategy Training**

In implementing modified CALLA in the classroom, the researcher will presents this approach explicitly and implicitly. Explicit modified CALLA will be given to experimental class, while the implicit one will be given to control class. The two different ways of presenting the approach are expected to give different effect to students in this research.

Explicit and implicit strategy training differ in terms of the way teachers teach the strategy to students. In explicit training, teachers give students rules to practice and make conscious efforts to learn. Oxford (1990:214) claimed that defined explicit instruction could help students develop awareness of the learning strategies used, learn to think of practicing the target language with the new strategies, students' self-evaluation of the strategies used, and students' practice of transferring knowledge to newer tasks. On the other hand, according to Lee & Van Patten (2003:171) cited in Talley & Hui-Ling (2014:39), "The acquisition of implicit knowledge in language learning involves three separate procedures: 1. Noticing; 2. comparing; and, 3. integrating. In brief, the implicit strategy training is meant to create an opportunity for learning without the student's awareness of what has been learned.

By contrast, in explicit teaching, teachers apply conscious or overt strategies to teach students through an awareness that one is in the process of learning (Richards, & Schmidt, 2002 cited in Talley & Hui-Ling, 2014:39). Explicit learning can involve language activities such as teaching memorization techniques, hypothesis formation, or testing. EFL teachers are encouraged to provide direct instruction in language learning strategies such as selective attention, activating prior knowledge, summarizing, questioning, and making inferences, to mention just a few. As such, strategy training may be considered an explicit approach to teaching students how to apply language learning and language use strategies in the classroom.

In short, explicit strategy training will provide students with a direct awareness of language learning strategies. Explicit teaching of language learning strategies may be reduced when students are ready to accept autonomy for their

learning. Implicit learning may be facilitated through the deliberate scaffolding of strategies instruction and allowing comprehension and memorization to take place.

Seeing the difference of explicit and implicit training, it is very interesting to see whether or not there is a significant difference of students' cognitive reading strategy and reading comprehension between the students who are trained explicitly and implicitly. Explicit training of modified CALLA will be given in the experimental class. In the other hand, implicit training of CALLA will be given to the control class

#### **2.4. Concept of Reading**

A lot of experts have been defined the term of reading. The definition of the term can be vary since people have different purpose, different background knowledge, and different importance when they read. Because of that, the researcher defines the term of reading from some perspectives.

Grellet (1981:17) claims that "reading is a constant process of guessing, and what one brings to the text is often more important than what one finds in it". Meanwhile, Mcnamara (2007:3) define reading as an extraordinary achivement when one considers the number of levels and components that must be mastered. In addition to reading definition above, Nuttal (1996, p. 4) define reading as getting out the text as nearly as possible the message the writer put into it. Generally, the purpose of reading is to search for information, for general comprehension, to learn new information, and to synthesize and evaluate information.



Comprehension is the interpretation of the information in the text (McNamara, 2007:28). In addition, Grellet (1981:3) defines reading comprehension as extracting the required information from it as efficiently as possible. Based on the statements above, in comprehending a text, readers should use available information to understand the core of the text. Furthermore, they must draw upon their own experiences and their previous knowledge in order to replace this prior knowledge and experience to what they read.

In reading comprehension, according to Milan in Kuning (2015:12) the students should be able to determine several aspects such as determining the main idea, comprehending main idea, distinguishing between main idea and supporting details, making inferences, making references, understanding vocabulary and using new words. All those aspects is elaborated below.

#### **a. Determining Main Idea**

In reading comprehension, identifying the main idea of a written selection is one of the most important comprehension skill. Main idea is the most important ideas stated in the topic sentence and supporting by supporting sentence in a single paragraph (Suparman, 2012:130). Recognizing main idea is important for reading rapidly. When you are seeking only main idea or major concepts, you can extract each idea readily.

#### **b. Finding Supporting Details**

Reading for facts require you to concentrate and give full attention to the task. You must realize that all factual information is not of equal importance. As with main

ideas, you may disregard some words and sentences that are used as introductory or illustrative material. Supporting detail is the statements which explain, clarify, describe and illustrate the main idea. It is in line with Suparman (2012:132) who states that supporting details is the sentence or the statements which develop the main idea, that is, they explain it by giving a reasons, examples, facts, statistics and quotations. In term of finding supporting detail, the students need to read the text carefully since supporting detail can be found if the reader can comprehend the text well. If students can find the supporting detail of the text, they can easily comprehend the text.

