



**STUDENTS' CREATIVITY AND ITS RELATION TO
ENGLISH LEARNING ACHIEVEMENT**

**(A case study of the tenth grade students of SMA N 1 Brebes
in the academic year 2006/2007)**

a final project

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by

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(A case study of the tenth grade students of SMA N 1 Brebes in the academic year 2006/2007)

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Demikian harap pernyataan ini dapat digunakan seperlunya.

Semarang, Juli 2007

Yang membuat pernyataan,

Sutrisno

A little is better than nothing

Love and duty always struggle

Knowledge is power



To

- My beloved parents
- My sibling (Mas Ato, Mas Ono, my nicest sister, Tuty)
- All my family

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ABSTRACT

The title of the study is Students' Creativity and Its Relations to English Learning Achievement (A case study of tenth grade students of SMAN 1 Brebes). The study was conducted in SMAN 1 Brebes on May 9-10th, 2007.

This study is aimed at describing the students' creativity in English learning achievement, which focuses on one main issue which explains whether there is any positive and significant correlation between students' creativity and their achievement in English learning.

This is a quantitative case study. Questionnaire and Achievement test were used to collect the data. Samples were taken practically by applying cluster random sampling. The validity of the data was established by applying Pearson Product Moment formula. The data consisted of questionnaire data and achievement test. They were analyzed by correlation analysis procedure. Generally, students' creativity in English learning is high. By applying the analysis of percentage description, it was found that the average value of the strength of students' creativity was 71 %. Furthermore, in general, the students' achievement in English learning was good. Moreover, their average or mean score was 70.

By applying the Pearson Product Moment formula, it was found that the obtained value of correlation coefficient was 0.691, while the critical value of "r" in the table with 95% significance level with the number of subject 32 was 0.349. So, the correlation coefficient was higher than critical value. It shows that there is a positive and significant correlation between students' creativity and their achievement in English learning. Based on the findings, it is suggested that teacher should help the students to increase their creativity. This can be done by giving the students chances to ask questions, have discussions, express their ability in English, and try to help the students to investigate and solve their problem in learning English. Moreover, the students should increase their ability in English by trying to enrich their knowledge related to English, practice their English, and enlarge reading books in English.

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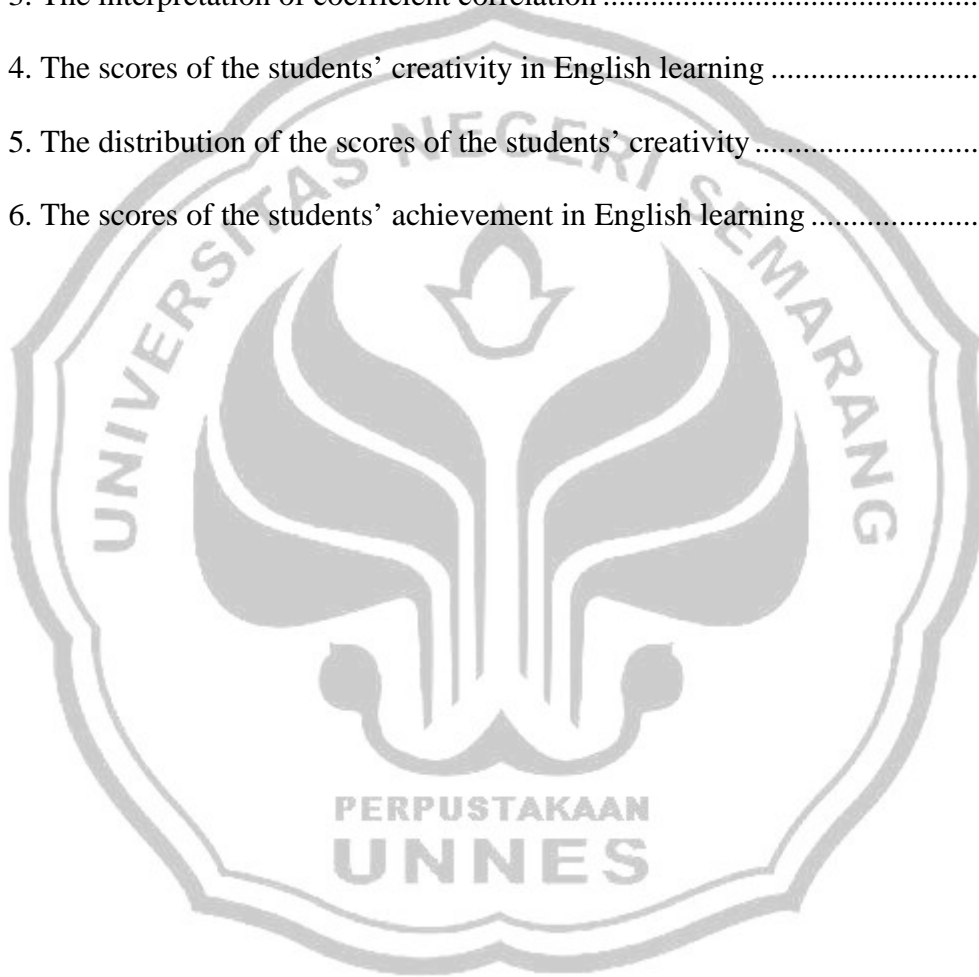


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CHAPTER I

INTRODUCTION

1.1 Background of the Study

English is an important language. It becomes the international communication language. In Indonesia, English is the first foreign language. Because English is an important position, it is taught from the fourth grade of elementary school in some schools as an alternative subject and from the first grade of junior high school (SMP) up to third grade of senior high school (SMA) as one of the compulsory subjects. The students of SMP and SMA are hoped to have enough competence in English because it becomes a subject tested in UAN (Ujian Akhir Nasional). The result of UAN has been satisfactory. This is supported by the fact that UAN English score of SMP and SMA are successful. According to Bambang as quoted from <http://www.depdiknas.go.id> (2006) explains that average score of UAN in English is 7.54. It is higher than UAN standard which is 4.5. It means that the score is satisfactory, but improvement is still needed to achieve the best result.

In order to reach the goal above, many experts of education try to reveal the problems of English learning. To overcome the problems, they try to carry out different attempts to improve English teaching learning processes. The curriculum, approach, method, and technique of English teaching are always revised and improved in order to meet the goals of the teaching learning process.

Sofiah (1998: 5) states that the success of the English teaching learning processes at schools depends on the teachers for they are key figures in the

classroom. It is considered that if the teachers do not have good competence in the teaching learning process, the students will not achieve the objectives. In addition, Sofiah states that the source of the problems is not the teacher, but also the institution related to education. It is assumed that this institution is also responsible to the results of teaching learning processes since its output is related to the results of teaching learning processes.

