ABSTRACT

Selamet Riadi Jaelani. The Effectiveness of Self-Directed Learning (SDL) to Teach Reading Viewed from Students’ Self-Esteem (An Experimental Study at the Eleventh Grade Students of SMA Negeri 1 Keruak in the Academic Year of 2012/2013). First Consultant: Prof. Dr. Samiati Tarjana, M.A.; Second Consultant: Dr. Ngadiso, M.Pd. Thesis. Surakarta. English Education Department Graduate School, Sebelas Maret University of Surakarta 2013.

This research is aimed at finding out whether: (1) self-directed learning method is more effective than problem based learning (PBL) method to teach reading at the Eleventh Graders of SMAN 1 Keruak in the Academic Year of 2012/2013; (2) the students who have high self-esteem have better reading ability than those who have low self-esteem at the Eleventh Graders of SMAN 1 Keruak in the Academic Year of 2012/2013; and (3) there is an interaction between teaching methods and self-esteem for teaching reading at the Eleventh Graders of SMAN 1 Keruak in the Academic Year of 2012/2013.

The method which was applied in this research was experimental study. It was conducted at the eleventh graders of SMAN 1 Keruak. The population of the research is the eleventh graders of SMAN 1 Keruak in the academic year of 2012/2013. The samples were two classes. A cluster random sampling technique was used. Each class was divided into two groups (the students who have high and low self-esteem). Then, a questionnaire for getting the data of the students’ self-esteem and a multiple choice test for getting the data of the students’ reading ability. The two instruments were tried out to get valid and reliable items. The data were analyzed by using multifactor analysis of ANOVA 2x2 and Tukey test.

Based on the results of the analysis, the research findings that can be taken: (1) SDL method is more effective than PBL method to teach reading; (2) The students who have high self-esteem have better reading ability than those who have low self-esteem because the mean of R₁ is higher than R₂; and (3) There is an interaction between teaching methods and self-esteem in teaching reading because Fₒ is higher than Fₜ: (a) for the students who have high self-esteem, SDL method is more effective than PBL method to teach reading; and (b) for the students who have low self-esteem, PBL method is more effective than SDL method to teach reading.

Based on the findings, it can be concluded that in general SDL method is more effective than PBL method to teach reading. For the students who have high self-esteem, SDL method is more effective than PBL method to teach reading but for the students who have low self-esteem, PBL method is more effective than SDL method to teach reading.

Key words: Self-Directed Learning (SDL) Method, Problem Based Learning (PBL) Method, Reading, Self-Esteem
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THE EFFECTIVENESS OF SELF-DIRECTED LEARNING (SDL) TO TEACH READING VIEWED FROM STUDENTS’ SELF-ESTEEM
(An Experimental Study at the Eleventh Grade Students of SMA Negeri 1 Keruak in the Academic Year of 2012/2013)

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This is to certify that I myself write the thesis entitled “THE EFFECTIVENESS OF SELF-DIRECTED LEARNING (SDL) TO TEACH READING VIEWED FROM STUDENTS’ SELF-ESTEEM” (An Experimental Study at the Eleventh Grade Students of SMA Negeri 1 Keruak in the Academic Year of 2012/2013).

It is not a plagiarism or made by others. Anything related to other’s work is written in quotation, the source of which is listed on the bibliography. If then, this pronouncement proves wrong, I am ready to accept any academic punishment, including withdrawal or canceling of any academic degree.

Surakarta, January 04, 2013

Selamet Riadi Jaelani
MOTTO

Having bravery in facing the wave of life will make you stronger.

Life is a problem and a problem is a nice food of life.
DEDICATION

This thesis is dedicated to:

My beloved mother, brother, sister,

close friends, and all families.
ACKNOWLEDGMENT

First of all, the researcher wishes to express his deepest gratitude to the Almighty of Good (Allah SWT) that he can accomplish this thesis as a partial fulfillment of the requirements for getting the graduate degree of Education in English.

Second, in completing this thesis, a list of names has contributed assistance and valuable helps to whom he has to express his sincere gratitude and deepest appreciation. In this chance, he would mention a rather longer list of names below.

1. The Director of Graduate School of Sebelas Maret University for giving his permission to write this thesis.
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Finally, the researcher is aware that this thesis is still far from being perfect. Therefore, constructive criticisms and suggestions are really needed for the perfectness of further research.

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CHAPTER I
INTRODUCTION

A. Background of the Study

English is an international language in the world because English is Lingua Franca (international language) so it is important for people to learn it. By learning English, the students are expected to absorb and keep up with the development of science, technology, art, and etc.

Today English as one of the subject matters learned by students at any educational level, such as elementary school, intermediate school, and upper intermediate level. It is the key to face the globalization era. As an international language, it plays an important role in many aspects of life such as education, economic, international relationship, technology, and etc. English language covers four language skills that must be mastered if someone wants to be successful in English, those are: listening, speaking, reading, and writing as a central point.

In Senior High School, reading comprehension is very urgent thing. There are so many things that are presented in the form of texts. The teacher can use the reading text to teach some kinds of English elements such as teaching grammar through the text, teaching vocabulary through the text, teaching pronunciation through the text, etc. These elements can be taught integratedly in the teaching learning process.

Reading ability is also necessary to help students to understand many kinds of tests that are commonly used to measure their ability such as in final
examination test where most of questions are presented in the form of reading text. Furthermore, the students can get some information and knowledge by reading. Via reading the students can also develop their grammar, structure understanding and enlarge their vocabulary mastery.

Reading ability involves much more than readers’ responses to the text. Reading ability is a multicomponent, highly complex process that involves many interactions between readers and what they bring to the text (previous knowledge, strategy use) as well as variables related to the text itself (Klingner, Vaughn, and Boardman, 2007: 8).

Consequently, the ability to read is extremely vital for our students, especially for the senior high school students. However, the students who do not understand the importance of learning to read will not be motivated to learn. Then, learning to read takes an effort, and students who see value of reading in their personal activities will be more likely to work hard than those who fail to see the benefits (Burn, et al., 1996: 5).

Moreover, the fact shows that many students do not like to read. It is caused by their lack of vocabulary mastery so that they have difficulty to understand the text, even to get the meaning of the text being read. This condition is caused by many factors such as they rarely read, they are lazy to open their dictionary to find the meaning of words available in the text, etc. These problems may affect their ability to have low ability in understanding the text given.

Some methods have been created to describe the development of teaching reading. Some suggestions for teaching learners are: (1) students complete cloze
passage (in which learners fill in specific words that are left out of a text; (2) provide instruction in comprehension strategies such as using headings and graphics to predict meaning, summarizing verbally, skimming, and scanning; (3) assess students’ strategy by asking them which comprehension strategy is used; (4) assess learners’ reading comprehension by having them read passages and answer comprehension questions about the text in multiple choice or short answers; and (5) have students summarize readings (Duzer, Burt, and Terrill, 2005: 18).

The teacher’s method is an important factor that may affect the students’ ability to teach reading ability. There are some kinds of method that can be applied by the English teacher to develop their students’ ability in reading. One of them is self-directed learning; the self-directed learning is written mainly for the training practitioner who has some experience in the field—namely, instructional designers or senior trainers who are familiar with material or program development and need to match training designs with a range of training situations. For instance, training novices who may not understand how to perform a need analysis or exactly what interactive video can consult the suggested readings list to learn enough about these and other concepts to apply them in SDL or become expert at them if their role demands it (Gibbons, 2002: 2-3).

SDL is any increase in knowledge, skill, accomplishment, or personal development that an individual selects and brings about by his or her own efforts using any method in any circumstances at any time. SDL is important because it enables students to customize their approach to learning tasks, combines the
development of skill with the development of character, and prepares them for
learning throughout their lives (Gibbons, 2002: 2-3).

Another method that can be applied by the English teacher is Problem-
based learning (PBL) that can be described as a learning environment where the
problem drives the learning. Students are given a problem that is posed such that
they realize the need to gain up to date, evidence-based knowledge before they
can solve the problem. This drives the students to investigate and discuss
identified learning issues in groups with the instructor as facilitator and coach.
The following immediate benefits to students have been identified: increased
retention of information; an integrated (rather than discipline-bound) knowledge
base; development of lifelong learning skills; exposure to real-life experience at
an earlier stage in the curriculum; increased student-faculty liaison; and an
increase in overall motivation (Greening in Klegeris, Hurren, 2011: 1).

Another factor that also determines the success of teaching reading ability
is self-esteem. It refers to an individual’s sense of his or her value worth, the
extent to which a person values, approves or appreciates, prizes, and likes him or
herself. Self-esteem is considered an evaluative component of self-concept, a
broader representation of the self that includes cognitive and behavioral aspects as
well as evaluative or affective ones. While the construct is most often used to
refer to a global sense of self-worth, narrow concepts such as appearance esteem
or body esteem are used to imply a sense of self-esteem in more specific areas.
Most people feel bad about themselves from time to time. Feelings of low self-
esteeem may be triggered by being treated poorly by someone else recently or in
the past, or by a person’s own judgments of him or herself. However, low self-esteem is a constant companion for too many people, especially those who experience depression, anxiety, phobias, psychosis, delusional thinking, or who have an illness or a disability (Rattan, at al, 2006: 1).

Based on the above phenomena, the writer wants to investigate about Self-Directed Learning (SDL) to Teach Reading Ability Viewed from Students’ Self-Esteem for the Eleventh Grade students of SMA Negeri 1 Keruak in the Academic Year of 2012/2013.

B. Identification of the Problems

Based on the background of the study, there are some problems that can be identified. Those problems are: (1) Why do the students have lack ability in reading?; (2) What factors may cause the students lack of self-esteem in reading?; (3) Do the students have high self-esteem in reading?; (4) Is self-directed learning (SDL) better to teach reading ability?; (5) Is problem-based learning (PBL) better to teach reading ability?; and (6) Does the students’ self-esteem affect their ability in reading?

C. Limitation of the Problems

The writer is aware that all the above problems are impossible to be answered because of the writers’ limited ability and the time allotment provided. Therefore, the problems of this study are limited to some related variables. In this case, the writer only focused on self-directed learning (SDL) and problem-based
learning (PBL). Self-directed learning (SDL) was put as an experimental variable and problem-based learning (PBL) was put as a control variable. Furthermore, the teaching reading was concentrated on the teaching reading ability of narrative and descriptive texts for senior high school students. The senior high school students who was chosen were the eleventh grade students of *SMA Negeri 1 Keruak* in the academic year of 2012/2013. Meanwhile, the self-esteem was used as a moderator variable, because it was believed as the factor that influenced students’ ability in reading.

D. Formulation of the Problems

Based on the background of the study above, the writer formulates the problems in the form of research question as follows:

1. Is self-directed learning (SDL) more effective than problem-based learning (PBL) to teach reading ability for the eleventh grade students of *SMA Negeri 1 Keruak*?

2. Do the students having high self-esteem have better reading ability than those having low self-esteem for the eleventh grade students of *SMA Negeri 1 Keruak*?

3. Is there any interaction between the learning methods and students’ self-esteem to teach reading?
E. Objectives of the Study

Based on the above formulation of the problems, this study is primarily intended at finding out:

1. Whether self-directed learning (SDL) is more effective than problem-based learning (PBL) to teach reading ability for the eleventh grade students of SMA Negeri 1 Keruak.

2. Whether the students having high self-esteem have better reading ability than those having low self-esteem for the eleventh grade students of SMA Negeri 1 Keruak.

3. Whether there is an interaction between the methods and students’ self-esteem to teach reading.

F. Benefits of the Study

The result of this study is intended to give contribution in teaching English both theoretically and practically. Theoretically, this study will support the theories on language teaching and learning, especially those related to this study.

(1) The concept of self-directed learning (SDL) is expected to be able to improve the students’ ability in reading; and (2) The concept of problem-based learning (PBL) is also expected to be able to develop students’ ability in reading, especially for those who have low self-esteem in reading ability.

Then, practically the benefits of this study are placed into some intensions as follows:
1. For the English teachers
   a. The result of this study can be used as a starting point for measuring the teachers’ learning, whether their learning is suitable or not and also they can develop their knowledge in teaching English.
   b. The result of this study is expected to be able to provide the English teacher with current theory and research finding related to the foreign language teaching at senior high school level.

2. For the students
   a. The result of this study can be used to improve students’ ability in reading and motivate them in learning English better.
   b. The result of this study can be used as a starting point of being creative students, especially in reading English texts.

3. For other researchers
   a. The result of this study can be used as a reference for conducting further relevant research.
   b. The result of this study can be used as a thinking framework for finding out another solution to solve students’ problem in comprehending the English texts when they are going to conduct the investigation.

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CHAPTER II
REVIEW OF RELATED LITERATURE

A. Reading

1. Definitions of Reading

The reason why reading is very necessary to be taught to the students is that the students should be able to read and understand an English text. Another reason is that reading can be used by the English teacher as a media to teach other language skills such as listening, speaking, and writing and also language elements such as vocabulary, pronunciation, and grammar.

According to Anderson (2008: 3), reading is a process of readers combining information from a text and their own background knowledge to build meaning. Meaning does not rest in the reader nor does it rest in the text. Readers’ background knowledge integrates with the text to create the meaning. Meanwhile, Aebersold and Field (1997: 15) give their opinion in defining reading as follows:

In general, reading is what happens when people look at a text and meaning to the written symbols in that text. The text and the reader are the two physical entities necessary for the reading process to begin. It is however, the interaction between the text and the reader that constitutes actual reading. Granted, the meaning the reader gets from the text may not be exactly the same as the meaning the writer of the text wished to convey.