#### **c. Making Inference**

The third aspect is making inference. Drawing inferences to make reasonable deductions based on facts or evidences presented. Readers infer when they read between the line in order to get additional insight into author's meaning. According to Nation (2008:34) making inference is taking messages from the text that are not explicitly stated. It is also supported by McNamara (2007:49) who declare that the reader is left to fill in details that are not explicitly stated in the text, either by integrating statements within the text or by incorporating general knowledge with textual information. Thus, in completing this task the students should think deeper to find the answer since the messages is not explicitly seen.

#### **d. Making Reference**

In making reference, the students should know the intended object which is pointed by the author. It is quite difficult for the students to make the reference if they do not read the text carefully. So, the students should read the text deeply so that they can make reference correctly.

#### **e. Using Vocabulary Context**

The last aspect is using vocabulary context. In this aspect, the students should be able to replace certain words in the text with its synonym or antonym which is suitable with the context. To complete this task, the students should have a bank of words in their mind so that they can replace the words contained in the text with another appropriate words. Nation (2008:80) states that word recognition during reading is affected by vocabulary knowledge, similarly vocabulary knowledge will be affected by word recognition. Therefore, this fact should lead the students to enlarge their vocabulary mastery so that it can make them more easy in comprehending the reading text.

Based on the explanation about reading comprehension above, the researcher concludes that reading comprehension is a complex process in which the readers try to read deeply the text in order to get main ideas and every details explained in the text.

#### **2.4.1. Types of Reading**

In the case of reading, variety of performances derived more from the multiplicity of types of texts than from the variety of overt types of performance. Nevertheless, for considering assessment procedure, several types of reading performance are typically identified, and these will serve as organizers of various assessment tasks. According to Brown (2004:189), there are four types of reading.

**a. Perceptive**

In keeping the set of categories specified for listening comprehension, similar specifications are offered here, except with some differing terminology to capture the uniqueness of reading. Perceptive reading tasks involve attending to the components of larger stretches of discourse: letters, words, punctuation, and other graphemic symbols. Bottom-up processing is implied.

**b. Selective**

This category is largely an artifact of assessment formats. In order to ascertain one's reading recognition of lexical, grammatical or discourse features of language within a very short stretch of language, certain typical tasks are used: picture-cued tasks, matching, true/false, multiple-choice, etc. Stimuli include sentences, brief paragraphs, and simple charts and graphs. Brief responses are intended as well. A combination of bottom-up and top-down processing may be used.

**c. Interactive**

Include among interactive reading type are stretches of language of several paragraph to one page or more in which the reader must, in a psycholinguistics sense, interact with the text. That is, reading is a process of negotiating meaning; the reader brings to the text a set of schemata for understanding it, and intake is the product of that interaction. Typical genres that lend themselves to interactive reading are anecdotes, short narratives and descriptions, excerpts from longer texts, questionnaires, memos, announcements, directions, recipes, and the like. The focus on interactive task is to identify relevant features (lexical, symbolic, grammatical, and discourse) within texts of moderately short length with the objective of retaining the

information that is processed. Top-down processing is typical of such tasks, although some instances of bottom-up performance may be necessary.

#### **d. Extensive**

Extensive reading applies to texts of more than a page, up to and including professional articles, essays, technical reports, short stories, and books. Here that definition is massaged a little in order to encompass any text longer than a page. The purposes of assessment usually are to tap into a learner's global understanding of a text, as opposed to asking test takers to "zoom in" on small details. Top-down processing is assumed for most extensive tasks.

Referring to the types of reading above, it seems that reading comprehension achievement belongs to selective reading types. Since in measuring students' reading comprehension, the researcher gives a test in multiple-choice which need the combination of top down and bottom up process to complete the activity.

#### **2.4.2. Process of Reading**

Process of reading plays an important role in comprehending the text. It determines how well the comprehension of someone of certain texts. Therefore, it needs the elaboration to make clear assumption related to the process of reading comprehension. Nuttal categorizes the process of reading the reading material into two kinds of process. Nuttal (1996, p. 16-17 ) divides the processes of reading into two which are top-down process and bottom-up process.

**a. Top-down Process**

Top-down process means reading by using schemata. Nuttal (1996, p. 16) state that in top-down process, readers draw on their intelligence and experience to make prediction based on schemata that they have to understand the text. Furthermore, Nuttal (1996, p. 16) state that in top-down process readers try to see the overall purpose of the text, or get rough idea of the pattern of the writers' argument, in order to make a reasoned guess at the next step.