Citrawati (2002: 8) states that there is another factor that may influence the students' achievement: students' factor. The students as subjects in the learning process have different characteristics. Each student differs in intelligence, sex, socioeconomic background, motivation, attitude, and learning strategies.

Based on this view, the writer is interested in knowing what factors that actually influence in learning English. This time, the focus of the study is on students' creativity. Creativity can be defined as thinking ability in managing a problem referring to his experiences or knowledge. Creativity will make the students sensitive to the problem they have, looking for the solutions and giving the ideas to solve the problems in learning. For example, in English learning, the students always find the difficulties although the teacher has explained the subject and given information has been completed. The students having high creativity tend to find the difficulty they have and look for the solution. The creative students will have many alternatives in solving the difficulties in English learning. The writer predicts that the students having high creativity are able to get better achievement in English learning.

1.1 Reason for Choosing the Topic

The writer conducts this study with the following reasons:

- (1) Creativity as one of the psychological aspects plays an important role in a teaching learning process.
- (2) As foreign language, English is very important and it is not easy to learn it since there are many difficulties involved.
- (3) The result of the study can support the teachers and the students in English teaching-learning process.
- (4) The result of the study can be used to know how important of creativity in learning English.

1.2 Statement of the Problems

Based on the background above, the writer wants to state a problem:

Is there any positive and significant relationship between the students' creativity and their English learning achievement of the tenth grade students of SMAN 1 Brebes?

1.3 Purposes of the Study

The purposes of the study can be stated as follows:

- (1) To describe the students' creativity of the tenth grade students of SMA N 1 Brebes in the academic year 2006/2007.
- (2) To describe the students English learning achievement of the tenth grade students of SMA N 1 Brebes in the academic year 2006/2007.
- (3) To find out whether there is any positive and significant relationship between the students' creativity and their English learning achievement.

1.4 Significance of the Study

The result of this study will be useful in some ways. Theoretically, it could provide information about the students' creativity and learning achievement. Practically, it would be worth considering when people try to improve the English teaching process.

1.5 Hypothesis

Based on the statement of the problems above, the hypothesis of this study can be formulated as follows:

There is a positive and significant relationship between students' creativity and their English learning achievement.

1.6 Outline of the study

This study consists of five chapters. Chapter I presents the background of the study, the reason for choosing the topic, the statement of the problems, the purposes of the study, the significances of the study, the hypothesis and the outline of the thesis.

Chapter II presents the theoretical review, which consists of theories of learning achievement, which contains the definitions of learning, learning achievement, factors affecting learning achievement, and measurement of learning achievement. The second topic is concerned with the students' creativity including the definitions of creativity, the characteristics of a creative person, and measurement of creativity.

Chapter III deals with the method of investigation, which discusses the research design, population, sample, variables, the instrument, validity and reliability, procedure of collecting data and the method of analyzing data.

Chapter IV presents the data analysis and the discussion of the result.

Chapter V presents the conclusions of the investigation with the suggestion.



CHAPTER II

REVIEW OF THE RELATED LITERATURE

This theoretical review consists of the presentation of two topics. The first topic discusses the students' learning achievement comprising the definitions of learning, learning achievement, factors affecting learning achievement, and measurement of learning achievement. The second topic is concerned about the students' creativity including the definitions of creativity, the characteristics of a creative person, and measurement of creativity.

2.1 Students' Learning Achievement

2.1.1 Definitions of Learning

The word 'learning' has some definitions. In the Encyclopedia of Educational Research, learning is defined as a process of gaining new knowledge or skill. In order to qualify as learning rather than just temporary gain, this process must include retention of knowledge or skill so that it can be displayed at the future (1985: 2975).

Chance (1985: 17) states that learning as a relatively stable and unspecified change with an organism that makes a change in behavior that is due to experience and that can not be accounted for in terms of reflexes, instincts, or the influence of fatigue, injury, disease, or drug. This definition implies that learning refers to the changing of human being which is due to experience or planning, not due to natural growth.

Another experts, Bigge and Shermish (1992: 1) state that learning is basic to development of athletic prowess, of tastes in food and dress and of the appreciation of art and music. It contributes to ethnic prejudice, to drug addiction, to fear, and to pathological maladjustment. It produces the miser and the philanthropist, the bigot and the patriot. In short, it influences our lives at every turn, accounting in part for the best and worst of human beings and for the best and worst in each of us.

More specifically, Brown (1987: 6) breaks down the definition of learning into some items. They are:

- (1) Learning is acquisition or getting.
- (2) Learning is retention of information or skills.
- (3) Retention implies storage system, memory, cognitive organization.
- (4) Learning involves active, conscious focus on and acting upon event inside or outside the organism.
- (5) Learning is relatively permanent.
- (6) Learning involves some forms of practice.
- (7) Learning is a change in behavior.

From the definitions above, it can be concluded that learning is a process that indicated by people's changes from the interaction between individual and his environment. The process that done by individual for the better result of the society interaction. The process of learning of individual can happen in one day, one week, one month, or even for many years.

2.1.2 Definition of Learning Achievement

The word 'achievement' derives from 'achieve' which means to succeed in reaching a particular goal, status or standard especially by effort, skill, courage, etc (Hornby, 1995: 10).

Alkin (1982: 1) states that achievement refers to accomplishments and carries the connotation that accomplishments follow a period of study, training or practice.

Meriam – Webster Collegiate Dictionary (2004: 10), asserts that there are three definitions about achievement:

- (1) Achievement is the act of achieving , accomplishment
- (2) a. Achievement is the result gained by effort
b. Achievement is a great or heroic deed
- (3) Achievement is the quality and quantity of a students' work.

Learning achievement can be meant the result achieved by students in learning process. In this study, the learning achievement refers to the students' achievement in English subject in the first year students of SMA. The teachers have to make some tests to get students' achievement.

2.1.3 Factors Affecting Learning Achievement

There are many factors affecting students' learning achievement. Suryabrata (1983: 1) states that factors influencing students' learning achievement are factors that come from students' external and internal sides. External factors include environmental and instrumental factors while internal factors cover psychology and physical factors.

In addition, the instrumental factors include curriculum program, facilities, and teachers. Meanwhile, the physical factors cover general physical conditions and five senses and psychological factors consist of interest, intelligence, aptitude, motivation, cognitive ability, and personality.