Referring to the importance of reading, some experts define reading with different points of view. Kennedy (1977: 5) defines reading as the ability of an individual necessary to recognize a visual form, associate the form with a sound and/or meaning acquired in the past, and on the basis of past experience to understand and interpret in meaning.
Davies (1995: 1) states that reading is a mental or cognitive process, which involves a reader in trying to follow and respond to a message from a writer who is distant in space and time.

Clay (in Ashore, 1991: 4) defines that reading is a message that increases in power and flexibility the more it is practiced. His definition states that within the directional constrains of the printer’s code, language and visual perception are purposefully directed by the reader in some integrated way to the problem of extracting meaning from cues in a text, in sequence, so that the reader brings a maximum understanding to author’s message.

Moreover, reading is defined as a process of deriving meaning from connected text. It involves word knowledge (vocabulary) as well as thinking and reasoning. Therefore, comprehension is the ability of pupil to find, interpret, and use ideas; developing this ability is the main purpose in reading construction, as well as the most difficult task. Successful teaching of comprehension depends directly on the pupils’ mental ability, background knowledge, and maturity, as well as the instructional methods used. Indirectly, comprehension is facilitated by appropriate reading material, intellectual curiosity, and a desire to learn (Kennedy, 1997: 16).

Furthermore, Alyousef (2005) states that reading can be seen as an “interactive” process between a reader and a text, which leads to automaticity or (reading fluency). In this process, the reader interacts dynamically with the text as he/she tries to elicit the meaning and where various kinds of knowledge are being used: linguistic or systemic knowledge (through bottom-up...
processing) as well as schematic knowledge (through top-down processing). Since reading is a complex process, Grabe argues that “many researchers attempt to understand and explain the fluent reading process by analyzing the process into a set of component skills. On the other case, reading is defined as an interactive process that goes on between the reader and the text, resulting in comprehension. The text presents letters, words, sentences, and paragraphs that encode meaning. The reader uses knowledge, skills, and strategies to determine what that meaning is in reading.

Based on the above elaboration, it can be concluded that reading is a process of getting the message and solving the problem from the text to be able to extract meaning and cues in the text and finally retain the maximum understanding of the author’s message. It is quite obvious that reading depends on the reader’s objectives, and it is not just an activity to read what is printed and written.

2. The Elements of Reading

In 2000, the National Reading Panel (NRP) of the National Institute of Child Health and Development (NICHD) issues a report that identifies five elements, which are critical for effective reading instruction (http://www.nationalreadingpanel.org/)
1) Phonemic Awareness

*Phonemic awareness* is the ability to notice, think about, and work with the discrete sounds in spoken words. You can encourage your child to participate in activities and play games that involve connecting, sorting, and manipulating sounds and rhymes.

2) Phonics

*Phonics* involve the relationships between letters and individual sounds (also called phonemes), and helping children to recognize that there are systematic and predictable relationships between written letters and spoken words. The alphabet is considered to be a basic tool of the reader and writer, and many children have incomplete knowledge of letter sound relationships.

3) Fluency

*Fluency* is the ability to read a text quickly and accurately. Fluent readers recognize words automatically and group words as they read, creating a flow of words rather than pauses between words. Fluency develops with practice that can make children become more fluent in reading.

4) Vocabulary

*Vocabulary* refers to words and their meanings. Vocabulary knowledge is an important predictor of reading comprehension ability. Children must have good vocabulary skills in order to communicate
effectively; these skills apply to speaking, listening, reading, and writing.

5) Comprehension

Comprehension refers to the ability to understand what one is reading to relate a text to what one already knows while also constructing new knowledge and understanding. The aspects of comprehension are: (1) comprehending literal meaning; (2) comprehending figurative or symbolic meaning; (3) appreciating, evaluating, or responding emotionally to a text; and (4) understanding the significance of a text, or understanding how one text relates to another.

3. The Process of Reading

In reading process, teacher can help students build predictions and expectations for the text they are going to read by doing various pre-reading activity, and teacher can also help students while they are reading. During reading reader’s minds repeatedly engage in a variety of processes. According to Field (1197: 96), using top-down and bottom-up strategies, readers use pre-reading information to make some predictions about the text. Using bottom-up strategies, readers start by processing information at the sentence level. As they process the information, each new sentence gives them to check if and how that information fits, again using both bottom-up and top-down strategies. They are checking their comprehension of this text.
to see what they expect to read. They are predicting what information they expect until they come to the end of the paragraph.

At this point, they are usually formulating the main idea of the paragraph. If they think they recognize a main idea of sentence at the beginning of the paragraph, they will check to see if that early prediction is still a valid one. They may mark it in some physical ways: highlight it in the text, make a note in the margin of the text, or write notes on a separate piece of next paragraph. If there is not stated a main idea in the paragraph, they may compose one. They read on this manner until the end of the text or until comprehension breaks down, necessitating the use of different strategies.

The teacher's job is to make these processes conscious for students. If they are not already doing these things as they read in their L2/FL, they begin to consciously practice them and develop their ability to read more effectively. In order for this to happen, teachers need to work with students while they are reading, using activities that will require them to participate overtly in these processes.

Brown (in Westwood, 2001: 20) suggests that readers have to use their knowledge and experience of the world, language, books, and subject matter in conjunction with the words on the page to make meaning when they are reading.

In short, in order to determine the type of instruction students need, it is important first to consider what is actually involved in the process of reading and comprehending text. Such basic information provides clear
pointers to what students need to be taught. An understanding of what is involved in reading also helps to identify possible causes for students’ reading difficulties.

4. Micro and Macro Skills of Reading

   a. Micro-skills

   1) Discriminate among distinctive graphemes and orthographic patterns of English.

   2) Retain chunks of language of different lengths in short-term memory.

   3) Process writing at an efficient rate of speed to suit the purpose. Recognize a core of words, and interpret word order patterns and their significance.

   4) Recognize grammatical word classes (nouns, verb etc.) systems (e.g. tense, agreement, and pluralisation), patterns, rules, and elliptical forms.

   5) Recognize that a particular meaning may be expressed in different grammatical forms.

   6) Recognize cohesive devices in written discourse and their role in signaling the relationship between and among clauses.

   7) Recognize grammatical word classes (nouns, verb etc.) systems (e.g. tense, agreement, and pluralisation), patterns, rules, and elliptical forms.
8) Macro-skills

1) Recognize the rhetorical forms of written discourse and their significance for interpretation.

2) Recognize the communicative functions of written texts, according to form and purpose.

3) Infer context that is not explicit by using background knowledge.

4) Infer links and connections between events, deduce causes and effects, and detect such relations as main idea, supporting idea, new information, given information, generalization, and exemplification.

5) Distinguish between literal and implied meanings.

6) Detect culturally specific references and interpret them in a context of the appropriate cultural schemata.

7) Develop and use a battery of reading strategies such as scanning and skimming, detecting discourse markers, guessing the meaning of words from context, and activating schemata for the interpretation of texts (Brown, 2001: 307).

5. The Purposes of Reading

Davies (1995: 132-134) classifies preliminary summary of different reading purposes presented below:

1) For pleasure
   a. To follow a narrative
   b. To enjoy the sound and rhythm or rhyme
2) For general impression
   
a. To gain an idea of writer’s viewpoint
   b. To gain an overall impression of the ‘tone’ of a text
   c. To decide whether or not to read the text

3) For organizing reading and study
   
a. To identify the important content of a text
   b. To answer specific question(s)
   c. To decide which section of a text to start studying

4) For learning content or procedure
   
a. To gain an understanding of new concepts
   b. To learn certain facts from a text
   c. To follow instruction

5) For language learning
   
a. To translate the text, literally or metaphorically
   b. To learn new vocabulary
   c. To identify useful structures or collocations
   d. To use the text as a model for writing
   e. To practice pronunciation

From the above, it is clear that there is a wide range of specific purposes for which we may read and that our specific purposes may change during the course of reading a single text. Thus, the question we ask our students to consider will vary according to both the nature of the text, the level, and the background of students.
6. Reading Comprehension

Kennedy (1997: 22) says that reading comprehension is the ability to find, analyze, understand, and interpret ideas. It is essential to all forms of communication and is developed in all areas of the language art. Listening builds the initial ability to recognize, understand, and interpret ideas. Oral language contributes to word meaning, vocabulary development, and the expressing of ideas. Written language stresses word meaning, selection and use of words, attention to word form and structure, and background development. When these abilities are combined with the specific comprehension skills taught through reading, a balanced program in comprehension is virtually assured.

Furthermore, Grellet (1998) states that reading comprehension means extracting the required information from a written text as efficiently as possible, rejecting irrelevant information and finding what we are looking for, quickly. She establishes that there are two main reasons for us to read, first one is for pleasure and the second one is for information. This is the fact that working with a text as if it was a series of independent units would only lead students to feel the need of understanding every single sentence, which is not necessary in order to fulfill the purpose of understanding the text and to be reluctant to infer meanings of sentences from what comes before or after them.

Meanwhile, reading comprehension is the primary purpose for reading (though this is sometimes overlooked when students are asked to read overly
difficult texts); raising students awareness of main ideas in a text and exploring the organization of a text are essential for good comprehension. As sequence, the use of graphic representations to highlight text organization and to indicate the ordering of the content information is an important resource for comprehension instruction (Richard, 2002: 277).

It can be concluded from the theories that reading comprehension is the degree to which the reader understands what he/she reads which is resulted from what he/she knows, before reading the text (the background of knowledge) and how he/she reads it. However, type of comprehension skills considered to successful reading comprehension and strategies for reading comprehension should be clearly exhibited.

7. Type of Comprehension

The more comprehensive explanation is stated by Day (2005) in the Journal of reading in a foreign language. He presents a detailed picture of six types of comprehension below:

a. Literal comprehension: understanding of the straightforward meaning of the text and can be answered directly from the text.

b. Reorganization: it is based on literal understanding of the text; students must use information from various parts of the text and combine them for additional understanding.

c. Inference: making inference involves more than a literal understanding of a text; students may initially have difficult time answering inference
questions because the answers are based on material that is in the text but not explicitly stated. An inference involves students combining their literal understanding of the text with their own knowledge and intuitions.
d. Prediction involves students using both their understanding of the passage and their own knowledge of the topic and related matters in a systematic fashion to determine what might happen next or after the story ends.
e. Evaluation requires the learners to give a global or comprehensive judgment about some aspects of the text.
f. Personal response requires readers to respond with their feelings for the text and the subject, (http://nfire.hawaii.edu/rfl/April 2005/day.html).

The above comprehension types are from the lowest to the highest, students should master literal comprehension, inference, prediction, evaluation, and personal response in understanding the text.

8. Strategy for Teaching Reading

Manzo and Manzo (1995: 14) state that strategies are constructed from varying level of evidence, experience, and speculation. Strategies of the reading process differ in significant ways and have important implications for how to teach and evaluate students’ progress in reading. There are several additional reasons why a teacher ought to have the background of knowledge about the reading process. The reasons are as follows:
1) It saves teachers from adopting unexamined beliefs and practices that are antithetical to reflective teaching.

2) It is the conceptual basis for the business of teaching, and competent people to know their business.

3) It helps teachers to clarify and refine the personal belief about the reading process, and hence about the teaching of reading.

4) It offers teachers a framework for understanding, categorizing, and evaluating new ideas about reading strategies and practices.

5) It helps teachers to select procedures for personal mastery and provides a rational basis for supporting these decisions.

6) It helps teachers to consider points of view other than their own and to understand the rational basis for these.

Based on the above elaboration, there are three kinds of strategies that can be applied to teach reading comprehension, namely bottom-up, top-down, and interactive strategies.

a. Bottom-Up Strategy

Manzo and Manzo (1995: 15) state that bottom-up strategy of the reading process is said to be “text-driven.” These models emphasize reading as a process of getting meaning from the printed page. This is accomplished, according to these models, through sequential mastery of a series of “reading sub-skills.” The first step is curate visual perception and recognition of letters, then of sounds, then of words, and eventually of sentences and passage meaning.
1) Reading is seen as the process of accurately decoding an author’s writing through efficient use of a sequence of sub-skills.

2) Reading is taught by first identifying the necessary sub-skill sequence, directly teaching each successive sub-skill, and re-teaching any un-mastered sub-skill as necessary. There is a strong emphasis on mastery of the phonic element of word decoding.

3) Reading progress is evaluated by frequent testing for mastery of each sub-skill.

In this strategy, most of the students start their comprehension with the letter and sound recognition, which in turn allows for morpheme reorganization, building up to the identification of grammatical structures, sentences and longer texts. Based on this elaboration, it can be stated that in bottom-up strategy the reader starts his comprehension from identifying letters, to recognize the words, and then proceeds to the phrase, sentence, paragraph, and then text level processing.

b. Top-Down Strategy

Top-down strategy of the reading process tends to be “meaning-driven.” The reader is said to begin with prior knowledge and actively compares what is read to what is already understood. Top-down strategy tends to emphasize sub skill and literal understanding and to focus on building background information and personal responding (Manzo and Manzo, 1995: 15).
In comparison with bottom-up strategy, top-down strategy can be summarized as follows:

1) Reading is seen as a process of predicating meaning based on prior knowledge and experience, and then verifying and correcting predications as the author’s massage is translated.