**b. Bottom-up Process**

Bottom-up process means the readers try understand the things in the text, such as word, meaning, and sentence in order to get the general idea of the text. Nuttal (1996, p. 17) state that in bottom-up process the readers build up a meaning from the black marks on the page : recognizing letters and words, working out sentence structure in order to get full understanding of the text.

**c. Interactive Process**

Readers' background knowledge and the knowledge of content schemata play more crucial role than the language knowledge in reading process. In line with top-down and bottom-up process, Rumelhart's (1980: 5) states that the efficient and effective reading requires both top-down and bottom-up strategies operating interactively. Based on this statement, both those processes seem occur simultaneously in reading process. Moreover, Carrell (1992:105) claims that some second language readers are not efficient interactive processors, either because they attempt to process in a totally bottom-up fashion and may be effortful decoders at that, or because they attempt to process in a totally top-down fashion and are hence

subject to schema failures or schema interference. In addition, based on Sutarsyah (2015:5) when reading, there is interaction between the graphic symbols and reader's language knowledge (bottom-up decoding skill) and the knowledge of the world (top-down comprehension strategy).

To sum up the explanation above, it is important to know the process of reading in order to help the students to get better reading comprehension achievement. Furthermore, in reading comprehension, those three processes are needed because in comprehending the text we should not only find out the general idea, but also obtain specific information related to the text.

In short, knowing the process of reading can help students get better understanding of the text. To get the full understanding of the material or text, it can be done through looking at the general information followed by the details of the text or vice versa.

## **2.5. Previous Related Studies**

There are some journal articles dealing with the use of Cognitive Academic Language Learning Approach (CALLA) and students' reading comprehension. First, Cubukcu (2008) conducted a study about the effectiveness of systematic direct instruction of multiple metacognitive strategies designed to assist students in comprehending text. Within this study, students have been taught metacognitive strategies for reading in a five-week program they have joined voluntarily. The researcher used CALLA as approach to teach metacognitive strategy training. The students have used the reading logs to reflect on their own thinking processes as they

have been engaged in reading tasks. Specifically, the reading comprehension and vocabulary achievement of 130 third-year university students has been investigated to determine whether instruction that incorporated metacognitive strategies has led to an increase in the reading comprehension of expository texts.

Second, Phuakpong (2011) conducted a study on the reading comprehension skills using CALLA, a metacognitive strategy instruction for 4 weeks. A one-shot case design was used to investigate the effect of metacognitive strategy instruction on the reading comprehension skills of 15 undergraduate Tourism students. During the intervention, they used the reading logs to reflect on their metacognitive awareness and self-regulatory mechanisms while they were engaged in reading tasks on the Internet. Data from participants' reading logs were analyzed qualitatively. Findings reveal that metacognitive strategy instruction can increase their reading comprehension skills. In addition, the results imply that their metacognitive awareness is raised. They have become strategic readers and autonomous learners as well.

Third, Marimuthu and Muthusamy (2011) investigated about Metacognitive strategy training through CALLA as a way to improve students' reading comprehension. A quasi-experimental design was utilized using nonequivalent groups to compare the performance of both the control ( $n=32$ ) and experimental groups ( $n=33$ ). Results obtained showed that the group that received training through CALLA showed better use of the MCS, thus improving their reading comprehension performance in the post test. It can therefore be concluded that the use of CALLA as



an instructional strategy does aid towards improved performance in language learning, particularly in reading comprehension.

## **2.6. Hypotheses**

In conducting this study, the writer will try to prove the following hypotheses:

Ho1 : there is no significant difference of the usage of cognitive reading strategies before and after treatment.

H<sub>A1</sub> : there is a significant difference of the usage of cognitive reading strategies before and after treatment.

Ho2 : there is no significant difference of students' reading cognitive strategies who are taught by modified CALLA explicitly and modified CALLA implicitly.

H<sub>A2</sub> : there is a significant difference of students' reading cognitive strategies who are taught by modified CALLA explicitly and modified CALLA implicitly. by using Cognitive Academic Language Learning Approach (CALLA).

H<sub>o3</sub> : there is no significant difference of students' reading comprehension who are taught by modified CALLA explicitly and modified CALLA implicitly.