Roijakkers as quoted by Sofiah (1998: 13) proposes that learning achievement is influenced by two factors. The first is concerned with factors that come from students and the second from the teachers. Students' factors include motivation, attention toward subject, ability to apply what has been learned. Meanwhile, the teacher' factors are the abilities to establish students and teacher communication, encourage students' interest and motivation, transfer material, response to the students' ability.

According to Brown (1987: 104) there are some affective factors determining the success of the learner such as motivation, attitude, risk taking and extroversion. A student with high motivation will make some effort to achieve his purposes. Good attitude contributes the success of the student, like attitudes towards the teacher and target language. Furthermore, Brown (1987: 104) states that risk taking is an important characteristic of successful learning of a language. A student also should take a risk from his unawareness to be successful. Finally, an extroverted student should often participate actually in class discussion.

2.1.4 Measurement of Learning Achievement

Kerlinger (1979: 451) explains that achievement tests measure present proficiency, mastery, and understanding of general and specific areas of

knowledge. For the most part, they are measures of the effectiveness of instruction and learning.

Brown (2003: 48) states that the specifications for an achievement test should be determined by:

- (1) the objectives of the lesson, unit, or course being assessed,
- (2) the relative importance (or weight) assigned to each objective,
- (3) the tasks employed in classroom lessons during the unit of time,
- (4) practical issues, such as the time frame for the test and turnaround time, and
- (5) the extent to which the test structure lends itself to formative wash back.

Alkin (1982: 6-8) states that there are many techniques that can be used to measure students' learning.

The techniques are as follows:

(1) Choice-Type Questions

The typical multiple choice item presents a statement or question followed by several alternative responses or answers.

(2) Short-Answer Items

Short-answer items typically require a single word, phrase, or numerical answer. It requires students to construct a response rather than simply recognizing a best answer and it reduces or eliminates the possibility of getting the right answer by guessing.

(3) Performance Assessments

The recent growth in interest in essay examinations is part of a larger movement that is calling for construction of performance assessments that more closely, mirror long-term instructional objectives.

In Indonesia, commonly used types of evaluation technique are the assignments and tests. The form of the assignments that the teachers usually give to the students is doing homework. Meanwhile, in tests, the students are commonly asked to answer a number of the questions.

2.2 Students' Creativity

2.2.1 Definitions of Creativity

There are a number of opinions about the concept of creativity found in the literature. These seem to be seen from different viewpoints. Some of these opinions are represented in this section.

Campbell as adapted by Mangunhardjana (1986: 11) defines that creativity is the activity which produced the result whose natures are following:

- (1) novel: innovative, interesting, fresh and surprising.
- (2) useful: practice, solving the problem and producing the good result
- (3) understandable: the same result can be understandable and can be produced at the other time.

A review of the literature on creativity shows that creativity as a multidimensional concept can be defined in terms of product, person, and process. It may be also be defined in terms of personal and environmental conditions that

press an individual toward creative behavior. Munandar (1995: 45-46) has referred to the definition of creativity as the four P's of creativity: product, person, press, and process.

In terms of product, Munandar (1995: 46) states that creativity is defined as an ability to produce a new product. This product should not be entirely a new product; it can be a combination from the previous elements. It means that creativity is a making idea. This new idea can be absolutely new thing or combination which is produced before.

Creativity as a person, Hulbeck as quoted by Munandar (1995: 20) says that creative action is an imposing of one's own whole personality on the environment in a unique and characteristic way. It can be concluded that creativity is a personality aspect which can be developed through his environment.

In terms of press, according to Munandar (1995: 37) the conditions needed for creative growth should be seriously considered in order to develop creativity. Press refers to internal (within himself) and external or his environment condition. Press can motivate the individual to perform his creativity.

Creativity as a process, according to Semiawan (1984: 6) refers to thinking various ideas in managing a problem. It means that creativity is thinking process to get the answers in solving a problem from many ideas. Meanwhile, Torrance as quoted by Munandar (1995: 21) defines that creativity is the process of 1) sensing difficulties, problems, gaps in information, missing elements, something asked; 2) making guesses and formulating hypotheses about these deficiencies; 3)

evaluating and testing these guesses and hypotheses; 4) possibly revising and retesting them; and finally 5) communicating the results.

2.2.2 Characteristics of a Creative Person

Ruggiero (1984: 92) states that there are five most prominent characteristics of a creative person. They are as follows:

- (1) Creative people are dynamic. Unlike most people, creative people do not allow their minds to become passive, easy to accept ideas.
- (2) Creative people are daring. They are willing to face unpleasant experience, apply their curiosity and learning, and learn from their experiences. As a result, they are less likely to repeat their failure.
- (3) Creative people are resourceful. Resourcefulness refers to ability to cut effectively and conceptualize the approach that solves the problem.
- (4) Creative people are hardworking. They are not afraid of making the failure.
- (5) Creative people are independent. They do not fear to have new ideas different from others.

Dellas and Gaier as quoted by Cropley (2003: 60) that there are nine most prominent characteristics of a creative person. They are as follows;

- (1) Independence, (2) dominance, (3) extroversion, (4) openness, (5) breadth of interest, (6) self- acceptance, (7) intuitiveness, (8) flexibility, (9) social poise.

A creative person, according to Semiawan (1984: 10), has ten characteristics: (1) having strong imagination, (2) having high initiative, (3) having large interest, (4) having high curiosity in knowing something, (5) being

flexible in thinking, (6) being self confident, (7) being open to new experience, (8) being energetic, (9) being brave in taking risks, (10) being brave in expressing ideas.

Considering all the notions and opinions about creativity, the writer generalizes the characteristics of creative person as follows:

- (1) Having preference to do difficult and hard work
- (2) Having rich knowledge
- (3) Having high desire to study things
- (4) Being imaginative
- (5) Being open to new experiences
- (6) Being brave in expressing ideas
- (7) Having ability to analyze and synthesize
- (8) Being self-confident
- (9) Having high initiative
- (10) Being active

2.2.3 Measurement of Creativity

There are some instruments to measure creativity, which have been developed and used in Indonesia since 1977 (Munandar, 1995: 68-73). They are:

(1) The Verbal Creativity Test

This instrument is taken from Guilford's structure of intellect model as conceptual framework. This creativity test battery consists of six verbal subtests, namely word beginnings, anagrams, three-word-sentences, thing categories, unusual uses, and consequences. The primary traits measured in this test are

fluency, flexibility, and originality in thinking. The test can be used for the age of ten years upward. The sum of the standard scores on each subtest can be converted into a creativity quotient.

(2) Torrance's Circle Test

This test is useful for the assessment of creative potential in young children (from pre-school Upward). It provides measures in fluency, flexibility, originality, and elaboration. This test is in the form of figural items. It has been used to identify gifted children in the elementary school.