2) Reading is taught by providing meaningful text and emphasizing the relationship between the child’s prior experience and information on the printed page. Phonic elements of decoding are taught, for the most part, incidentally as students encounter words in print.

3) Reading progress is evaluated by assessment of the child’s ability to derive appropriate meaning from print, not from mere accuracy in decoding and oral reading.

In this strategy, the reader starts with hypothesis and prediction and attempts to verify them by working down to the printed stimuli. In this case, a reader processes the text by applying the higher-level stages based on the knowledge and experience that he has previously. Furthermore, if the reader uses this strategy he should have background knowledge and language competence in order that he can understand the content of text easily.

c. Interactive Strategy

Interactive strategy is more like top-down strategy, then bottom-up, but is considered a synthesis of the two. It is important to note that the word “interactive” in this strategy refers to the reader’s inner dialogue. It is not
meant to suggest that the reader interacts in any real sense with the author or that the print is responsive.

A summary of interactive models illustrates their similarity to and difference from top-down models:

1) Reading is seen as a process of predicting meaning based on prior knowledge and experience, and then verifying and correcting predictions as the author’s message is carefully translated.

2) Reading is taught by meaningful text, relating text to the child’s prior experience, and providing as much direct instruction as is needed to provide children with necessary strategies for independently monitoring and fixing typical problems with decoding. Verifying, and reformulating predictions of the author’s message.

3) Reading progress is evaluated by assessing the child’s ability to drive appropriate meaning from print and by his or her flexible use of appropriate reading strategies—which is often determined by having the youngster thing aloud as she or he encounters various decoding and comprehension challenges.

Based on the above theory, it can be stated that interactive strategy is the combination between both bottom-up and top-down strategies. In understanding the text being read a reader can use these strategies interactively. This strategy suggests that the process of reading is initiated by decoding letters and words and by formulating hypothesis about meaning. Then, in understanding the text, a reader tries firstly to process
the visual information existing in the text as a basic tool to make prediction. Furthermore, this prediction is confirmed to the new information that has been found in the text.

According to Brown (2001: 306), the strategies for reading ability are as follows:

1. Identifying the purpose in reading
2. Skimming the text for main idea
3. Scanning the text for specific information
4. Guessing the meaning of words and a grammatical relationship (e.g. a pronoun reference)
5. Distinguishing between literal and implied meaning.

According to Fathur (2009: 29), there are some indicators of reading comprehension as follows:

1. Identifying the purpose in reading
2. Finding the main idea
3. Finding the specific information
4. Finding the words reference
5. Finding literal and implied meaning
6. Finding inference of the text.

In short, it can be summed up that reading is a process of interaction between the reader and the text to understand printed materials to get new meaning and it is an activity to sum of message of the written language. Reading ability is obtaining meaning from units larger than a single word and...
it is such a thing as total or perfect comprehension of a text. The students should master some indicators of reading ability: identifying the purpose of a text, finding main idea, finding words reference, finding explicit information, finding implicit information, and finding the meaning of words based on the context.

B. Self-Directed Learning

1. Definitions of Self-Directed Learning

According to Hiemstra (1994: 2), several things are known about self-directed learning: (a) individual learners can become empowered to take increasingly more responsibility for various decisions associated with the learning endeavor or afford; (b) self-direction is best viewed as a continuum or characteristic that exists to some degree in every person and learning situation; (c) self-direction does not necessarily mean all learning will take place in isolation from others; (d) self-directed learners appear able to transfer learning, in terms of both knowledge and study skill, from one situation to another; (e) self-directed study can involve various activities and resources, such as self-guided reading, participation in study groups, internships, electronic dialogues, and reflective writing activities; (f) effective roles for teachers in self-directed learning are possible, such as dialogue with learners, securing resources, evaluating outcomes, and promoting critical thinking; and (g) some educational institutions are finding ways to support self-directed study through open-
learning programs, individualized study options, non-traditional course offerings, and other innovative programs.

What does *self-directed* mean? When confronted with complex and sometimes ambiguous and intellectually demanding tasks, self-directed people exhibit the dispositions and habits of mind required to be self-managing, self-monitoring, and self-modifying (Costa and KaUick, 2004). Self-managing people control their first impulse for action and delay premature conclusions. They generally approach tasks by clarifying outcomes and gathering relevant data that will illuminate the problem. They think flexibly and develop alternative strategies to accomplish their goals. Self-managing individuals draw on past knowledge and apply it to new situations. They imagine, create, and innovate (Costa and KaUick, 2000). Self-monitoring people think about their own thinking, behaviors, biases, and beliefs as well as about the effects that such processes and states of mind have on others and on the environment. They have sufficient self-knowledge to know what works for them. They establish conscious metacognitive strategies to monitor the effectiveness of their plans and help them make any necessary alterations. Self-monitoring people persevere in generating alternative plans of action, and they know how and when confronted with perplexing situations. They listen to others with understanding and empathy. Self-modifying people can change themselves. They reflect on their experiences and evaluate, analyze, and construct meaning. They apply what they have learned to future activities, tasks, and challenges. Such people communicate their conclusions with clarity, precision, and
prudence, and they readily admit that they have more to learn. Curious and motivated, they remain open to continuous learning. Self-managing, self-monitoring, and self-modifying capabilities transcend all subject matter commonly taught in school and characterize peak performers in all walks of life. These capabilities make for successful relationships, continuous learning, productive workplaces, and enduring democracies. Education should strive to develop these intellectual dispositions more fully.

2. The Steps for Using Self-Directed Learning

Khodabandehlou et al., (2005: 9) elaborates teacher’s role in self-directed learning to teach reading:

a) Pre-reading

b) Pre-reading
   a) Teacher gives a topic to the students to be discussed
   b) Teacher shares the texts to the students
   c) Teacher introduces materials and their different types of a text, life-goals, and styles of learning.

c) Whilst-reading

   a) Teacher engages students in discussion on topics from the self-directed learning readiness scale in doing reading exercises.
   b) Learners should be allowed to collaborate with the teacher in determining the meaning of word in reading passage.
c) Teacher works with students and suggests generating similar discussion to find main idea from the text given in teaching reading.

d) Teacher also needs to model learning strategies for students to predict the meaning, clarifying the purposes of the text, and summarizing of reading.

e) Teacher suggests students to get message from reading text.

f) Teacher needs to allow individual learners to find meaning of word based on the context.

g) Teacher allows learners to explore ideas of the text from reading.

h) Teacher allows learners to identify pronoun reference from the text.

i) **Post-reading**

   a) Teacher corrects students’ answers and asks them to take responsibility, cooperate and consult with each other.

   b) Teacher needs to encourage learners to reflect on what they did and to revise attempted work on teaching reading.

3. **The Purposes for Using Self-Directed Learning**

   According to Piskurich (1993), five purposes related to self-directed learning are as follows:
a) Much is still to be learned about the spontaneous development of self-directed or autonomous learning behaviors. Research hasn’t shown, for example, why certain children are more likely to be successful independent learners than others.

b) What is known about self-directed learning gathered primarily from laboratory observations suggests that classroom applications can be powerful, but implementation will be challenging. Developmental research on learning indicates that independent, self-directed learning activities are closely tied to physical maturity.

c) Teacher-directed learning has a well-developed repertoire of instructional strategies and techniques. Self-directed learning has no comparable collection of proven practices.

d) Teachers may have a great deal of difficulty learning how to share control of instruction with students. Teachers are taught to make the decisions in the classroom, and helping students make their own decisions will conflict with some teachers’ learned experiences as well as their feelings about being in charge. The reorientation toward a student-owned classroom requires not only a cognitive reorientation but an affective one, as well. For some teachers this is a most difficult challenge.

e) Similarly, students who are used to relying on teachers to give them structure, direction, and information will have to learn to start asking themselves, “What can I do before I ask an adult?”
Self-directed learning activities are of primary concern to those multigrade instructors who have prized self-directed learners and have recognized the importance of encouraging their development. It could be argued that one of the highest concerns of education in general is the creation and nurturing of self-directed learners. An adult who has not incorporated the skills of independence, self-directed learning will go through life with a tremendous handicap.

Although research on self-directed learning is still in the formative stage, guidelines for the development of classroom activities that allow and encourage autonomous learning are emerging. Since many students do grow into independent learners, it is obvious that some current classroom practices do encourage independent learning. An excellent starting point for developing self-directed learning is to observe student behaviors.

4. **Advantages of Self-Directed Learning**

According Piskurich (1991: 253), there are some strengths of SDL below:

a. It is a designated facility where SDL package are used
b. It has an easy accessible facilitator always on duty
c. It can be form of small group
d. It can be contained in the “right” type of other facilities
e. It is usually a training argumentation, not a system
f. It gives us more choices in subject matter and method
g. It is easier to control than a distributed implementation

h. It is one of the most flexible of training processes

i. It can be used if we have many trainees with many training needs

j. It can be used if we have many trainees with the same need.

5. Disadvantages of Self-Directed Learning

According Piskurich (1991: 253), there are some weaknesses of SDL below:

a. It usually has heavy start-up.

b. It does not allow for individual differences in learning style to any great degree.

c. It has facilitator salary costs to consider.

d. It is not a good environment for practicing on the job performance.

C. Problem-Based Learning (PBL)

1. Definitions of Problem-Based Learning

According to Duch, Groh, and Allen (2001: 6), problem-based learning provides a form in which these essential skills will be developed. The basic principle supporting the concepts of PBL is older than formal education itself; namely, learning is initiated by posing a problem, query, or puzzle that the learner wants to solve. It is used to motivate students to identify and research the concepts and principle they need to know and to work through those problems. Students work in small learning teams,
brining together collective skill at acquiring, communicating, and integrating information.

PBL helps students develop deeper analytical skills. Analytical skills such as critical thinking, problem defining and problem solving are at the heart of PBL. Students use these skills by looking at possible solutions to a problem. Students start to develop skills such as research techniques, data analysis and working as a team member as they move through these analytical skills. All of these skills assist students in becoming life long learners (Utecht, 2003: 6).

In problem-based learning (PBL), students are asked to work together to analyze and resolve problems, and to communicate, evaluate, and integrate information from diverse sources. Effectiveness performances of these group-learning tasks require the development of new skills on the part of both the student and the teacher.

In other case of PBL, students are encouraged to take responsibility for their group and organize and direct the learning process with support from a tutor or instructor. Advocates of PBL claim it can be used to enhance content knowledge while simultaneously fostering the development of communication, problem-solving, critical thinking, collaboration, and self-directed learning skills.
2. Characteristics of Problem-Based Learning (PBL)

Barrows (in Savery, 2006: 1) describes in detail some characteristics of PBL below:

1) Students must have the responsibility for their own learning.

Learners’ motivation increases when responsibility for the solution to the problem and the process rests with the learner and as student ownership for learning increases. Inherent in the design of PBL is a public articulation by the learners of what they know and about what they need to learn more. Individuals accept responsibility for seeking relevant information and bringing that back to the group to help inform the development of a viable solution.

2) The problem simulations used in problem-based learning must be ill-structured and allow for free inquiry.

Problems in the real world are ill-structured (or they would not be problems). A critical skill developed through PBL is the ability to identify the problem and set parameters on the development of a solution. When a problem is well-structured learners are less motivated and less invested in the development of the solution.

3) Learning should be integrated from a wide range of disciplines or subjects.

Students should be able to access, study and integrate information from all the disciplines that might be related to understanding and resolving a particular problem just as people in the real world must recall and apply information integrated from diverse sources in their work. The rapid
expansion of information has encouraged a cross-fertilization of ideas and led to the development of new disciplines. Multiple perspectives lead to a more thorough understanding of the issues and the development of a more robust solution.

4) Collaboration is essential.

PBL provides a format for the development of these essential skills. During a PBL session the tutor will ask questions of any and all members to ensure that information has been shared between members in relation to the group’s problem.

5) What students learn during their self-directed learning must be applied back to the problem with reanalysis and resolution.

The point of self-directed research is for individuals to collect information that will inform the group’s decision-making process in relation to the problem. It is essential that each individual share coherently what he or she has learned and how that information might impact on developing a solution to the problem.

6) A closing analysis of what has been learned from work with the problem and a discussion of what concepts and principles have been learned are essential. PBL is a very engaging, motivating and involving form of experiential learning, learners are often very close to the immediate details of the problem and the proposed solution.

7) Self and peer assessment should be carried out at the completion of each problem and at the end of every curricular unit.
These assessment activities related to the PBL process are closely related to the previous essential characteristic of reflection on knowledge gains. The significance of this activity is to reinforce the self-reflective nature of learning and sharpen a range of metacognitive processing skills.

8) The activities carried out in problem-based learning must be those valued in the real world.

9) Student examinations must measure student progress towards the goals of problem-based learning.

The goals of PBL are both knowledge-based and process-based. Students need to be assessed on both dimensions at regular intervals to ensure that they are benefiting as intended from the PBL approach. Students are responsible for the content in the curriculum that they have “covered” through engagement with problems. They need to be able to recognize and articulate what they know and what they have learned.

10) Problem-based learning must be the pedagogical base in the curriculum and not part of a didactic curriculum.

Based on these descriptions of the characteristics of PBL identify clearly: (1) the role of the tutor as a facilitator of learning; (2) the responsibilities of the learners to be self-directed and self-regulated in their learning; and (3) the essential elements in the design of ill-structured instructional problems as the driving force for inquiry.
3. **Steps of Teaching Reading Using PBL**

According to Boud and Feletti (1991: 245), there are some steps for using PBL as follows:

1. **Pre-reading**
   a) Teacher invites students to make a group
   b) Teacher gives the text
   c) Teacher explains some instructions
   d) Teacher invites students to undertake the instructions given in reading.