H<sub>A3</sub> : there is a significant difference of students' reading comprehension who are taught by modified CALLA explicitly and modified CALLA implicitly.

## **CHAPTER III RESEARCH METHODOLOGY**

This chapter provides the explanation about the procedures of the research in order to find out the answer to the research question which is stated in previous chapter. This chapter covers research method, research participant, research instrument, research procedure and techniques for analyzing the data.

### **3.1. Research Design**

In this research, quasi experimental design was employed and the researcher chose non randomized control group pretest-posttest design. In quasi experimental, the samples were not chosen randomly (Cresswel, 2009:309). The samples can be taken purposively based on the need of the research. In this design, it consisted of pre test, treatment and post test. In the pre and post test, reading test was distributed to measure the students' reading comprehension. Then, in the treatments, the researcher gave different treatments to experiment and control class. In experiment class, the researcher treated the students by using modified CALLA explicitly. While in the control class, the treatment was given implicitly. Further, the design of the study was non randomized control group pretest-posttest design. The design of non randomized control group pretest-posttest design is as follows.

**Table 1.3****The Schematic of Non randomized control group pretest-posttest**

Group	Pre-test	Treatment	Post-test
<i>Experimental group = E</i>	O	X1	O
<i>Control Group = C</i>	O	X2	O

Note:

- X represents the exposure of a group to an experimental variable
- O refers to the process of observation or measurement

**3.2. Variable**

A variable is term as an attribute of an object which varies from object to object. In research, variables can be classified as dependent and independent variables. The independent variable is an active variable which manipulate the values of the variable to study its affect on another variable. While, dependent variable is the variable that is affected by the independent variable (Kaur, 2013:36). The independent variable of the research are explicit and implicit CALLA and the dependent variable is the students' cognitive reading strategies and students' reading comprehension.

**3.3. Population and Sample**

The population involved in the research was second grader students from SMA Negeri 8 Bandar lampung. The sample in this research was taken by using purposive sampling technique. Purposive sampling technique was chosen since quasi-

experimental design does not contain random selection of subjects. It was in line with Cresswel (2009:309) who states that in quasi- experimental design, the samples were not chosen randomly. Besides, this technique was used since the researcher has certain goal—to make the research focus on certain subjects. The samples were two classes of second grader students of SMA Negeri 8 Bandar lampung. Each of the class consisted of 30 students.

### **3.4. Research Instruments**

Research instruments are tools used in the research for obtaining relevant data to research's project. The data are collected to answer research questions of the research. There were two research instruments utilized in the research, namely test and questionnaire. From those instruments, the data collections were analyzed to determine whether or not Cognitive Academic Language Learning Approach (CALLA) can enhance students' cognitive reading skills and students' reading comprehension. In addition, data of students' perception about the implementation of CALLA were gained from the questionnaire.

#### **3.4.1. Test**

The reading comprehension test was administered to find out whether there is any significant difference of students' reading comprehension who are taught by modified CALLA explicitly and implicitly. The test consists of 35 questions which have been developed by the researcher. Before the test was used to measure students' reading comprehension, the pilot-test was employed to students who were not involve

in the experimental and control group. The test is intended to examine the validity and reliability of the items that administered in experimental and control group.

The pre-test conducted in experimental and control group before giving the treatment was aimed to measure students' initial reading comprehension. On the other hand, the post-test was conducted in both groups at the end of the treatment in order to find out whether or not there is an improvement on students' cognitive reading strategies and students' reading comprehension.

### **3.4.2. Questionnaire**

In investigating the first, second and fourth research questions, there were two kinds of questionnaires that employed in this research, they were cognitive reading strategy questionnaire and students' perception questionnaire. The first questionnaire was intended to measure the improvement of students' cognitive reading strategy before and after the treatment. Meanwhile, the second questionnaire was employed to gather the data of students' perception toward the implementation of CALLA in the classroom. Explanation about those two questionnaires can be seen clearly in the following sub chapter.

#### **3.4.2.1. Cognitive Reading Strategy Questionnaire**

This questionnaire was aimed to find out students' cognitive reading strategies usage. It administered both in experimental and control group before and after the treatment. This instrument was adapted from LLSQ by Setiyadi, (2015:4). The consideration of choosing this questionnaire in this study due to it has been standardized and it has been developed in EFL setting which is same with the setting

of this study. In addition, the researcher also add nine items, items number 12,13,14,15,16,17,18,19, and 20 in order to accommodate more cognitive reading strategies.