(4) Test for Creative Thinking-Drawing Production (TCT-DP)

This test is introduced by Jellen and Urban to assess creative potentials. This instrument consists of six figural fragments and requires the tester to complete the drawing. This product is then evaluated according to 11 criteria of creativity. Jellen and Urban have applied the TCT-DP to ten years old children from 9 countries including Indonesia.

(4) A Scoring Scheme and Ideal Pupil Checklist

A Scoring Scheme has been developed to assess writing ability in composition. Meanwhile, Ideal Pupil Checklist was intended to provide information on teachers' and parents' perception on the ideal students to be compared with experts' perceptions.

(5) The Creative Attitude Scale (CAS)

CAS developed in 1977 by Munandar (1977: 94). It consisted of 32 items to assess the creative characteristics in individual. In her study, this test has been implemented to the students in Indonesia especially in Jakarta. Munandar's CAS

is adopted for used in this study with some modifications and adaptations felt necessary. The writer decided to use this instrument because it can be modified according to students' condition, e.g. elementary, junior, or senior high students.



CHAPTER III

METHOD OF INVESTIGATION

3.1 Research Design

The method of investigation is held through a quantitative research. Hornby (1995: 1035) states quantitative is connected with the amount or number of something rather than with how it is. Meanwhile, according Best (1981: 154) quantification is defined as a numerical method of describing observations of materials or characteristics. In this term of quantitative data, the writer used statistical analysis to calculate the numeral data that were gathered and to analyze them by the use of correlation analysis. The correlation coefficient was then interpreted to find out the relationship between students' creativity and their achievement in English learning.

In constructing research design, the writer used one-shot case study. This research design belongs to experimental design. Arikunto (1998: 83) points out that one-shot case study means there is no control group or pretest in the research.

3.2 Population

Arikunto (1993: 103) states that population is all members of the research subject.

Based on the definition above, population is all individuals from whom the data are collected. The population of the study was the tenth grade students of SMA N 1 brebes in the academic year 2006/2007. The total number of population was 324 students divided into 8 classes. The numbers of the students of each class were as follows:

X.1: 40 X.4: 40 X.7: 41

X.2: 40 X.5: 40 X.8: 41

X.3: 41 X.6: 41

3.3 Sample

Best (1981: 8) says a sample is a small proportion of the population selected for observation and analysis.

Arikunto (1998: 107) gives an indication to take the sample. If the population is less than 100, it is better that all of the population is used as samples, but if the population is more than 100, the researcher can take 10%- 15% or 20%-25% as sample. Since the population in this study was large enough, the writer took some members of the population as sample. Here, the writer took 10% of the population that was 32 students.

There are many sampling techniques used in the investigation. According to Saleh (2001: 34 – 36) there are four sampling techniques namely:

- (1) Simple random sampling
- (2) Stratified random sampling
- (3) Cluster random sampling
- (4) Systematic sampling

In order to select the students who would participate as the sample of this study, a cluster random sampling technique was applied.

3.4 Variables of the Study

Best (1981: 59) states variables are the conditions or characteristics that the experimenter manipulates, controls, or observes. Saleh (2001: 25-26) points out there are five kinds of variables:

- (1) Dependent variable
- (2) Independent variable
- (3) Moderator variable
- (4) Control Variable
- (5) Intervening Variable

There are two kinds of variables in the study, namely dependent and independent variables. The independent variable is the students' creativity and the dependent variable is English learning achievement. The types of the data of the two variables are interval. For the independent variable, the data will be obtained from the result of the creativity questionnaire. Meanwhile for the dependent variable, the data will be obtained from the result of the achievement test.

3.5 Instrument

The data for this study were collected by using two instruments. The first instrument is questionnaire and the second one is an achievement test. The following presents the description of these instruments.

3.5.1 Questionnaire

Hornby (1995: 962) states that questionnaire is a written or printed list of questions to be answered by a number of people especially as part of a survey. Arikunto (1998: 140) defines that a questionnaire is a number of within questions,

which are used to gain information from respondents about the respondents themselves, or their knowledge, belief, etc.

According to Arikunto (1998: 140) a questionnaire based on the way to answer the question, there are two types of questions:

- (1) opened questionnaire, the respondent can answer the questions using their own sentences.
- (2) closed questionnaire, the respondent can directly choose the appropriate answer.

In this study, the writer used the closed questionnaire to measure the students' creativity. This questionnaire is based on Munandar (1977: 276) who proposes an instrument to measure creativity called Creativity Attitude Scale (CAS). The questionnaire consists of 30 statements developed from 10 indicators. The characteristics measured are related to doing difficult and hard work, being active, having high initiative, being self-confident, having rich knowledge, having high desire to study things, being imaginative, being open to new experiences, openness to new experiences, being brave in expressing ideas and having ability to analyze and synthesize. Each item is followed by five closed options, namely absolutely agree (SS), agree (S), undecided (R), disagree (TS) and absolutely disagree (STS).

To find the scores of the students' creativity, score 5 was given to the answer of *absolutely agree* and score 1 was given to the answer of *absolutely disagree*. The questionnaire is presented as follows:

Table 1
The questionnaire for obtaining the data on students' creativity

NO	Indicators	Item Number	Total
1	Having preference to do difficult and hard work	1, 9, 19	3
2	Having high desire to study things	5, 15, 20	3
3	Having rich knowledge	28	1
4	Being imaginative	4, 11, 14	3
5	Being open to new experiences	10, 12, 16	3
6	Being brave in expressing ideas	6, 22, 25	3
7	Having ability to analyze and synthesize	7, 17, 18	3
8	Being self-confident	3, 8, 13, 26	4
9	Having high initiative	23, 24, 27, 30	3
10	Being active	2, 21, 29	3
Total			30

3.5.1.1 Validity of Questionnaire

Best (1981: 153) state that validity is that quality of a data-gathering instrument or procedure that enables it to determine what it was designed to determine. Furthermore, Arikunto (1998: 161) states that the steps are taken to obtain an instrument with logic validity, which means that instrument is a result from a very careful effort in the part of the writer in order to acquire validity.

In this study, the validity of the instrument was measured by applying the Pearson Product Moment formula. The formula is as follows:

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

r_{xy} = validity of questionnaire

N = the number of respondents

X = the score number of each items

Y = the sum score number of each items

(Arikunto, 1998: 174)

After some revisions, the questionnaire was tried out to 20 students. Try out was carried out to know whether the instrument was applicable. Based on the try out and the items analysis of the instrument, it was found that items 4, 11, 14, and 25 were not valid. The complete results can be seen in appendix I table 1 and appendix II table 2.