2. ** Whilst-reading**
   a) The teacher asks students to discuss and find words meaning and concepts of the text given.
   b) Teacher asks students to identify the main idea of the text, which phenomena require explanation or discovery of underlying causes.
   c) Teacher asks students to analyze pronoun reference in the text.
   d) Teacher emphasizes students to identify the explicit information from the text.
   e) The teacher suggests students to formulate the ideas, unclear information, and obtaining the best information from the passage.
   f) Teacher asks students to synthesize newly acquired purposes from the text.

3. **Post-reading**
   a) Teacher stimulates students learning after conducting reading process.
   b) Teacher reinforces students’ understanding in reading.
   c) Teacher makes evaluation and gives solution to solve the aspects of reading.
4. **Advantages of PBL**
   
a. Students are strongly supportive of interaction allowed by small-group work and the ability to learn from one to another.

b. The improve communication between students generates more and different ideas, enables more information to be gathered but spreads the workload.

c. Of interest is the effect of group pressure ‘forcing’ students to answer the questions each week because they feel a responsibility to their peer.

d. This has been a striking feature of the classes: students rarely fail to hand in their weekly answers.

e. The process leads to broad reading around topics and also forces the students to contact outside groups.

f. The interactive process with students is most enjoyable and stimulating.

g. Students’ approach varies from year to year, so teaching the same subject each year is no longer boring (Bound and Feletti, 1991: 208).

5. **Disadvantages of PBL**
   
a. The comments reflect some concerns about working in groups. These refer to various aspects of group dynamics such as reliance on other members and disagreements with groups. Because of time constrains, information is not always shared or discussed.

b. There is occasional resentment because some group members do more work than others do. 

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*commit to user*
c. Some students indicate discomfort with the process in their comment that there is insufficient direction; they request more feedback on success or failure or are unsure whether all relevant areas have been covered.

d. Students are difficult to find a large classroom, as opposed to a lecture theater, conducive to group discussions.

e. There is no interaction between students within each of the groups and ensure involvement of all members (Bound and Feletti, 1991: 209).

D. Self-Esteem

1. Definitions of Self-Esteem

According to Rattan (2006: 1), self-esteem refers to an individual’s sense of his/her value, worth, and the extent to which a person values, approves, appreciates, prizes, and likes him or herself. Self-esteem is considered the evaluative component of self-concept, a broader representation of the self that includes cognitive and behavioral aspects as well as evaluative or affective ones. While the construct is most often used to refer to a global sense of self-worth, narrow concepts such as appearance esteem or body esteem are used to imply a sense of self-esteem in more specific areas.

Self-esteem is usually broadly defined as a person’s overall evaluation or attitude toward her or himself. However, self-esteem can be best understood as a reflection of an individual’s sense of her or his acceptability to important others (MacDonald, 2003: 2).
Then according to Erkut (2006: 5), self-esteem has been generally defined as the evaluation of the self; it is an affective response to one’s self-description. The evaluation refers to a judgment of one’s worth and what is being judged is one’s perception or one’s self-concept.

According to Schiraldhi (2007: 1), self-esteem is strongly associated with happiness, psychological resilience, and a motivation to live a productive and healthy life. Those lacking self-esteem are more likely to experience depression, anxiety, problem anger, chronic pain, suppression, and a variety of other distressing physical and psychological symptoms. So self-esteem is essential to our health, coping abilities, survival, and sense of well-being.

2. The Sources of Self-Esteem

According to Coopersmith (in Mruk, 2006: 75), there are some sources of self-esteem as follows:

1) Acceptance and Rejection

Acceptance and rejection affect our self-feeling through our relationships with parents, siblings, peers, friends, spouses or partners, co-workers or colleagues, and so on throughout our lives. Of course, there are other terms to describe this source of self-esteem. In any case, acceptance is a source of self-esteem because it is connected to worthiness.

It is also important to realize that there are many ways that acceptance and rejection can be alive in relation to the development and
maintenance of self-esteem. For instance, care, nurturance, and attraction are important features of acceptance, but respect, fondness, and admiration are often more common or appropriate in a professional relationship. Similarly, there are several modes of being rejected such as being ignored, devalued, used, mistreated, and abandoned, which may negatively affect self-esteem.

2) Virtue and Guilt

Definition of virtue, which is the adherence to moral and ethical standards, it implies that there are higher values or standards of behavior to follow to be a worthy person, rather than simply measuring up to some culturally relativistic code of conduct.

Similarly, guilt, particularly what existentialists call “authentic guilt,” may be understood as the failure to live up to more than just personal standards or those of a particular reference group. The connection between being virtuous and self-esteem are identified earlier when we examine the findings about values and self-esteem in certain types of self-esteem moments: Each time we act virtuously, or in a way that is recognized as adhering to a reasonable standard concerning what is desirable, healthy, or good, we also find ourselves as worthy because our actions express ourselves in these situations.

3) Influence and Powerlessness

This source of self-esteem and break with tradition have two reasons. First, power over one’s environment may capture something of
how this kind of behavior is actually lived, but other people can be a part of one’s environment, too. It is difficult to embrace the idea that a person who acts on their environment to their own ends while affecting others negatively is actually tapping into a genuine source of self-esteem. More to the empirical point, although power can be used to describe a way of relating to others, it may be too strong a word to describe the more subtle aspects of interacting with others effectively. For example, gentle persuasion can be just as effective as more direct assertions of power in some situations and the word “power” may not be able to capture this source of self-esteem.

4) Achievements and Failures

The use of the term “achievement” is more accurate in describing this particular source because it is not just any kind of success that counts. For example, people are successful in this or that area of life but also have obvious problems with self-esteem. Moreover, achievement carries with it a much stronger personal connotation than does mere success.

In short, one way is to understand the various aspects of the problem in the fundamental structure of self-esteem. Success and achievement are clearly tied to competence, but they are not enough to create self-esteem. The fundamental structure of self-esteem shows us that worth is only part of the picture. Otherwise, we have to include narcissism as genuine or authentic self-esteem. The most efficient way to resolve this situation is to
stay with the fundamental structure, which indicates that each basic source of self-esteem is necessary, but not sufficient to form self-esteem.

3. The Basic Types of Self-Esteem

There are several types and levels of self-esteem such as fragile, secure, high, low, stable, unstable, defensive, true, paradoxical, optimal, and so forth. An effective theory of self-esteem must not only account for such findings but should also demonstrate how they are even possible in the first place. Therefore, an integrated understanding of self-esteem must show how a relationship between the two factors of competence and worthiness are able to generate types of self-esteem.

Indeed, that the relationship between competence and worthiness spontaneously generates four possibilities: worthiness-based self-esteem, high self-esteem, low self-esteem, and competence based self-esteem. Otherwise, something is wrong with our understanding of the fundamental structure. Fortunately, a phenomenological analysis not only incorporates one of the most important self-esteem findings in the field but actually predicts it. The next step is to examine whether the characteristics associated with the types of self-esteem or necessitated by the fundamental structure are consistent with major research findings in the field.

Both a lack of competence and a lack of worthiness are included in low self-esteem. It is easy to imagine how the combination of reduced coping skills and a shrunken reservoir of positive self-feeling would make people
vulnerable in this fashion. Otherwise, people with high self-esteem typically exhibit a positive degree of both competence and worthiness. People who are also high in competence will also be likely to have the skills that are necessary to succeed in life. Both sets of characteristics are found in the literature we see indicating a relationship between self-esteem and happiness, initiative, openness, spontaneity, a secure identity, and a general absence of psychopathology.

4. The Factors Influencing Self-Esteem

According to Brown (2000: 145), three general levels of influencing self-esteem are as follows:

1) General or Global self-esteem is said to be relatively stable in a mature adult, and is resistant to change except by active and extended therapy. It is the general or prevailing assessment one makes of one’s own worth overtime and across a number of situations.

2) Situational or specific self-esteem refers to one’s self-appraisals in particular life situation, such as social interaction, work, education, home, or on a certain relatively discretely defined traits, such as intelligence, communicative ability, athletic ability, or personality traits like gregariousness, empathy, and flexibility.

3) Task self-esteem relates to particular tasks within specific situation. For example, within the educational domain, task self-esteem might refer to one subject matter area. Specific area self-esteem might encompass second
language acquisition in general, and self-esteem might appropriately refer
to one’s self-evaluation of a particular aspect of the process: speaking,
writing, and particular class in a second language, or area a specific kind
of classroom exercise.

5. Characteristic of Students Having High and Low Self-Esteem

People with high self-esteem, in effect, carry with them a loving parent
who is proud of their successes and tolerant of their failures. Such people tend
to have an optimistic view about life, and to be able to tolerate external stress
without becoming excessively anxious. Although capable of being
disappointed and depressed by specific experiences, people with high self-
esteeem recover quickly as the children who are secure in their mother’s love.

In contrast, people with low self-esteem carry within them a
disapproving parent who is harshly critical of their failures, and register only
short-lived pleasures when they succeed. Such people are appropriate to be
very sensitive to failure and to rejection, to have low tolerance for frustration,
to take a long time to recover following disappointments, and to have a
pessimistic view of life. The picture is not unlike that of children who are
insecure in their parent’s love (Epstein in Brown and Marshall, 2002: 28).

Table 1. Top 15 Characteristic of students having high and low self-
esteeem (Guindon, 2010: 20)

<table>
<thead>
<tr>
<th>No</th>
<th>High Self-Esteem</th>
<th>Low Self-Esteem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Confident</td>
<td>Withdrawn/shy/quiet</td>
</tr>
<tr>
<td></td>
<td>Friendly/outgoing</td>
<td>Insecure</td>
</tr>
<tr>
<td>---</td>
<td>------------------</td>
<td>----------</td>
</tr>
<tr>
<td>3.</td>
<td>Happy</td>
<td>Underachieving</td>
</tr>
<tr>
<td>4.</td>
<td>Positive/optimistic</td>
<td>Negative (attitude)</td>
</tr>
<tr>
<td>5.</td>
<td>Motivated</td>
<td>Unhappy</td>
</tr>
<tr>
<td>6.</td>
<td>Achieving</td>
<td>Socially inept</td>
</tr>
<tr>
<td>7.</td>
<td>Competitive/risk taker</td>
<td>Angry/hostile</td>
</tr>
<tr>
<td>8.</td>
<td>Accepting/tolerant</td>
<td>Unmotivated</td>
</tr>
<tr>
<td>9.</td>
<td>Involved/active</td>
<td>Depressed</td>
</tr>
<tr>
<td>10.</td>
<td>Secure/well adjusted</td>
<td>Dependent/follower</td>
</tr>
<tr>
<td>11.</td>
<td>Comfortable</td>
<td>Poor self-image</td>
</tr>
<tr>
<td>12.</td>
<td>Assertive</td>
<td>Non-risk taker</td>
</tr>
<tr>
<td>13.</td>
<td>Caring</td>
<td>Lacks self-confidence</td>
</tr>
<tr>
<td>14.</td>
<td>Independent</td>
<td>Poor communicator</td>
</tr>
<tr>
<td>15.</td>
<td>Responsible</td>
<td>Acts out</td>
</tr>
</tbody>
</table>

6. **The Causes of High and Low Self-Esteem**

The most important influences on a person’s level of self-esteem are their parents. This influence is partly genetic and partly produced by the degree of love, concern, acceptance, and interest shown by parents through childhood and adolescence. Physical and particularly sexual abuse by parents have especially damaging and enduring effects. It also seems that after parents have had their say little else in life will be able to modify the opinion of self thus formed.

*commit to user*
Indeed, one of the clearer messages of research concerns the relative immunity of established levels of self-esteem to disconfirming feedback. A range of strategies are deployed to discount any evidence that contradicts the people’s opinions of themselves. These allow people to hold on to very positive opinions even when to the detached observer these would seem to have little basis. But the same strategies are also used by people with very low opinions of themselves to hold on to these estimations.

The operation of these strategies helps to clarify why so many conditions and circumstances do not have the impact on self-esteem that might otherwise be expected. The social prestige of the categories to which people belong have little or no effect on their self-esteem. This is true of social class and ethnicity. Being male confers a slight advantage over being female but the precise reasons for this have yet to be determined. Real successes and failures have an effect but it is not large. Actual physical appearance including both body shape and facial attractiveness has far less impact on the individual than his or her self-image. Again and again it turns out that what matters is not the reality but what the individual believes to be the case. And this latter is often only tenuously related to the former.

The quality of close relationships with others does appear to be a significant determinant of self-esteem. As noted above, the likelihood of forming these relationships is itself a function of self-esteem.

Finally, self-esteem can be damaged by repeated, unambiguous and public failures and rejections – such as, for example, may be involved in
being diagnosed an alcoholic, convicted for child abuse, or being unable to find employment. But it is not at all clear that there are correspondingly beneficial effects of public successes (Emler, 2001: 59).

7. The Elements of Self-Esteem

According to Branden (in Brandt, 2009: 54), the source of self-esteem can only be internal. It is relationship between a person’s self-efficacy and self-reflects.