#### **3.4.2.2. Students' Perception Questionnaire**

In exploring the fourth research question, a questionnaire consisted of 20 items were distributed. The questionnaire was adopted from Richards (2001:232). Since it was aimed to find out students' perception about the implementation of CALLA, this questionnaire only given to students who were in experimental group.

### **3.5. Research Procedures**

In conducting this research, there were several procedures that should be done step by step. The following is the procedure of this research.

#### **a. Conducting try out of the instruments**

This activity is aimed to find out whether the instruments are valid and reliable. If the result shows that the instruments were valid and reliable, it means that the instruments can be used to gather the data. The try out test was given to the class which did not involve as experiment or control class. It administered before the pre-test was given.

#### **b. Administering pre-test for both experimental and control group**

Having known that the instruments were valid and reliable, the next step that should be done was administering pre-test for both experimental and control group. The aim of this activity was to find out the students' initial ability of reading comprehension. Having known the students' initial ability will help the researcher to

see the difference of students' reading comprehension clearly before and after the treatment.

c. Distributing cognitive reading strategy questionnaire

After giving the pre-test to the students in both groups, experimental and control group, questionnaire of cognitive reading strategy was given to students. The objective of this step was to investigate the prior knowledge of students about cognitive reading strategies and how familiar the students with those strategies.

d. Conducting the treatment

The treatment has been given for eight meeting in both experimental and control class. During the treatment, the modified CALLA was implemented based on the plan that stated before. The difference between the two classes was in experimental class modified CALLA was taught explicitly while in control class it was taught implicitly.

e. Distributing students' cognitive reading strategy and perception questionnaire

Having finished the treatments, the students in both classes were asked to answer the questionnaire about cognitive reading strategies. It was used to see the difference of students' cognitive reading strategy after the treatment. In addition, students in experimental class were given the students' perception questionnaire. This questionnaire was aimed to investigate students' perception toward the implementation of CALLA.

f. Administering post-test for both experimental and control group

After finishing the whole treatments, post-test was administered in order to see the difference achievement of students in reading comprehension after the treatment.

### **3.6. Validity and Reliability**

Validity refers to a demonstration that a particular instrument in fact measures what it suppose to measure (Cohen et al, 2000:133). Meanwhile, reliability refers to measure of consistency over time and over similar samples (Cohen et al, 2000:146). These two crucial things should be fulfilled before the instrument was used to gather the data.

#### **3.6.1. Validity and Reliability of Reading Test**

In order to have a valid test, the writer did content validity. Construct validity has been done by doing expert judgment. The experts judged whether the instrument was valid or not. Two experts were asked to judge whether the reading test based on the underlying theory or not. They were I Gusti Nyoman and Juni Hartiwi. I Gusti Nyoman was a senior English teacher and Junii Hartiwi was an English lecturer. Their experience in teaching as a teacher and lecturer became the consideration to choose them as the experts to see the construct validity of the test.

In this research, the experts were instructed to match the theories and the indicators of reading comprehension test. The theory that was used as guidance in constructing the test was theory of Milan in Kuning (2015:12).The result revealed that there were five items that should be dropped (3,15,24,28,40). So, it can be said



that the valid instrument that can be used as a tool for collecting the data was 35 items.

In measuring the reliability of the test, the researcher employed split-half model which has been done by using SPSS 20. The reliability coefficient of the test should be at least 0.70 and preferably higher. After being calculated by SPSS 20, it was found that the reliability of this test was 0,954. It means that the instrument is reliable and it is ready to use. The following is the result of reliability test.

#### **Reliability Statistics**

Cronbach's Alpha	Part 1	Value	,879
		N of Items	18(a)
	Part 2	Value	,881
		N of Items	17(b)
	Total N of Items		35
Correlation Between Forms			,912
Spearman-Brown Coefficient	Equal Length		,954
	Unequal Length		,954
Guttman Split-Half Coefficient			,954

a The items are: x1, x2, x4, x5, x6, x7, x8, x9, x10, x11, x12, x13, x14, x16, x17, x18, x19, x20.

b The items are: x20, x21, x22, x23, x25, x26, x27, x29, x30, x31, x32, x33, x34, x35, x36, x37, x38, x39

#### **3.6.2. Validity and Reliability of Questionnaire**

Before the questionnaire is used as the instrument, it should be tested to get the validity and reliability of the instrument. A good instrument should be valid and reliable. Explanation about how to get the validity and reliability of questionnaire will be explained as follows.