3.5.1.2 Reliability of Questionnaire

Reliability deals with the reliance. It means that a test can have high reliance standard if it gives consistent and stable results about the subjects' condition when it is given repeatedly. Here, the reliability of the instrument was measured by applying the Alpha Cronbach formula. The formula is as follows:

$$r_{11} = \left(\frac{k}{k-1} \right) \left(1 - \frac{\sum \delta b^2}{\delta t^2} \right)$$

r_{11} = reliability of questionnaire

k = number of questionnaire item

$\sum \delta b^2$ = the sum of item variance

δt^2 = total variance

(Arikunto, 1998: 174)

The result is consulted to the r table with the level of significance of 95%. If the result is higher than r table in the level of significance 95%, it is concluded that the item is reliable. From the computation, it was found that the reliability of the instrument of the creativity was 0,902. The complete data on the analysis of the reliability of the instrument is enclosed in Appendix III.

3.5.2 Achievement Test

Best (1981: 193) says that achievement tests attempt to measure what an individual has learned-his or her present level of performance. They are particularly helpful in determining individual or group status in academic learning. In this study, the achievement test is used to measure students' English achievement. The test covers reading, structure, and vocabulary. The reason for taking three aspects above is that one of the purposes of the English teaching in SMU is to develop the students' skill in reading, speaking, writing, and listening emphasizing on the reading skill (kurikulum 2004, 2003: 7).

This test was in the form of a multiple-choice test that consisted of five alternative answers. It consisted of 40 items. The scores of the items were from 0 to 1 in which each right answer was scored as 1 and the wrong answer was scored as 0. The test is presented as follows:

Table 2
The content of achievement test

Aspects	Themes	Item numbers	Total
Reading	Health	1, 2, 3, 4, 5	5
	Travel	19, 20, 21, 22,	4
Vocabulary	General	29, 38, 25, 23,	5
	knowledge	24	
	Synonym	11, 30	2
Structure	Health	6, 7	2
	Occupation	28, 32, 36	3
	Past Continuous	14, 15, 16, 17,	8
	tense	18, 27, 34, 39	
	Modal	37, 40	2
	Degree of	8, 9, 10, 12, 13,	7
	comparison	26, 31	
	Relative clause	35	1
Total			40

3.5.2.1 Validity of the test

Best (1981: 153) states that validity is that quality of a data-gathering instrument or procedure that enables it to determine what it was designed to determine. Content validity provides the indication whether the data collection procedure is a good representation of content which needs to be measured (Kerlinger, 1979: 417). The content of the test is reported in Table 2.

The test also has been tried out to 20 students. Here, the validity of the instrument was measured by applying the Product Moment formula. The formula is as follow:

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

In which:

r_{xy} = validity of test

N = the number of respondents

X = the score number of each items

Y = the sum score number of each items

(Arikunto, 1998: 174)

Based on the items analysis, it was found that among the 40 items being tried out, 8 items, numbers 11, 12, 22, 28, 29, 34, 36, and 40 were not valid. The complete analysis can be seen in appendix IV table 3 and appendix V table 4.

3.5.2.2 Reliability of test

Reliability means the stability of test scores. A test cannot measure anything well unless it measures consistently. To know whether the items are reliable or not, the writer applied Kuder Richarson-20 formula. The formula is as follows:

$$r_{11} = \left(\frac{k}{k-1} \right) \left(1 - \frac{M(k-M)}{kVt} \right)$$

k = the number test item

M= the means of the scores

Vt= the total of varians

(Arikunto, 1998: 185)

The table of 'r' product moment with N= 20 and level significance of 95% was 0.444. The computation shows that the reliability of the instrument was 0.922. Since the result of computation was higher than the 'r' in the product moment table, the test was considered to have high/good reliability. The coefficient reliability of the whole test is listed in appendix VI.

3.6 Procedure of collecting data

The study was conducted in the field on May 9-10th, 2007. The instruments were administered in May or before the students had the final exam because the teaching-learning process for the second quarter had been finished. Moreover, the instrument, in this case achievement test, can be used as preparation for students to have the final exam. After the instruments were administered, the writer collected and analyzed it. Finally, the writer analyzed it completely.

3.7 Method of analyzing data

The analyzing is going to find out the correlation between the students' creativity and their achievement in English learning. The data were obtained from the questionnaire and the achievement test. The questionnaire was analyzed by using Creative Attitude Scale. To score the scale, the response options were credited 5, 4, 3, 2, and 1 from absolutely agree to absolutely disagree statements.

The writer used the percentage description analysis to measure of the students' creativity is. The formula is as follows:

$$\text{The percentage} = \frac{\text{The total value of answer}}{\text{Total value of ideal answer}} \times 100 \%$$

(Arikunto, 1998: 244)

Then, the writer categorized the scores resulted from calculation into the following criteria:

- | | |
|--------------|----------|
| 1. Very high | 84%-100% |
| 2. High | 68%-83% |
| 3. Fair | 52%-67% |
| 4. Low | 36%-51% |
| 5. Very low | 20%-35% |

(Yohanes, 1998:74 quoted by Miswadi 2000:54)

While the students' English learning achievements are classified into the following criteria:

- | | |
|--------------|-----------------|
| 1. Excellent | = 85-100 points |
| 2. Good | = 68-84 points |
| 3. Fair | = 60-67 points |
| 4. Poor | = 45-59 points |
| 5. Fail | < 45 points |

After getting the scores of the students' creativity and the scores their achievement in English learning, the writer wanted to know whether or not every student with high creativity also had good achievement in English learning. To answer the problem, the writer correlated the sum of the scores of the students' creativity and their achievement in English learning's score. To find out the correlation coefficient between two variables, the writer applied the Pearson Product-Moment formula as follows:

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

r_{xy} = correlation coefficient between X and Y

N = total number of the students

$\sum X$ = sum of the scores for the strength of creativity

$\sum Y$ = sum of the scores for the students' achievement

$\sum X^2$ = sum of the square of the strength of creativity

$\sum Y^2$ = sum of the scores of the students' achievement scores

$\sum XY$ = total sum of the product multiplying the score for the strength of creativity and the scores for the students' achievement

(Arikunto, 1998: 256)

The writer used this formula because the data in this research were interval. The study can be said to have a statistically significant relationship if the coefficient correlation obtained is greater than that in the table. In this study, the writer used 95% significance level and the number of the sample is 32 students.