1) Self-Efficacy

Self-efficacy is the belief that you can achieve what you set out to do. When your self-efficacy is high, you believe you have that ability to act appropriately. When your self-efficacy is low, you worry that you might not able to do the task that it is beyond your abilities. Your perception of your self-efficacy can influence which task you take on and which ones you avoid. According to Bandura, a major source of self-efficacy is the experience of mastery, in which success in one area builds your confidence to succeed in other areas. For example, an administrative assistant who masters a sophisticated computerized accounting system is more likely to tackle a future complicated computer program that is a person who feels computer illiterate and may not even try to figure out the new program, regardless of how well he or she could do it.

2) Self-Reflect

Self-reflect, the second component of self-esteem is what you think and feel about yourself. Your judgment of your own value a primary factor in
achieving personal and career success. People who respect themselves tend to act in ways that confirm and reinforce this respect. People who lack self-respect may put up with verbal or physical abuse. Branden believes that the healthier our self-esteem, the more inclined we are to treat others with respect, benevolence, goodwill, and fairness since we do not tend to perceive them as a threat, and since self-respect is the foundation of respect for others.

8. The Importance of Self-Esteem

Self-esteem is a collection of beliefs and feelings that students have about themselves. How they define themselves influences their motivations, attitudes, and behaviours and affects their emotional adjustments. Most people’s feelings and thoughts about themselves fluctuate somewhat based on their daily experiences. The grade that can be got at an exam, how the people act, even ups and downs in romantic relationships, all can have a temporary to permanent impact on students self-esteem. however, it is something more fundamental than the normal ‘ups and downs’ associated with situational changes. For people with good basic self-esteem, normal ‘ups and downs’ may lead to temporary fluctuations in how they feel about themselves, but only to a limited extent. In contrast, for people with poor basic self-esteem, these ‘ups and downs’ may make all the differences in the world.
According to Robins (2005: 161), self-esteem shows remarkable continuity vast array of experiences that impinge upon a lived life. At the same time, self-esteem also shows systematic changes that are meaningfully connected to age-related life experiences and contexts. These normative changes illustrate the role of the self as an organizing psychological construct that influences how individuals orient their behavior to meet new demands in their environment and new developmental challenges.

The best way to understand self-esteem development is to understand the self-evaluative mechanisms that drive the self-system, the cognitive and affective processes presumed to play a role in how self-evaluations are formed, maintained, and changed. Although experimental studies have linked a number of self-evaluative processes to short-term changes in self-evaluation, we know little about the influence of such processes on self-esteem change over long periods of time. Research on the self should draw on this experimental work to develop hypotheses about long-term change in self-esteem and explore how self-evaluative processes.

However, it is important to recognize that such factors can only influence self-esteem through intrapsychic mechanisms, such as perceptions of control and agency and feelings of pride and shame, which shape the way people react to and internalize the events that occur in their lives.
According to Emler (2001: 58), the indicators of students having high self-esteem and low self-esteem can be seen below:

<table>
<thead>
<tr>
<th>No</th>
<th>Young people with very high self-esteem are more likely to:</th>
<th>Young people with low self-esteem are not more likely as a result to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hold prejudiced attitudes towards ethnic minorities</td>
<td>Commit crimes, including violent crimes</td>
</tr>
<tr>
<td>2.</td>
<td>Reject social influence</td>
<td>Use or abuse illegal drugs</td>
</tr>
<tr>
<td>3.</td>
<td>Engage in physically risky pursuits.</td>
<td>Drink alcohol to excess or smoke.</td>
</tr>
<tr>
<td>4.</td>
<td>More spirit</td>
<td>As parents, physically or sexually abuse their own children</td>
</tr>
<tr>
<td>5.</td>
<td>Success academically</td>
<td>Fail academically.</td>
</tr>
</tbody>
</table>

There are other ways in which self-esteem may be implicated in behaviour but which have yet been explored to any significant extent. Among these, perhaps the most interesting and potentially important is that self-esteem modifies the effect of other variables upon behaviour or outcomes such as physical health. Because self-esteem may even modify the direction of such effects, these influences will be more difficult to detect. One intriguing example suggests that positive life events enhance the health of those with high self-esteem but adversely affect the health of those with low self-esteem.
Finally, we need to recognise that self-esteem can be simultaneously cause and effect. Two examples here are victimisation and the quality of personal relationships.

Having high self-esteem people believe they possess many positive qualities and few negative qualities. Low self-esteem people show a similar tendency to a lesser degree. These findings suggest two things: First, self-esteem differences in self-evaluation are so broad and pervasive that it makes better sense to assume that self-esteem colors people’s evaluations of their specific attributes rather than assume that self-esteem is built up, piece-by-piece, on people’s more specific self-appraisals. Second, when self-esteem differences are found, they are not due to negative thinking on the part of low self-esteem people.

Based on the above elaboration, it can be concluded that self-esteem is the personal judgment, which is expressed in the attitudes that the individual holds towards himself and indicates the extent to which and individual believes himself to be capable, successful, and worthy. Students having high self-esteem more persistent, believe themselves to be capable, successful, and worthy. Meanwhile, students having low self-esteem have the opposite characteristic. However, the students should master the indicators of self-esteem: (1) believing to be successful; (2) believing to be worthy; (3) having high aspiration; (4) believing to be capable; and (5) having persistence.
E. Rationale

1. The Difference between Self-Directed Learning (SDL) and Problem-Based Learning (PBL) to Teach Reading

   The teaching method applied by the teachers is one of important factors influencing students’ reading ability. Therefore, a teacher must give a wise decision in choosing the appropriate method in order to teach reading successfully. As stated before, the methods compared in this study are self-directed learning (SDL) and problem-based learning (PBL). In this case, self-directed learning is an instructional process that centers on assessing learning needs, securing learning resources, planning and implementing learning activities, and evaluating learning. The teacher asks individual students questions about the text to monitor their comprehension. After reading, the teacher invites students in a discussion focusing on the aim at reading and follow-up activities that focus on the content of the text and the specific skill that students learn to use.

   In PBL, participants of a PBL course often work as a whole from the beginning to the end. The work procedure is defined collaboratively by the group and executed by the same group within the work processes, although sometimes they work on different tasks individually or in sub-groups. Participants with different roles (e.g., teacher and learner) can collaboratively perform activities at the same step. In workflow systems, a participant with a certain role works only at the role-related steps and does not care about the work at other steps. For each activity, exactly one role is
defined. Even if multiple performers with the same role are engaged in the same step, they deal with different work items individually. Therefore, self-directed learning is more effective than problem-based learning.

2. The Difference between Students Having High Self-Esteem and Students Having Low Self-Esteem

The students having high level of self-esteem expect to do well in their accomplishment, try hard, and try to be successful. They are inclined to attribute their success to their abilities, and to make due allowance for circumstances in interpreting their failures. In the end, students with high self-esteem generally enjoy a great deal of self-confidence and have a realistic assessment of their strengths and weaknesses.

On the other cases, the students having low self-esteem tend to expect the worst, use less effort on their tasks, especially challenging, demanding ones, and achieve less success. Even, when students having self-esteem achieve success, they are less appropriate to attribute their success to their abilities or to enjoy it.

Based on the above phenomenon, it can be concluded that students having high self-esteem will have a better achievement in reading ability than those having low self-esteem.
3. The Interaction between Teaching Methods and Students’ Self-Esteem to Teach Reading

Teaching reading is not an easy task for the senior high school students, so the teachers have to pay more on how the students have to be taught. Choosing and applying the proper learning are believed able to treat the students to have high self-esteem and choosing improper learning will bring them to have low self-esteem in learning, especially in understanding the reading texts. Based on the above elaboration, the students’ reading ability can be affected by the learning method applied by the teacher. Therefore, the teacher ought to be selective in selecting the learning used in the teaching and learning process. It is suitable that teaching method, which is used by the teacher in the class, gives a big influence for the success of the teaching and learning process. Unlike lecture, which places the students in a passive learning role, SDL requires the students to be more active in acquiring the academic content without neglecting their social and human relation with others unconsciously. The teacher not only concerns with teaching academic content, but also considers making the students develop their social and human relation with others.

Self-directed learning (SDL) is proved more effective in increasing students’ reading ability achievement. It will automatically force the students to be more active in acquiring the academic content without neglecting their social and human relation with other students.
unconsciously. The teacher’s goal in conducting the teaching is not only concerned with teaching academic content, but also making students develop their critical thinking in their life.

Meanwhile, self-esteem is how we think and feel about ourselves. It refers to how we think the way we look, our abilities, our relationship with others, and our hopes for the future. Self-esteem is the confidence we have on ourselves. It can be stated that self-esteem is an important factor to acquire reading because understanding of the text requires self-esteem. The students having high level of self-esteem expect to do well in their accomplishment, try hard and try to be successful. In teaching and learning process, they usually have better attitudes. They have high desire to pay attention to the teacher. They are active in joining the teaching and learning process. Therefore, self-directed learning (SDL) is better to teach reading for students having high self-esteem.

Meanwhile, for low self-esteem students, it is better to teach them by using problem-based learning (PBL) method. Low self-esteem students need guidance and support in comprehending English and PBL demonstrates the quality of students learning and maintains by relaying on students’ autonomy and personal responsibility on formal teaching. Some students indicate discomfort with the process in their comments that there is insufficient direction; they request more feedback on success or failure or unsure whether all relevant areas are covered. It is in accordance with the characteristic for the students having low self-esteem. The students are...
passive in the class and they just become the followers in the teaching and learning process, so far the students having low self-esteem PBL is more effective to teach reading.

It can be concluded that there is interaction between methods of teaching used (self-directed learning and problem-based learning) and degree of self-esteem to teach reading. Self-directed learning is more effective than problem-based learning to teach reading for students having high self-esteem. On the other hand, problem based learning is more effective than self-directed learning to teach reading for students having low self-esteem.

F. Hypothesis

Based on the above rationale, the hypotheses can be formulated as follows:

1. Self-Directed Learning (SDL) is more effective than Problem-Based Learning (PBL) to teach reading ability for the eleventh grade students of SMA Negeri 1 Keruak.

2. The students having high self-esteem have better reading ability than those having low self-esteem of the eleventh grade students of SMA Negeri 1 Keruak.

3. There is an interaction between the teaching methods and students’ self-esteem in teaching reading ability.
CHAPTER III
RESEARCH METHODOLOGY

A. Research Method

The method applied in this research was an experimental research. Experimental research is a research in which the researcher manipulates the independent variable. As stated by Johnson and Christensen (2000: 23), the aim of the experimental research is to investigate the possible cause-and-effect relationship by manipulating one independent variable to influence the other variable(s) in the experimental group, and by controlling the other relevant variables, and measuring the effects of the manipulation by some statistical means. By manipulating the independent variable, the researcher can see if the treatment makes a difference on the subjects.

The experimental research method enables us to identify causal relationships because it allows us to observe, under controlled conditions, the effect of systematic and hanging one or more variables. The independent variable in experimental research is commonly called as experimental variable or treatment variable. Meanwhile, the dependent variable is known as the outcome variable.

Referring to this research, the writer chose the experimental research method because this research was related to the effectiveness of teaching methods used as the independent variables and self-esteem as the attribute variable in teaching reading ability for the eleventh grade students of SMA Negeri 1 Keruak. The research design used in this research was a simple factorial design. This
research involved three kinds of variables namely independent variables, dependent variable, and attribute variable. The independent variable of this research was teaching methods. The teaching methods are the factors of this study, which are manipulated, measured, and selected to know the effect and the relationship to the phenomenon investigated. The methods used in this study were self-directed learning and problem-based learning. These two different teaching methods were related to two groups of students. In this case, the self-directed learning group of students was functioned as an experimental group and problem-based learning of students was functioned as a control group.

Furthermore, the dependent variable of this research was the students’ reading ability of the eleventh grade students of SMA Negeri 1 Keruak in the academic year of 2012/2013. The attribute variable of this study was students’ self-esteem in learning. This variable was also assumed as the secondary independent variable to the phenomenon investigated. In this study the writer was interested in investigating the effect of independent variable (X) or methods on dependent variable (Y) or reading ability, in which the relationship between X and Y is influenced by the attribute variable (Z) or students’ self-esteem.

B. Time and Place of the Study

This study was conducted at the eleventh grade students of SMA Negeri 1 Keruak in the academic year of 2012/2013. Then, the research was conducted on July up to November 2012. To be clearer it is shown in the following time schedule.

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Table 3.1 Time Schedule of the Research.

<table>
<thead>
<tr>
<th>Activities</th>
<th>July</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arranging Proposal</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducting Proposal Seminar</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trying out Instrument</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducting Treatment</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Collecting and Analyzing the Data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Making Report</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. Population, Sample, and Sampling

1. Population

According to Gay (1992: 125), population is the group of interest to the searcher, the group to which she or he would like the results of the study to be generalized. It may be called that population is any individuals having the quality or characteristic in common from which a researcher may get the data.

Furthermore, Johnson and Christensen (2000: 158) define population as a set of all elements. It is the larger group to which a researcher wants to generalize his or her sample result. Based on the above definitions, population is the whole subjects that are going to be investigated. In this research, the target population of this study was all of the eleventh grade students of SMA Negeri 1 Keruak in the academic year.
2012/2013. The total numbers of the population were 181 students divided into 5 classes.

2. Sample

Sample refers to any group from which the information is gained as Christensen (2000: 158) defines sample as a set of elements taken from a larger population according to a certain rules. Furthermore, he states that a sample is always smaller than a population, and it is often much smaller.