### **3.6.2.1. Validity and Reliability of Cognitive Reading Strategies Questionnaire**

The questionnaire that was used in this research was adapted from Setiyadi (2015:4). Although it has been standardized, the validity and the reliability of the questionnaire checked again since the subject of the research is different. Construct validity done by doing expert judgment. The expert involved in this research was Hery Yufrizal. He was the writer's advisor. He was asked to judge whether or not every item in cognitive reading strategies and students' perception questionnaire were based on the underlying theory. Having had a lot of experience in teaching English and doing research in the field of learning strategies was the reason to choose him as the right person to judge whether the questionnaire was valid or not.

In this case, the theory of cognitive reading strategies by O'Malley & Chamot (1990:119-120) was the guidance to do the construct validity. Seeing the result of expert judgment, it was found that all of the items were in line with theories and it can be concluded that this questionnaire can be used to gather the data in this research.

The reliability of the questionnaire analyzed by using Coefficient Alpha Formula. The reliability coefficient of the questionnaire should be at least 0.70 and preferably higher. The reliability value of the questionnaire is higher than 0.70 meaning that this questionnaire can be used to obtain the data. Based on the analysis by using SPSS 20, it was found that the coefficient Alpha obtained was 0.828. It means that the questionnaire is reliable and it can be used as instrument to get the

data for students' Cognitive reading strategy. The following is the result of the reliability of the questionnaire.

### Reliability Statistics

Cronbach's Alpha	N of Items
,828	20

#### 3.6.2.2. Validity and Reliability of Students' Perception Questionnaire

In gathering the data of students' perception toward the implementation of modified CALLA, a questionnaire which consisted of 20 items was employed. Before the questionnaire was used as an instrument, the researcher analyzed the validity and reliability of the instrument. The content validity was done by doing expert judgment. The expert looked up to the questionnaire items and match them with the theory lies behind them. In this case, the questionnaire was based on adoption from questionnaire by Richards (2007:232). Seeing the result of expert judgment, it was found that all of the items were in line with theories and it can be concluded that this questionnaire can be used to gather the data in this research.

In finding out the reliability of the questionnaire, Cronbach Alpha Formula was used. Based on the analysis by using SPSS 20, it was found that the coefficient Alpha obtained was 0.919. It means that the questionnaire is reliable and it can be used as instrument to get the data of students' perception toward the implementation of CALLA.

### Reliability Statistics

Cronbach's Alpha	N of Items
,919	20

### 3.7. Data Analysis

As stated before, the data in this research will be analyzed quantitatively. There were some different statistical computations to answer each research question. To analyze the data, Statistical Package for Social Science (SPSS) program version 20 for windows was used. The data obtained from test and questionnaire were compared before and after treatment. Since there were four research questions in this research, the researcher will describe it one by one. The steps are describes as follows.

#### a. Research Question 1

1. The score of students' cognitive reading strategies questionnaire before and after the treatment in the experimental class were analyzed to find out the mean score.
2. The researcher analyzed the score of students' cognitive reading strategies questionnaire before and after the treatment in the control class to find out the mean score.
3. The mean score of each strategy were compared by using paired t-test to know the differences of the usage of each strategy before and after the treatment given. The significant level ( ) which is used is 0.05.

**b. Research Question 2**

1. Having known the mean score of students' cognitive reading strategies questionnaire before and after the treatment in the experimental and control class, the computation was completed by using ANOVA.
2. The mean score of students' cognitive reading strategies questionnaire after the treatment in both experimental and control class were used.
3. The researcher set the group factor to see the differences of the usage of cognitive reading strategy between the two classes. The significant level ( ) which is used is 0.05.

**c. Research Question 3**

1. The score of pre test and post test in the experimental class were analyzed to find the mean score.
2. The score of pre test and post test in the control class were analyzed to find out the mean score
3. The score of pre test and post test were compared by using independent t-test to know the differences before and after the treatment given. The significant level ( ) which is used is 0.05.

The hypothesis that will be tested as follows

$H_{01}$  = there is no significant difference of the usage of cognitive reading strategies before and after treatment.

$H_{A1}$  = there is a significant difference of the usage of cognitive reading

strategies before and after treatment.