Furthermore, Arikunto (1998: 260) suggests interpretation table toward coefficient correlation. The table is as follows:

Table 3

Interpretation of coefficient correlation ('r')

The 'r' value	Interpretation
0.800-1.000	Very strong
0.600-0.800	Strong
0.400-0.600	Fair
0.200-0.400	Weak
0.000-0.200	Very weak

Based on the table above, the writer would apply it to interpret the coefficient correlation which was obtained. For example, if the obtained value was 0.85, the value of the coefficient correlation was categorized very strong. The result of the study will be discussed in chapter IV.

CHAPTER IV

RESULT OF THE STUDY

4.1 The Data Collection

The writer did some preparation to analyze the data, they were:

- a. Scoring the questionnaire.
- b. Using percentage formula to find out the degree of the strength of the students' creativity.
- c. Scoring the students' achievement in English learning.
- d. Correlation analysis.

4.2 Scoring the Questionnaire

In the scoring questionnaire of the respondent, the scores were listed by summing up the item credit of their answers. As mentioned in the previous chapter, each item had five response options; absolutely (SS) credited 5 points, agree (S) credited 4 points, undecided (R) credited 3 points, disagree (TS) credited 2 points and absolutely disagree (STS) credited 1 points. The result of questionnaire is presented as follows:

Table 4

The scores of the students' creativity in English learning

NO	CODE	SCORE
1	S-01	73
2	S-02	70
3	S-03	70
4	S-04	46
5	S-05	55
6	S-06	63
7	S-07	66
8	S-08	75
9	S-09	75
10	S-10	76
11	S-11	77
12	S-12	74
13	S-13	78
14	S-14	78
15	S-15	83
16	S-16	73
17	S-17	70
18	S-18	67
19	S-19	55
20	S-20	70
21	S-21	75
22	S-22	72
23	S-23	76
24	S-24	73
25	S-25	77
26	S-26	81
27	S-27	81
28	S-28	83
29	S-29	49
30	S-30	73
31	S-31	69
32	S-32	72

Further explanation about the students' creativity scores in English learning can be seen in appendix VII table 5.

Then, the whole scores were summed in percentage description to facilitate the analysis. The distribution of the scores can be presented in following table 5.

Table 5

The distribution of the Scores of the Students' Creativity

NO	Indicator	Item number	A	B	C	D	E
1	Having preference to do difficult and hard work	1, 9, 19	35	37	6	17	1
2	Having high desire to study things	5, 15, 20	20	31	23	19	3
3	Having rich knowledge	28	0	14	3	15	0
4	Having imaginative	4, 11, 14	14	34	26	22	0
5	Being open to new experiences	10, 12, 16	8	51	12	22	3
6	Being brave in expressing ideas	6, 22, 25	25	40	12	18	1
7	Having ability to analyze and synthesize	7, 17, 18	9	44	28	15	0
8	Being self-confidence	3, 8, 13, 26	22	57	36	12	1
9	Having high initiative	23, 24, 27, 30	6	53	37	31	1
10	Being active	2, 21, 29	21	47	6	22	0
Total			160	408	189	193	10

A= absolutely agree D= disagree E= absolutely disagree

B= agree

C= undecided

From the table above, the creativity can be measured as follows:

(1) Having preference to do difficult and hard work

$$\begin{aligned} \text{The total value of answer} &= (35 \times 5) + (37 \times 4) + (6 \times 3) + (17 \times 2) + (1 \times 1) \\ &= 336 \end{aligned}$$

$$\begin{aligned} \text{The total of ideal answer} &= 32 \times 3 \times 5 \\ &= 480 \end{aligned}$$

$$\begin{aligned} \text{Having preference to do difficult and hard work} &= \frac{A}{B} \times 100\% \\ &= \frac{336}{480} \times 100\% \\ &= 70\% \end{aligned}$$

From the computation above, it is concluded that degree of having preference to do difficult and hard work is high, since 70% is between 68%-83%, which is considered high.

(2) Having high desire to study things

$$\begin{aligned} \text{The total value of answer} &= (20 \times 5) + (31 \times 4) + (23 \times 3) + (19 \times 2) + (3 \times 1) \\ &= 353 \end{aligned}$$

$$\begin{aligned} \text{The total of ideal answer} &= 32 \times 3 \times 5 \\ &= 480 \end{aligned}$$

$$\begin{aligned} \text{Having high desire to study things} &= \frac{A}{B} \times 100\% \\ &= \frac{353}{480} \times 100\% \\ &= 74\% \end{aligned}$$

From the computation above, it is concluded that degree of having high desire to study things is high, since 74% is between 68%-83%, which is considered high.

(3) Having rich knowledge

$$\begin{aligned} \text{The total value of answer} &= (0 \times 5) + (14 \times 4) + (3 \times 3) + (15 \times 2) + (0 \times 1) \\ &= 95 \end{aligned}$$

$$\begin{aligned} \text{The total of ideal answer} &= 32 \times 1 \times 5 \\ &= 160 \end{aligned}$$

$$\begin{aligned} \text{Having rich knowledge} &= \frac{A}{B} \times 100\% \\ &= \frac{95}{160} \times 100\% \\ &= 60\% \end{aligned}$$

From the computation above, it is concluded that degree of having rich knowledge is fair, since 60% is between 52%-67%, which is considered fair.

(4) Having imaginative

$$\begin{aligned} \text{The total value of answer} &= (14 \times 5) + (34 \times 4) + (26 \times 3) + (22 \times 2) + (0 \times 1) \\ &= 328 \end{aligned}$$

$$\begin{aligned} \text{The total of ideal answer} &= 32 \times 3 \times 5 \\ &= 480 \end{aligned}$$

$$\begin{aligned} \text{Having imaginative} &= \frac{A}{B} \times 100\% \\ &= \frac{328}{480} \times 100\% \\ &= 68\% \end{aligned}$$

From the computation above, it is concluded that degree of having imaginative is high, since 68% is between 68%-83%, which is considered high.

(5) Being open to new experiences

$$\begin{aligned}\text{The total value of answer} &= (5 \times 5) + (51 \times 4) + (12 \times 3) + (22 \times 2) + (3 \times 1) \\ &= 327\end{aligned}$$

$$\begin{aligned}\text{The total of ideal answer} &= 32 \times 3 \times 5 \\ &= 480\end{aligned}$$

$$\begin{aligned}\text{Being open to new experiences} &= \frac{A}{B} \times 100\% \\ &= \frac{327}{480} \times 100\% \\ &= 68\%\end{aligned}$$

From the computation above, it is concluded that degree of being open to new experiences is high, since 68% is between 68%-83%, which is considered high.