The number of sample, therefore, it can be concluded from the number of population involved in this research. The huge number of population requires a specific number. On the other hand, when the population is not too large, population can be involved as sample. The sample of this research was the eleventh grade students. There were two available programs for the students at SMA Negeri 1 Keruak, science and social program. Science program consisted of two classes with 61 students and social program consisted of four classes with 120 students. The researcher took two classes from social program, XI IPS 1 and XI IPS 2 as a sample of this research. Each class consisted of 38 students so the total number of the sample was 76 students.

Based on the above theories, the writer took only 76 students (38 students from XI IPS 1 and 38 students from XI IPS 2) or two classes from all of population as the sample of this study. In dividing each of the class into the group of high and low self-esteem, the writer took 19 students
who had high self-esteem and 19 students who had low self-esteem from grade XI IPS 1 (Experimental class) and XI IPS 2 (Control class). Furthermore, the writer took 19 students who had high self-esteem from grade XI IPS 1 (Experimental class) and 19 students who had low self-esteem from grade IPS 2 (Control class). In determining the sample (2 out of all), the researcher applied cluster random sampling and did not use random assignment. So, this research was categorized as a quasi-experimental research. After that, the researcher did a lottery to divide both classes from 76 students into 38 students as Experimental group and 38 students as Control group.

3. Sampling

According to Johnson and Christensen, (2000: 156), sampling is the process of drawing sample from a population. They also confirm that when taking sample, it needs to be known the characteristics of subject (called sample) selected from larger group (called the population) in order to understand the characteristic of population. Based on these opinions, it can be stated that sampling is the way or technique used to take the sample of study.

The sampling technique used in this study was cluster random sampling technique. Cluster random sampling is a sampling in which groups, not individuals, are randomly selected (Suharsimi, 1992: 132). In this case, all members of selected groups have similar characteristics.
Based on this idea, cluster random sampling is a sampling technique that chooses the sample of study by taking certain classes that have similar characteristics. Therefore, among the five classes, the writer decided to take only two classes (XI IPS 1 and XI IPS 2) randomly as the sample of the study, which consisted of 76 students. In this case, 38 students were taken from class XI IPS 1 and 38 students from class XI IPS 2. This number of sample was considered representative enough used as a subject of research.

**D. Technique of Collecting Data**

The technique of collecting data is very crucial in one research because it is related to the way or procedure of how the writer will gather or collect the data being investigated and what kinds of data are going to be collected. Furthermore, to collect the data, the writer needs the instrument, which is called a test. Gay (1992: 154) states that a test is a means of measuring the knowledge, skill, feeling, intelligence, or aptitude of an individual or group.

In this study, the researcher used questionnaire and objective tests related to the material and the topic provided. Questionnaire was used to know the students’ self-esteem in learning and test was applied to the students’ ability in reading.

In order to know the level of students’ self-esteem, the students were given self-esteem questionnaire. The questionnaire consisted of statement lists and four responses, which should be chosen by the students. The responses consisted
of (strongly agree, agree, disagree, and strongly disagree). For positive statement, the score 4 to 1, while for negative statement, the score is from 1 to 4. Furthermore, to know the students’ reading competence, the students were given reading test with five options (a, b, c, d, and e). The items of students’ self-esteem questionnaire and reading test were made and arranged based on the indicators at the blue print, which were formulated on the construct.

The good instrument used in one research must be valid and reliable. Validity refers to the degree to which a test measures what is supposed to be measured (Gay, 1992: 155). Furthermore, Brown (1994: 254) states that validity is the degree to which the test actually measures what it is intended to measure. To know whether the instrument used in this study is valid or not, the researcher uses content and construct validity. Content validity is the degree to which a test measures an intended content area. Meanwhile, construct validity refers to the degree to which a test measures an intended hypothetical construct (Gay, 1992: 157). To know the validity of questionnaire the researcher used the following formula.

\[ r_{iv} = \frac{\sum x_i x_i}{\sqrt{\sum x_i^2 \sum x_i^2}} \]

Where:

- \( r_{iv} \) = Coefficient of validity
- \( \sum x_i x_i \) = Total of items variance
- \( \sum x_i^2 \) = Total variance of item
The result of \( r_\delta \) is then compared with \( r \) table of product moment at the level of significance \( \alpha = 0.05 \). The item is valid if \( r_o > r_i \) or if \( r_o \) is higher than \( r_i \).

(Ngadiso, 2009: 1)

Then, to know the reliability, the following formula was used.

\[
r_{ik} = \frac{k}{k - 1} \left( 1 - \frac{\sum s_i^2}{s_k^2} \right)
\]

Where:

- \( r_{ik} \) = Coefficient of reliability
- \( k \) = Total of valid items
- \( \sum s_i^2 \) = Total variance of all items
- \( s_k^2 \) = Total variance

The result of \( r_o \) is then compared with \( r \) table of product moment at the level of significance \( \alpha = 0.05 \). The questionnaire is reliable if \( r_o > r_i \) or if \( r_o \) is higher than \( r_i \).

(Ngadiso, 2009: 2-3)

Then, the reading instrument used was consulted to the experts’ judgment and correlated to the curriculum and books used, in this case was the course book for the senior high school for eleventh graders. Furthermore, to know the validity of test, the researcher applied the following formula.

\[
r_i = \frac{\bar{X}_i - \bar{X}}{S_i \sqrt{\frac{p_i}{q_i}}}
\]

Where:
\[ X_i = \text{The mean of correct answer for item no } i \]

\[ X_t = \text{The mean of total score} \]

\[ S_t = \text{The standard deviation} \]

\[ p_i = \text{The proportion of students who respond correctly for the item no } i \]

\[ q_i = \text{The proportion of student who responds incorrectly for the item no } i \]

In which:

\[ S_t = \sqrt{\frac{\sum \sigma^2}{n}} \]

The result of \( r_o \) is then compared with \( r \) table of product moment at the level of significance \( \alpha = 0.05 \). The item is valid if \( r_o > r \), or if \( r_o \) is higher than \( r_t \).

Furthermore, the second consideration to know whether the instrument used is good or not is reliability. Gay (1992: 161) defines reliability as the degree to which a test consistently measures whatever it measures. He says further that the more reliable a test is, the more confidence that can be had that the scores obtained from the administration of the test are essentially the same scores that will be obtained if the test is re-administered. On the other hand, Brown (1994: 252) states that a test is a method of measuring a person’s ability or knowledge in a given area. Based on the above definitions, to know the reliability of test (instrument) used in this study, the researcher used the following formula:

\[ r_{kk} = \frac{k}{k-1} \left( 1 - \frac{\sum pq}{S_i^2} \right) \]
Where:

\[ r_{ik} = \text{The estimated reliability or coefficient of reliability} \]

\[ k = \text{The number of valid items on the test} \]

\[ p = \text{The proportion of student who responds correctly of each item} \]

\[ q = 1 - p \]

\[ S_i^2 = \text{Observed score variance} \]

The result of \( r_o \) is then compared with \( r \) table of product moment at the level of significance \( \alpha = 0.05 \). The test is reliable if \( r_o > r \) or if \( r_o \) is higher than \( r_l \).

E. Technique of Analyzing Data

The techniques used in analyzing the data of this study were descriptive and inferential analysis. Descriptive analysis was used to know the mean, median, mode, and standard deviation of students’ scores in reading test. Inferential analysis was used to know normality and homogeneity previously before the ANOVA test. Normality test was conducted in order to know whether the sample distributes normally or not, while homogeneity test is aimed at knowing whether the data are homogeneous or not. Liliefors test was used to examine the normality test. Meanwhile, Barlet test was used to examine the homogeneity test. When using factorial design, as the researcher did, that included independent variables, moderator variable, and dependent variable, the size of the analysis of variance was equal to the number of independent and moderator variables. The term variable in this sense was the same factor. The statistical device that was appropriate for factorial design was analysis of variance (ANOVA). It was
possible to put more than one independent variables into a single study. Previously, moderator variable was included into independent variable. Dealing with this study, the researcher used two independent variables, the teaching methods and students’ self-esteem which were divided into two levels; high and low levels. Because there were two independent variables, ANOVA was called as 2x2 ANOVA.

Table 3.2 Design for ANOVA

<table>
<thead>
<tr>
<th></th>
<th>1st effect</th>
<th>2nd effect</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self-Directed Learning (SDL)</td>
<td>Problem-Based Learning (PBL)</td>
<td></td>
</tr>
<tr>
<td>High Self-Esteem</td>
<td>Group 1 ( \sum \frac{X}{X} )</td>
<td>Group 2 ( \sum \frac{X}{X} )</td>
<td>( \sum \frac{X_{r}}{X} )</td>
</tr>
<tr>
<td>Low Self-Esteem</td>
<td>Group 3 ( \sum \frac{X}{X} )</td>
<td>Group 4 ( \sum \frac{X}{X} )</td>
<td>( \sum X_{c} )</td>
</tr>
<tr>
<td>Total</td>
<td>( \sum X_{r_{i}} )</td>
<td>( \sum X_{c_{i}} )</td>
<td>( \sum \frac{X}{X} )</td>
</tr>
</tbody>
</table>

Then the step used to calculate 2 x 2 ANOVA is as follows:

a. The total sum of squares:

\[
\sum X_{i}^{2} = \sum X_{i}^{2} - \left[ \frac{\sum X_{i}}{N} \right]^{2}
\]

\(commit to user\)
b. The sum of squares between groups:

\[ \sum x_b^2 = \left( \sum \frac{X_1^2}{n_1} \right) + \left( \sum \frac{X_2^2}{n_2} \right) + \left( \sum \frac{X_3^2}{n_3} \right) + \left( \sum \frac{X_4^2}{n_4} \right) - \frac{\sum X_i^2}{N} \]

c. The sum of squares within groups:

\[ \sum x_w^2 = \sum x_1^2 - \sum x_b^2 \]

d. The sum between-columns of squares:

\[ \sum x_{bc}^2 = \left( \sum \frac{X_{c1}^2}{n_{c1}} \right) + \left( \sum \frac{X_{c2}^2}{n_{c2}} \right) - \frac{\sum X_1^2}{N} \]

e. The sum between-rows of squares:

\[ \sum x_{br}^2 = \left( \sum \frac{X_{r1}^2}{n_{r1}} \right) + \left( \sum \frac{X_{r2}^2}{n_{r2}} \right) - \frac{\sum X_1^2}{N} \]

f. The sum of squares interaction:

\[ \sum x_{int} = \sum x_b^2 - \left( \sum x_{bc}^2 + \sum x_{br}^2 \right) \]

g. df for between - columns sum of squares = C – 1

df for between - rows sum of squares = R – 1

df for interaction (C-1) (R-1)

df for between - groups sum of squares = G – 1

df for within - columns sum of squares = \( \sum (n-1) \)

df for total sum of square = N – 1

C = the number of columns

R = the number of rows  

\[ \text{commit to user} \]
G = the number of groups

n = the number of subject of one groups

N = the number of subject of all groups

The following is the table for summarizing 2 x 2 ANOVA:

**Table 3.3 Design for Summarizing ANOVA**

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>Ft(.05)</th>
<th>Ft(.01)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between columns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Teaching methods)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between rows (Self-esteem)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Columns by rows (Interaction)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Between columns  
   \[ q = \frac{\bar{X}_{c_1} - \bar{X}_{c_2}}{\sqrt{\text{error variance}/n}} \]

2. Between rows  
   \[ q = \frac{\bar{X}_{r_1} - \bar{X}_{r_2}}{\sqrt{\text{error variance}/n}} \]

3. Between column (HSE)  
   \[ q = \frac{\bar{X}_{c_1}r_1 - \bar{X}_{c_2}r_1}{\sqrt{\text{error variance}/n}} \]

4. Between column (LSE)  
   \[ q = \frac{\bar{X}_{c_1}r_2 - \bar{X}_{c_2}r_2}{\sqrt{\text{error variance}/n}} \text{ or } q = \frac{\bar{X}_{c_2}r_2 - \bar{X}_{c_1}r_2}{\sqrt{\text{error variance}/n}} \]
5. The statistic test is found by dividing the difference between the means by the square root or the ratio of the within group variation and the sample size.

\[ TS : q = \frac{X_i - X_j}{\sqrt{S^2_w / n}} \]

Tukey test is used to know the difference between cells and the mean score obtained is used to know which method is more effective to teach reading skill, whether self-directed learning or problem-based learning. (Ngadiso, 2009: 19)

F. Statistical Hypotheses

In this study, the researcher proposed three hypotheses. These hypotheses were based on the formulation of the problems as presented in the previous chapter.

1. The difference between self-directed learning \((A_1)\) and problem-based learning \((A_2)\) to teach reading for eleventh grade students of SMAN 1 Keruak in the academic year 2012/2013.

\( H_0 : \mu A_1 = \mu A_2 \)

It means that there is no difference between self-directed learning is more effective than problem-based learning.

\( H_1 : \mu A_1 > \mu A_2 \)

It means that self-directed learning is more effective than problem-based learning to teach reading.
2. The difference between the students who have high self-esteem and who have low self-esteem in reading ability for eleventh grade students of SMAN 1 Keruak in the academic year 2012/2013.

$H_0 : \mu B_1 = \mu B_2$

It means is no difference between $B_1$ and $B_2$ (between high self-esteem and low self-esteem).

$H_1 : \mu B_1 < \mu B_2$

It means that the students having high self-esteem have better reading ability than low self-esteem.

3. The interaction between the methods used (self-directed learning and problem-based learning) (A) and students’ self-esteem (B) to teach reading for eleventh grade students of SMAN 1 Keruak in the academic year 2011/2012.