$H_{o2}$  = there is no significant difference of students' reading cognitive strategies who are taught by modified CALLA explicitly and modified CALLA implicitly.

$H_{A2}$  = there is a significant difference of students' reading cognitive strategies who are taught by modified CALLA explicitly and modified CALLA implicitly.

$H_{o3}$  = there is no significant difference of students' reading comprehension who are taught by modified CALLA explicitly and modified CALLA implicitly.

$H_{A3}$  = there is a significant difference of students' reading comprehension who are taught by modified CALLA explicitly and modified CALLA implicitly.

The criteria for hypothesis acceptances is that if the significant (p) value obtained through SPSS program was less than the significant level (0.05) it means that  $H_o$  is rejected. However, if the significant (p) value which was gained from SPSS program was greater than the significant level (0.05) it means that  $H_o$  is accepted.

On the other hand, to analyze the data of students' perception toward the implementation of CALLA, the researcher analyzed the result of questionnaire descriptively then described it clearly. The description will be based on the mean score of students' response.

## **CHAPTER V CONCLUSIONS AND SUGGESTIONS**

In this chapter, the researcher draws the following conclusions based on the result that has been elaborated in the previous chapter. In addition, the suggestions of the research are presented briefly which is intended to the teachers, and further researchers.

### **5.1. Conclusions**

Relying on the result of data analysis and the discussions of this research, the researcher draws the following conclusions.

1. This research focuses on the students' Cognitive reading strategies and reading comprehension by implementing modified CALLA. The result revealed that there were two strategies which differ significantly before and after the implementation of modified CALLA. The two strategies which differ significantly are deduction and getting the idea quickly strategies. It seems that it is because of the practicality of the strategies. Since in this research the students tried to implement the strategies in practice and test setting, pre-test and post-test, the practicality of the strategies became important, especially in test setting. In test setting, students were given limited time to do the test. Students should finish the test as fast as they can. Because of that, the practical strategies were needed to help students complete the test quickly and correctly. Meanwhile, there are eight strategies

which differ not significantly. It might be caused by the difficulty of the strategies, students' different prior knowledge and students' different learning style.

2. In terms of the usage of Cognitive reading strategies, there are four strategies which differ significantly between the class which was taught by modified CALLA explicitly and the class which was taught implicitly. The four strategies are repetition, deduction, imagery and getting idea quickly strategies. It shows that explicit teaching help students develop their awareness especially on those four strategies. It makes students can use the strategies better after they received explicit treatment of modified CALLA.
3. In relation to students' reading comprehension, it shows that there was a significant different of students' reading comprehension between experimental and control class. By looking at the result, students' reading comprehension in experimental class is better than students in control class. It means that the explicit teaching of CALLA can promote students reading comprehension. It can be happened like that since explicit teaching can help students to develop their awareness of strategies. When they aware of the strategies, they can use the strategies to overcome their problem when they were do reading task.
4. Based on the questionnaire of students' perception, it was revealed that the students' perception about the implementation of modified CALLA is positive. It seems that students are not familiar with learning strategies, in this case cognitive reading strategies, before they got the treatment by using modified CALLA. But, when they already got the treatment, they realize that



CALLA can help them in recognizing the cognitive reading strategies and by using those strategies, students can overcome their problem when they are doing the reading task. Seeing the benefit of CALLA, students think that this approach is very useful for them so that the perception of students is positive.

## **5.2. Suggestions**

In line with the result and conclusions of the research, the researcher would like to propose some suggestions both for teachers and further researcher:

### **a. For the Teachers**

- 1.** The approach used in this research was really effective to teach students about learning strategies. It can be used as an alternative approach for teacher to teach learning strategies, especially cognitive reading strategies. It provides clear directions and steps to teach students about the cognitive reading strategies.
- 2.** In implementing the approach, teachers are suggested to not only give the clear instruction about how to use the strategies but also teacher should give the materials which support the usage of the strategies. By giving the appropriate materials, students can try to implement the strategies by using those materials.

### **b. For the Further Research**

- 1.** By looking at the limitation of the research, several suggestions for further research identified. First, since in this research the CALLA was modified to be appropriate to teach cognitive strategy in reading. It seems that it would be interesting for the future researchers to implement this approach to different strategies or skills. Second, it is better for the further research to be conducted

in a school which has students with good ability of English in order to get the best result of the research. In addition, it is also suggested for the next researcher to implement CALLA in long term research to see the different effect of CALLA to students' strategies.

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