(6) Being brave in expressing ideas

$$\begin{aligned}\text{The total value of answer} &= (25 \times 5) + (40 \times 4) + (12 \times 3) + (18 \times 2) + (1 \times 1) \\ &= 358\end{aligned}$$

$$\begin{aligned}\text{The total of ideal answer} &= 32 \times 3 \times 5 \\ &= 480\end{aligned}$$

$$\begin{aligned}\text{Being brave in expressing ideas} &= \frac{A}{B} \times 100\% \\ &= \frac{358}{480} \times 100\% \\ &= 75\%\end{aligned}$$

From the computation above, it is concluded that degree of being brave in expressing ideas is high, since 75% is between 68%-83%, which is considered high.

(7) Having ability to analyze and synthesize

$$\begin{aligned} \text{The total value of answer} &= (9 \times 5) + (44 \times 4) + (28 \times 3) + (15 \times 2) + (0 \times 1) \\ &= 335 \end{aligned}$$

$$\begin{aligned} \text{The total of ideal answer} &= 32 \times 3 \times 5 \\ &= 480 \end{aligned}$$

$$\begin{aligned} \text{Having ability to analyze and synthesize} &= \frac{A}{B} \times 100\% \\ &= \frac{335}{480} \times 100\% \\ &= 70\% \end{aligned}$$

From the computation above, it is concluded that degree of having ability to analyze and synthesize, since 70% is between 68%-83%, which is considered high.

(8) Being self-confidence

$$\begin{aligned} \text{The total value of answer} &= (22 \times 5) + (57 \times 4) + (36 \times 3) + (12 \times 2) + (1 \times 1) \\ &= 471 \end{aligned}$$

$$\begin{aligned} \text{The total of ideal answer} &= 32 \times 4 \times 5 \\ &= 640 \end{aligned}$$

$$\begin{aligned} \text{Being self-confidence} &= \frac{A}{B} \times 100\% \\ &= \frac{471}{640} \times 100\% \\ &= 74\% \end{aligned}$$

From the computation above, it is concluded that degree of being self-confidence is high, since 74% is between 68%-83%, which is considered high.

(9) Having high initiative

$$\text{The total value of answer} = (6 \times 5) + (53 \times 4) + (37 \times 3) + (31 \times 2) + (1 \times 1)$$

$$= 416$$

The total of ideal answer = $32 \times 4 \times 5$

$$= 640$$

Having high initiative = $\frac{A}{B} \times 100\%$

$$= \frac{416}{640} \times 100\%$$

$$= 65\%$$

From the computation above, it is concluded that degree of having high initiative is fair, since 65% is between 52%-67%, which is considered fair.

(10) Being active

The total value of answer = $(21 \times 5) + (47 \times 4) + (6 \times 3) + (22 \times 2) + (0 \times 1)$

$$= 355$$

The total of ideal answer = $32 \times 3 \times 5$

$$= 480$$

Being active = $\frac{A}{B} \times 100\%$

$$= \frac{355}{480} \times 100\%$$

$$= 74\%$$

From the computation above, it is concluded that degree of having being active is high, since 74% is between 68%-83%, which is considered fair.

4.3 Scoring the students' achievement in English learning

The method of scoring English learning used achievement test. The achievement test used multiple-choice test. The score of the right answer is 1 and the score of the wrong one is 0. The result of achievement test is presented as follows:

Table 6

The scores of the students' achievement in English learning

NO	CODE	SCORE
1	S-01	75
2	S-02	33
3	S-03	38
4	S-04	48
5	S-05	60
6	S-06	53
7	S-07	63
8	S-08	75
9	S-09	78
10	S-10	78
11	S-11	80
12	S-12	83
13	S-13	88
14	S-14	88
15	S-15	93
16	S-16	95
17	S-17	63
18	S-18	63
19	S-19	25
20	S-20	63
21	S-21	83
22	S-22	68
23	S-23	78
24	S-24	73
25	S-25	85
26	S-26	88
27	S-27	88
28	S-28	90
29	S-29	63
30	S-30	73
31	S-31	68
32	S-32	40

For further explanation, can be seen in appendix VIII table 6.

4.3.1 Central Tendency

Relating to the scores of the students' in English learning, which deals with numeral data, the writer measured the mean. According to Best (1981: 225), the average or mean of group of scores is the most useful said to show the central

tendency, or the typical or representative value of the group of scores. Furthermore, Guilford (1973: 43) explains the mean is arithmetic average of a group of numbers. It is computed by dividing the sum of all of the scores by number of scores in the group. In computing the mean, the formula used is as follows:

$$M = \frac{\sum X}{N}$$

Where:

M = the mean

$\sum X$ = the sum of test' score

N = the total respondent

Using the formula of computation of the average from appendix VIII table 6 was as follows:

$$M = \frac{2237,5}{32} = 69,9$$

4.3.2 Standard Deviation

Standard deviation is by far the most commonly used indicator of degree of dispersion and is the most dependable estimate of the variability in total population from which the sample came (Guilford, 1973: 65).

The procedures for computing standard deviation are as follows:

- (1) Find each deviation from the mean (x) (which equal $X-M$)
- (2) Square each deviation, finding x^2
- (3) Sum the squared deviation, finding $\sum x^2$
- (4) Divide this sum by $(N-1)$, finding $\frac{\sum x^2}{N-1}$

(5) Extract the positive square root of the result of the step 4.

The SD formula was as follows:

$$SD = \sqrt{\frac{\sum x^2}{N-1}}$$

(Guilford, 1973: 65)

Where:

SD = standard deviation

N = total number of score

$\sum x^2$ = the sum deviation squared.

$$\begin{aligned} \text{Therefore, } SD &= \sqrt{\frac{\sum x^2}{N-1}} \\ &= \sqrt{\frac{11817}{31}} \\ &= 17.66 \end{aligned}$$

4.4 Correlation Analysis

After getting the score of the students' creativity in English learning and the score of English learning achievement, the data above were statistically found out the correlation between two variables.

In interpreting the finding mean to test the hypothesis (H_A), which is said there is a positive and significant relationship between students' creativity and their English learning achievement. In this thesis, the writer applied the Pearson Product Moment Correlation formula to compute the data. It is used to find the correlation between two variables. The writer measured the correlation between the students' creativity in English learning and their achievement in English learning of tenth grade students in the academic year 2006/2007.