$H_0 : A \times B = 0$

It means that there is no interaction between A and B (between teaching methods and self-esteem) to teach reading.

$H_1 : A \times B > 0$

It means that there is interaction between A and B (between teaching methods and self-esteem) to teach reading.
CHAPTER IV
RESEARCH RESULT

In this chapter the researcher discusses the result of the research. The result is divided into four discussions as follows: the description of the data, normality and homogeneity, hypothesis test, and the discussion of the result of the study.

A. Data Description

The data presented in this point are related to the result of the reading test which covers the mean, mode, median, standard deviation, and frequency distribution then completed by histogram and polygon. The descriptions of the data are based on the number of the groups analyzed. There are eighth groups as follows:

1. The data of students of experimental class (A₁).
2. The data of students of control class (A₂).
3. The data of students having high self-esteem (B₁).
4. The data of students having low self-esteem (B₂).
5. The data of students having high self-esteem of experimental class (A₁B₁).
6. The data of students having high self-esteem of control class (A₂B₁).
7. The data of students having low self-esteem of experimental class (A₁B₂).
8. The data of students having low self-esteem of control class (A₂B₂).

The data of each group presented above are described as follows:
1. The data of students of experimental class ($A_1$)

The descriptive analysis of the data of $A_1$ shows that the score is 42 up to 83. The mean is 62.39 the mode is 80 the median is 76.5 and the standard deviation is 10.26. Then, the frequency distribution, histogram, and polygon are presented in the table and figure 4.1 as follows.

<table>
<thead>
<tr>
<th>Class Limit</th>
<th>Frequency ($f_i$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>42 – 48</td>
<td>4</td>
</tr>
<tr>
<td>49 – 55</td>
<td>6</td>
</tr>
<tr>
<td>56 – 62</td>
<td>9</td>
</tr>
<tr>
<td>63 – 69</td>
<td>10</td>
</tr>
<tr>
<td>70 – 76</td>
<td>5</td>
</tr>
<tr>
<td>77 – 83</td>
<td>4</td>
</tr>
<tr>
<td>Sum</td>
<td>38</td>
</tr>
</tbody>
</table>

Figure 4.1. Histogram and Polygon of Data $A_1$
2. The data of students of control class (A$_2$)

The descriptive analysis of the data of A$_2$ shows that the score is 40 up to 75. The mean is 57.07 the mode is 50.94, the median is 49.94, and the standard deviation is 8.0. Then, the frequency distribution, histogram, and polygon are presented in the table and figure 4.2.

<table>
<thead>
<tr>
<th>Class Limit</th>
<th>Frequency ($f_i$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 – 45</td>
<td>2</td>
</tr>
<tr>
<td>46 – 51</td>
<td>9</td>
</tr>
<tr>
<td>52 – 57</td>
<td>9</td>
</tr>
<tr>
<td>58 – 63</td>
<td>9</td>
</tr>
<tr>
<td>64 – 69</td>
<td>7</td>
</tr>
<tr>
<td>70 – 75</td>
<td>2</td>
</tr>
<tr>
<td>Sum</td>
<td>38</td>
</tr>
</tbody>
</table>

Figure 4.2. Histogram and Polygon of Data A$_2$
3. The data of students having high self-esteem (B₁)

The descriptive analysis of the data of B₁ shows that the score is 42 up to 83. The mean is 62.13, the mode is 80.67, the median is 76.50, and the standard deviation is 10.51. Then, the frequency distribution, histogram, and polygon are presented in the table and figure 4.3.

<table>
<thead>
<tr>
<th>Class Limit</th>
<th>Frequency(fᵢ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>42 – 48</td>
<td>5</td>
</tr>
<tr>
<td>49 – 55</td>
<td>5</td>
</tr>
<tr>
<td>56 – 62</td>
<td>9</td>
</tr>
<tr>
<td>63 – 69</td>
<td>10</td>
</tr>
<tr>
<td>70 – 76</td>
<td>5</td>
</tr>
<tr>
<td>77 – 83</td>
<td>4</td>
</tr>
<tr>
<td>Sum</td>
<td>38</td>
</tr>
</tbody>
</table>

Figure 4.3. Histogram and Polygon of Data B₁
4. The data of students having low self-esteem ($B_2$)

The descriptive analysis of the data of $B_2$ shows that the score is 40 up to 75. The mean is 57.34, the mode is 60.17, the median is 57.86, and the standard deviation is 8.00. Then, the frequency distribution, histogram, and polygon are presented in the table and figure 4.4.

Table 4.4. Frequency Distribution of Data $B_2$

<table>
<thead>
<tr>
<th>Class Limit</th>
<th>Frequency ($f_i$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 – 45</td>
<td>2</td>
</tr>
<tr>
<td>46 – 51</td>
<td>9</td>
</tr>
<tr>
<td>52 – 57</td>
<td>7</td>
</tr>
<tr>
<td>58 – 63</td>
<td>11</td>
</tr>
<tr>
<td>64 – 69</td>
<td>7</td>
</tr>
<tr>
<td>70 – 75</td>
<td>2</td>
</tr>
<tr>
<td>Sum</td>
<td>38</td>
</tr>
</tbody>
</table>

Figure 4.4. Histogram and Polygon of Data $B_2$
5. The data of students having high self-esteem of experimental class (A\textsubscript{1} B\textsubscript{1})

The descriptive analysis of the data of A\textsubscript{1} B\textsubscript{1} shows that the score is
60 up to 84. The mean is 70, the mode is 73.5, and the standard deviation
is 7. Then, the frequency distribution, histogram, and polygon are
presented in the table and figure 4.5.

<table>
<thead>
<tr>
<th>Interval</th>
<th>Frekuensi (f\textsubscript{i})</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 – 64</td>
<td>5</td>
</tr>
<tr>
<td>65 – 69</td>
<td>5</td>
</tr>
<tr>
<td>70 – 74</td>
<td>2</td>
</tr>
<tr>
<td>75 – 79</td>
<td>5</td>
</tr>
<tr>
<td>80 – 84</td>
<td>2</td>
</tr>
<tr>
<td>Sum</td>
<td>19</td>
</tr>
</tbody>
</table>

Figure 4.5. Histogram and Polygon of Data A\textsubscript{1} B\textsubscript{1}
6. The data of students having high self-esteem of control class ($A_2B_1$).

The descriptive analysis of the data of $A_2B_1$ shows that the score is 42 up to 71. The mean is 55, the mode is 62.833, and the standard deviation is 7.46. Then, the frequency distribution, histogram, and polygon are presented in the table and figure 4.6.

Table 4.6. Frequency Distribution of Data $A_2B_1$

<table>
<thead>
<tr>
<th>Interval</th>
<th>Frekuensi ($f_i$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>42 – 47</td>
<td>3</td>
</tr>
<tr>
<td>48 – 53</td>
<td>4</td>
</tr>
<tr>
<td>54 – 59</td>
<td>6</td>
</tr>
<tr>
<td>60 – 65</td>
<td>2</td>
</tr>
<tr>
<td>66 – 71</td>
<td>2</td>
</tr>
<tr>
<td>Sum</td>
<td>19</td>
</tr>
</tbody>
</table>

Figure 4.6. Histogram and Polygon of Data $A_2B_1$
7. The data of students having low self-esteem of experimental class (A1B2)

The descriptive analysis of the data of A1 B2 shows that the score is 40 up to 69. The mean is 54.184, the mode is 49.75, and the standard deviation is 7.34. Then, the frequency distribution, histogram, and polygon are presented in the table and figure 4.7.

Table 4.7. Frequency Distribution of Data A1 B2

<table>
<thead>
<tr>
<th>Interval</th>
<th>Frekuensi (fi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 – 45</td>
<td>2</td>
</tr>
<tr>
<td>46 – 51</td>
<td>6</td>
</tr>
<tr>
<td>52 – 57</td>
<td>4</td>
</tr>
<tr>
<td>58 – 63</td>
<td>5</td>
</tr>
<tr>
<td>64 – 69</td>
<td>2</td>
</tr>
<tr>
<td>Sum</td>
<td>19</td>
</tr>
</tbody>
</table>

Figure 4.7. Histogram and Polygon of Data A1 B2
8. The data of students having low self-esteem of control class ($A_2B_2$)

The descriptive analysis of the data of $A_2B_2$ shows that the score is 46 up to 75. The mean is 59.87, the mode is 52.3, and the standard deviation is 7.72. Then, the frequency distribution, histogram, and polygon are presented in the table and figure 4.8.

Table 4.8. Frequency Distribution of Data $A_2B_2$

<table>
<thead>
<tr>
<th>Interval</th>
<th>Frekuensi ($f_i$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>46 – 51</td>
<td>3</td>
</tr>
<tr>
<td>52 – 57</td>
<td>5</td>
</tr>
<tr>
<td>58 – 63</td>
<td>4</td>
</tr>
<tr>
<td>64 – 69</td>
<td>5</td>
</tr>
<tr>
<td>70 – 75</td>
<td>2</td>
</tr>
<tr>
<td>Sum</td>
<td>19</td>
</tr>
</tbody>
</table>

Figure 4.8. Histogram and Polygon of Data $A_2B_2$
B. Normality and Homogeneity Test

Normality and homogeneity test must be done before analyzing the data by using inferential analysis. The normality test functions to know whether the sample is in normal distribution or not and the homogeneity test is to know whether the data are homogeneous or not. Both normality and homogeneity tests are listed in the following section:

1. Normality Test

The sample is in normal distribution if $L_o$ ($L_{obtained}$) is lower than $L_t$ ($L_{table}$) at the level of significance $\alpha = 0.05$. $L$ stands for Lilliefors.

<table>
<thead>
<tr>
<th>No</th>
<th>Data</th>
<th>The number of Sample</th>
<th>$L_{obtained}$ ($L_o$)</th>
<th>$L_{table}$ ($L_t$)</th>
<th>Alfa ($\alpha$)</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A₁</td>
<td>38</td>
<td>0.1028</td>
<td>0.14</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
<td>2</td>
<td>A₂</td>
<td>38</td>
<td>0.1227</td>
<td>0.14</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
<td>3</td>
<td>B₁</td>
<td>38</td>
<td>0.1148</td>
<td>0.14</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
<td>4</td>
<td>B₂</td>
<td>38</td>
<td>0.1108</td>
<td>0.14</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
<td>5</td>
<td>A₁B₁</td>
<td>19</td>
<td>0.1204</td>
<td>0.19</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
<td>6</td>
<td>A₂B₁</td>
<td>19</td>
<td>0.1106</td>
<td>0.19</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
<td>7</td>
<td>A₁B₂</td>
<td>19</td>
<td>0.1401</td>
<td>0.19</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
<td>8</td>
<td>A₂B₂</td>
<td>19</td>
<td>0.1055</td>
<td>0.19</td>
<td>0.05</td>
<td>Normal</td>
</tr>
</tbody>
</table>
2. Homogeneity Test

This test is conducted to know that the data are homogenous. If $\chi^2_o$ is lower than $\chi^2_t$ at the level of significance $\alpha = 0.5$ (0.05), it can be stated that the data are homogenous. To be clearer the data are as follows.

<table>
<thead>
<tr>
<th>Sample</th>
<th>df</th>
<th>$1/(\text{df})$</th>
<th>$s_i^2$</th>
<th>log $s_i^2$</th>
<th>(df) log $s_i^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>18</td>
<td>0.055556</td>
<td>54.1404</td>
<td>1.733521</td>
<td>31.2033792</td>
</tr>
<tr>
<td>2</td>
<td>18</td>
<td>0.055556</td>
<td>57.0526</td>
<td>1.756276</td>
<td>31.6129623</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
<td>0.055556</td>
<td>55.9123</td>
<td>1.747507</td>
<td>31.4551297</td>
</tr>
<tr>
<td>4</td>
<td>18</td>
<td>0.055556</td>
<td>63.5088</td>
<td>1.802834</td>
<td>32.4510069</td>
</tr>
</tbody>
</table>

Table 4.10. The Result of Homogeneity Test

Based on the result of the calculation above, it can be seen that the $\chi^2_o$ (0.13119) is lower than $\chi^2_t$ at the level of significance $\alpha = 5$ % (7.81). So $\chi^2_o < \chi^2_t$ (0.13119 < 7.81). Thus, it can be stated that the data are homogenous.

C. Hypothesis Test

After the result of normality and homogeneity test are calculated and fulfilled, hypothesis test can be done. The data analysis is done by using multifactor analysis of variance (ANOVA) 2 x 2. $H_o$ is rejected if $F_o > F_t$. $F_o$ continues to later
is higher than $F_t$). It means that there is a significant difference. After knowing that $H_0$ is rejected, the further analysis is done to know the difference between the two groups (Group A and group B) and cells using Tukey test. Furthermore, to know which group is better, the mean scores of the groups and cells are compared. Both ANOVA 2 x 2 and Tukey tests are presented as follows:

a. Summary of a 2 x 2 Multifactor Analysis of Variance

Table 4.11. Multifactor Analysis of Variance

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>$F_o$</th>
<th>$F_t(0.05)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between columns</td>
<td>426.32</td>
<td>1</td>
<td>426.320</td>
<td>7.805</td>
<td>3.97</td>
</tr>
<tr>
<td>Between rows</td>
<td>537</td>
<td>1</td>
<td>537</td>
<td>9.830</td>
<td></td>
</tr>
<tr>
<td>Column by row (interaction)</td>
<td>1960.47</td>
<td>1</td>
<td>1960.470</td>
<td>35.893</td>
<td></td>
</tr>
<tr>
<td>Between group</td>
<td>2923.7</td>
<td>3</td>
<td>974.567</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within group</td>
<td>4151.1</td>
<td>76</td>
<td>54.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7074.7</td>
<td>79</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the above table, it can be concluded that:

1) Because $F_o$ between columns (7.805) is bigger than $F_t$ at the level of significance $\alpha = 0.05$ (3.97), $H_0$ is rejected and the difference between columns is significant. Because the mean of $A_1$ (62.395) is higher than that of $A_2$ (57.079), it can be concluded that SDL method is more effective than PBL method to teach reading.

2) Because $F_{row}$ between rows (9.830) is bigger than $F_t$ at the level of significance $\alpha = 0.05$ (3.97), $H_0$ is rejected and the difference between
rows is significant. It can be concluded that the reading ability of students who have high and those who have low self-esteem is significantly different. Then, because the mean of $B_1$ (62.08) is higher than $B_2$ (57.39), it can be concluded that the students having high self-esteem have better reading ability than those having low self-esteem.

3) Because $F_{interaction}$ columns by rows (35.893) is bigger than $F_t$ at the level of significance $\alpha = 0.05$ (3.97), $H_0$ is rejected and there is no interaction between the teaching methods and students’ self-esteem to teach reading. Thus, it can be stated that the effectiveness of teaching methods depends on the level of students’ self-esteem.

b. Summary of Tukey Test

The summary and elaboration of Tukey test result is presented below.

<table>
<thead>
<tr>
<th>Between Group</th>
<th>$q_o$</th>
<th>$q_t$</th>
<th>Status</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>$A_1 - A_2$</td>
<td>4.52</td>
<td>2.86</td>
<td><strong>Significant</strong></td>
<td>$A_1 \neq A_2$</td>
</tr>
<tr>
<td>$B_1 - B_2$</td>
<td>3.98</td>
<td>2.86</td>
<td><strong>Significant</strong></td>
<td>$B_1 \neq B_2$</td>
</tr>
<tr>
<td>$A_1B_1 - A_2B_1$</td>
<td>9.76</td>
<td>2.96</td>
<td><strong>Significant</strong></td>
<td>$A_1B_1 \neq A_2B_1$</td>
</tr>
<tr>
<td>$A_1B_2 - A_2B_2$</td>
<td>3.10</td>
<td>2.96</td>
<td><strong>Significant</strong></td>
<td>$A_1B_2 \neq A_2B_2$</td>
</tr>
</tbody>
</table>

1) Because $q_o$ between columns ($A_1 - A_2$) (4.52) is higher than $q_t$ at the level of significance $\alpha = 0.05$ (2.86), applying SDL method differs significantly from PBL method to teach reading. Because the mean of $A_1$ (62.395) is
higher than that of $A_2$ (57.079), it can be concluded that SDL method is more effective than PBL method to teach reading.

2) Because $q_o$ between rows ($B_1 - B_2$) (3.98) is higher than $q_t$ at the level of significance $\alpha = 0.05$ (2.86), it can be concluded that the students who have high self-esteem and those who have low self-esteem are significantly different in their reading ability. Because the mean of $B_1$ (62.08) is higher than $B_2$ (57.39), it can be concluded that the students who have high self-esteem have better reading ability than those who have low self-esteem.

3) Because $q_o$ between cells ($A_1B_1 - A_2B_1$) (9.04) is higher than $q_t$ at the level of significance $\alpha = 0.05$ (2.96), applying SDL method differs significantly from PBL method to teach reading for students who have high self-esteem. Because the mean of $A_1B_1$ (70) is higher than that of $A_2B_1$ (54.37), it can be concluded that SDL method is more effective than PBL method to teach reading for students having high self-esteem.

4) Because $q_o$ between column by cells ($A_1B_2 - A_2B_2$) (3.10) is higher than $q_t$ at the level of significance $\alpha = 0.05$ (2.96), applying PBL method differs significantly from SDL method to teach reading for students who have low self-esteem. Because the mean of $A_2B_2$ (59.79) is higher than that of $A_1B_2$ (55), it can be concluded that PBL is more effective than SDL to teach reading for students who have low self-esteem.

Based on 3 and 4, SDL method is more effective than PBL method to teach reading for students having high self-esteem and PBL method is more
effective than SDL method to teach reading for students who have low self-esteem. It can be concluded that there is an interaction between the teaching methods and students’ self-esteem in teaching reading.

D. Discussion of the Result of the Study

1. SDL method is more effective than PBL method. SDL method is a method The teaching method applied by the teachers is one of important factors influencing students' reading ability. Therefore, a teacher must give a wise decision in choosing the appropriate method in order to teach reading successfully. As stated before, the methods compared in this study are self-directed learning (SDL) and problem-based learning (PBL). In this case, self-directed learning is an instructional process that centers on assessing learning needs, securing learning resources, planning and implementing learning activities, and evaluating learning. The teacher asks individual students questions about the text to monitor their comprehension. After reading, the teacher invites students in a discussion focusing on the aim at reading and follow-up activities that focus on the content of the text and the specific skill that students learn to use. Khodabandehlou, et al., (2005: 9) elaborate teacher's role in self-directed learning to teach reading. In SDL, teacher engages students in discussion on topics from the self-directed learning readiness scale in doing reading exercises, learners should be allowed to collaborate with the teacher in determining the meaning of word in reading passage, teacher works with students and suggests generating
similar discussion to find main idea from the text given in teaching reading, teacher also needs to model learning strategies for students to predict the meaning, clarifying the purposes of the text, and summarizing of reading, teacher suggests students to get message from reading text, teacher needs to allow individual learners to find meaning of word based on the context, teacher allows learners to explore ideas of the text from reading, and teacher allows learners to identify pronoun reference from the text.

In PBL, participants of PBL course often work as a whole from the beginning to the end. The work procedure is defined collaboratively by the group and executed by the same group within the work processes, although sometimes they work on different tasks individually or in sub-groups. Participants with different roles (e.g., teacher and learner) can collaboratively perform activities at the same step. In workflow systems, a participant with a certain role works only at the role-related steps and does not care about the work at other steps. For each activity, exactly one role is defined. Even if multiple performers with the same role are engaged in the same step, they deal with different work items individually. Mathews (2007: 2) describes PBL that the teacher’s responsibility to teach students about the rationale and structure of a problem-based approach to language learning. For students who are accustomed to more traditional, teacher-centered classrooms, it is critical that they know they will be given direct, follow-up instruction, but that during the problem-solving phase, the teacher’s role is to observe and support. Students also need to understand that their goal is to
work together to comprehend the text. Therefore, SDL method is more effective than PBL method to teach reading.

2. The students who have high self-esteem have better reading ability than those having low self-esteem. The students with high self-esteem are proud of their successes and tolerant of their failures. Such people tend to have an optimistic view about life, and to be able to tolerate external stress without becoming excessively anxious. Although capable of being disappointed and depressed by specific experiences, people with high self-esteem recover quickly as the children who are secure in their mother’s love. In contrast, people with low self-esteem carry within them a disapproving parent who is harshly critical of their failures, and register only short-lived pleasures when they succeed. Such are appropriate to be very sensitive to failure and to rejection, to have low tolerance for frustration, to take a long time to recover following disappointments, and to have a pessimistic view of life.

According to Emler (2001: 58), young people with very high self-esteem are more likely to: hold prejudiced attitudes towards ethnic minorities, reject social influence, and engage in physically risky pursuits, more spirit, and success academically.

Meanwhile, low self-esteem students indicate discomfort with the process in their comments that there is insufficient direction; they request more feedback on success or failure or unsure whether all relevant areas are covered. It is in accordance with the characteristic for the students having low self-esteem. The students are passive in the class and they just
become the followers in the teaching and learning process. According to Epstein in Brown and Marshall (2002: 28), people with low self-esteem carry within them a disapproving parent who is harshly critical of their failures, and register only short-lived pleasures when they succeed. Such people are appropriate to be very sensitive to failure and to rejection, to have low tolerance for frustration, to take a long time to recover following disappointments, and to have a pessimistic view of life.

Therefore, it can be concluded that the students having high self-esteem have better reading ability than those having low self-esteem to teach reading.

3. There is an interaction between teaching methods and students’ self-esteem to teach reading. Self-directed learning is still in the formative stage, guidelines for the development of classroom activities that allow and encourage to understand the text by him or herself. Instead, he or she will be able to find some information and ideas from the text given. Since many students do grow into independent learners, it is obvious that some current classroom practices do encourage independent learning. Khodabandehlou, et al., (2005: 9) elaborates teacher's role in self-directed learning to teach reading. In SDL, teacher engages students in discussion on topics from the self-directed learning readiness scale in doing reading exercises, learners should be allowed to collaborate with the teacher in determining the meaning of word in reading passage, teacher works with students and suggests generating similar discussion to find main idea from
the text given in teaching reading, teacher also needs to model learning strategies for students to predict the meaning, clarifying the purposes of the text, and summarizing of reading, teacher suggests students to get message from reading text, teacher needs to allow individual learners to find meaning of word based on the context, teacher allows learners to explore ideas of the text from reading, and teacher allows learners to identify pronoun reference from the text.

The students having high level of self-esteem expect to do well in their accomplishment, try hard, and try to be successful. In teaching and learning process, they usually have better attitudes. They have high desire to pay attention to the teacher. They are active in joining the teaching and learning process. According to Emel (2001: 58), young people with very high self-esteem are more likely to: hold prejudiced attitudes towards ethnic minorities, reject social influence, and engage in physically risky pursuits, more spirit, and success academically. Therefore, self-directed learning (SDL) is better to teach reading for students having high self-esteem.

Meanwhile, PBL demonstrates the quality of students’ learning and maintains by relying on students’ autonomy and personal responsibility on formal teaching. Some students indicate discomfort with the process in their comments that there is insufficient direction; they request more feedback on success or failure or unsure whether all relevant areas are covered. Mathews (2007: 2) describes PBL that the teacher’s
responsibility to teach students about the rationale and structure of a problem-based approach to language learning. For students who are accustomed to more traditional, teacher-centered classrooms, it is critical that they know they will be given direct, follow-up instruction, but that during the problem-solving phase, the teacher’s role is to observe and support. Students also need to understand that their goal is to work together to comprehend the text.

The students having low self-esteem tend to expect the worst, use less effort on their tasks, especially challenging, demanding ones, and achieve less success. Even, when students having self-esteem achieve success, they are less appropriate to attribute their success to their abilities or to enjoy it. According to Epstein in Brown and Marshall (2002: 28) people with low self-esteem carry within them a disapproving parent who is harshly critical of their failures, and register only short-lived pleasures when they succeed. Such people are appropriate to be very sensitive to failure and to rejection, to have low tolerance for frustration, to take a long time to recover following disappointments, and to have a pessimistic view of life. Thus, PBL method is more effective than SDL method to teach reading for the students having low self-esteem.

It can be concluded that there is interaction between methods of teaching used (self-directed learning and problem-based learning) and degree of self-esteem to teach reading. Self-directed learning is more effective than problem-based learning to teach reading for students having...
high self-esteem. On the other hand, problem based learning is more effective than self-directed learning to teach reading for students having low self-esteem.
CHAPTER V

CONCLUSION, IMPLICATION, AND SUGGESTION

A. Conclusion

Based on the descriptions of the data analysis, it can be drawn some conclusion as follows:

1. Self-directed learning is more effective than problem-based learning to teach reading for the eleventh graders of *SMA Negeri 1 Keruak* in the academic year of 2012/2013.

2. The students having high self-esteem have better reading ability than those having low self-esteem for the eleventh graders of *SMA Negeri 1 Keruak* in the academic year of 2012/2013.

3. There is an interaction between the teaching methods and the students’ self-esteem for teaching reading for the eleventh graders of *SMA Negeri 1 Keruak* in the academic year of 2012/2013.

Based on the above findings, it can be concluded in general self-directed learning method is an effective method to teach reading. The effectiveness of the method is determined by the level of the students’ self-esteem.
B. Implication

Self-directed learning method is more effective than problem-based learning method to teach reading. Self-directed learning method is an instructional process that centers on assessing learning needs, securing learning resources, planning and implementing learning activities, and evaluating learning. To apply this method the students should have high self-esteem because teacher engages students in discussion on topics from the self-directed learning readiness scale in doing reading exercises, learners should be allowed to collaborate with the teacher in determining the meaning of word in reading passage, teacher works with students and suggests generating similar discussion to find main idea from the text given in teaching reading, teacher also needs to model learning strategies for students to predict the meaning, clarifying the purposes of the text, and summarizing of reading, teacher suggests students to get message from reading text, teacher needs to allow individual learners to find meaning of word based on the context, teacher allows learners to explore ideas of the text from reading, and teacher allows learners to identify pronoun reference from the text.
C. **Suggestion**

1. **For the Teacher**
   a. The teachers can apply self-directed learning method to teach reading to increase the students’ reading ability.
   b. The teachers ought to consider that self-esteem is one of factors that may affect the students’ reading ability in the teaching and learning process in the classroom.

2. **For the Students**
   a. The students are expected to be more active in the teaching and learning process in order to increase their reading ability.
   b. It is suggested for students who have low ability in reading to be more active in joining the teaching and learning process in the classroom.

3. **For further researchers**
   a. The next researchers can use the result of this research as the starting point for conducting the next investigation.
   b. The next researchers can also develop the methods used in this research as a way of making revision to the weaknesses of this research.