The data to compute the correlation between the students' creativity in English learning and their scores can be obtained in appendix IX table 7. From the table, we find out the following values:

$$N = 32 \quad \Sigma X^2 = 164455$$

$$\Sigma X = 2276 \quad \Sigma Y^2 = 166119$$

$$\Sigma Y = 2237.5 \quad \Sigma XY = 162590$$

Then value above is put in the formula of Pearson "r" and the result is as following:

$$r_{xy} = \frac{N \Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{\{N \Sigma X^2 - (\Sigma X)^2\} \{N \Sigma Y^2 - (\Sigma Y)^2\}}}$$

$$r_{xy} = \frac{32 [162590] - [2276][2237.5]}{\sqrt{\{32(164455) - (2276)^2\} \{32(166119) - (2237.5)^2\}}}$$

$$= 0.691$$

From computation above, it is found that the correlation coefficient is 0.691; where as the critical value of "r" with 95% significant level and the number of subject 32 is 0.349. Thus, the critical value is lower than the value resulted from the computation above. It means that hypothesis was accepted. So, there is a positive and significant correlation between the students' creativity and their English learning achievement. It can be interpreted that there is positive and strong correlation between the students' creativity and their English learning achievement. From table 7 appendix IX, it can be seen that among the samples, there are 25 students with highly creativity, 8 students get excellent achievement, 11 get good achievement, 3 student get fair achievement, 1 student gets poor achievement and 2 students get fail in English learning. From 5 students with

fairly creativity, 1 student gets good achievement and 2 students get fair achievement, 1 student gets poor and 1 student gets fail achievement in English learning. Moreover, from 2 students with low creativity, 2 students get poor and fail achievement respectively in English learning.

The following chapter presents conclusions and suggestions as the result of the study.



CHAPTER V

CONCLUSIONS AND SUGGESTIONS

5.1 Conclusions

Based on the result of the study, it can be concluded as follows:

1. The students' creativity of the tenth grade students of SMAN 1 Brebes in the academic year 2006/2007 was considered high category. It can be seen from the average value of students' creativity was 71 %.
2. The average value of the students' achievement in English learning was 70. So, the English learning achievement of the tenth grade students of SMAN 1 Brebes in the academic year 2006/2007 was considered good category.
3. The coefficient correlation of the students' creativity with their achievement in English learning was 0.691, while the critical value for 95% with the number of sample (N) = 32 was 0.349. Thus, the obtained value was higher than critical value, which means that there is a positive and significant correlation between students' creativity and their achievement in English learning.
4. Among 25 students with highly creativity, 8 students got excellent achievement, 11 got good achievement, 3 students got fair achievement, 1 student got poor achievement and 2 students got fail in English learning. From 5 students with fairly creativity, 1 student got good achievement and 2 students got fair achievement, 1 student got poor and 1 student got

creativity, 2 students who got poor and fail achievement respectively in English learning achievement. Thus, achievement was not only influenced by the students' creativity. There were other factors, which probably determined the students' achievement such as; environmental factors, physical conditions and physiological factors.

5.2 Suggestions

- (1) Teacher should help the students to increase their creativity. This can be done by giving the students chances to ask questions, have discussions, express their ability in English, and try to help the students to investigate and solve their problem in learning English.
- (2) Teacher has to be able to choose the appropriate method and technique without abandoning the intended objective.
- (3) The students should develop their creativity especially in learning English to improve their achievement.
- (4) The students should increase their ability in English by trying to enrich their knowledge related to English, practice their English, and enlarge reading books in English.

BIBLIOGRAPHY

- Alkin, M. C . 1982. *Encyclopedia Education Research*. New York: Macmillan Publishing Company.
- Arikunto, S. 1998. *Prosedur Penelitian : Suatu Pendekatan Praktik*. Jakarta: Rineka Cipta.
- Bigge, M. L and Shermish S. S. 1992. *Learning Theories for Teacher*. New York: HarperCollins Publishers.
- Brown, H. D. 1987. *Principles of Language Learning and Teaching*. Englewood Cliffs, New Jersey: Prentice Hall, Inc.
- Brown, H. D. 2003. *Language Assessment: Principles and Classroom Practices*: USA: Longman.
- Best, J. W. 1981. *Research in Education*. New Jersey: Prentice – Hall Inc.
- Citrawati, F. D. 2002. A Correlation Study Between Students' Mastery of English As A Compulsory Subject and Their Socioeconomic Background. Semarang. FBS UNNES.
- Cropley, A. J. 2003. *Creativity in Higher Education and Learning*. New Delhi: Crest Publishing House.
- Chance, P. 1985. *Learning and Behaviour*. California: Wadworth Publishing Company.
- Depdikbud. 2003. *Kurikulum 2004 Standar Kompetensi*. Jakarta: Departement Pendidikan dan Kebudayaan, Direktorat Jenderal Pendidikan Dasar dan Menengah.
- Guilford, J. P. 1973. *Fundamental Statistics in Psychology and education*. California: McGraw-Hill.
- Harmer, Jeremy. 2000. *How to teach English*. New York: Longman.
- Hornby, A. S. 1995. *Oxford Advanced Learner's Dictionary*. Oxford University Press.
- Husen, T., Post Letherwaite, T. N. 1985. *The International Encyclopedia of Education*. Oxford: Pergamon Press.

- Kerlinger, F. N. 1979. *Foundations of Behavioral research*. Florida: Holt, Reinhart & Winston, Inc.
- Mangunhardjana, A. M. 1986. *Mengembangkan Kreativitas*. Yogyakarta: Kanisius.
- Miswadi. 2000. The Correlation Between the Students' Interest in Reading and their Achievement in Reading Comprehension. The case of the second year students of SLTP Purworejo, Klampok Banjarnegara in the academic year 1998/1999. FBS UNNES.
- Munandar, U. 1977. *Creativity and Education*. Jakarta: Dirjen Dikti Pendidikan Dan Kebudayaan.
- Munandar, U. 1995. *Pengembangan Kreativitas Anak Berbakat*. Jakarta: Rhineka Cipta.
- Ramelan. 1992. *Introduction to Linguistic Analysis*. Semarang: IKIP Semarang Press.
- Saleh, M. 2001. *Pengantar Praktek Penelitian Pengajaran Bahasa*. Semarang: IKIP Semarang Press.
- Semiawan, C. 1984. *Memupuk Bakat dan Kreativitas Anak Sekolah Menengah*. Jakarta: Gramedia.
- Sofiah, Utami. 1998. Students' Creativity and Its Relation to English Learning Achievement. FBS UNY.
- Suryabrata, S. 1983. *Pendidikan Belajar Mengajar di Perguruan Tinggi*. Yogyakarta. Andi Offset.
- Webster, N. 2004. *Webster's New International Dictionary*. New York: Pan American Copyright Convention.