The Effect of Roundtable and Clustering Teaching Techniques and Students' Personal Traits on Students' Achievement in Writing Paragraph

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Abstract: *The objectives of this experimental research were to investigate whether: (1) students' achievement in descriptive writing taught by using roundtable teaching technique was higher than taught by using clustering teaching technique. (2) students' achievement in descriptive writing with introvert personal trait was higher than that students with extrovert personal trait, (3) there was interaction between teaching techniques and personal traits on students' achievement in descriptive writing. The population of this research is students of third semester in UHN (Universita HKBP Nommensen) Pematangsiantar which consists of 5 classes with 40 students each class and 200 altogether. This campus is located in on Jalan. Sangnawaluh no.4 Pematangsiantar. There were 80 students selected as sample of this research by applying cluster random sample technique. The research design was experimental research by using factorial design 2x2. The students were divided into two experimental groups. The experimental group 1 was treated by using roundtable teaching technique and experimental group II was treated by using clustering teaching technique. The questionnaire was conducted for classifying the students upon the introvert and extrovert personal traits. Students' achievement in descriptive writing was measured by using writing test. The data were analyzed by applying two-way analysis of variance (ANOVA) at the level of significance α= 0.05. The result reveals that (1) students' achievement in descriptive writing taught by using roundtable teaching technique was higher than that taught by using clustering teaching technique, with Fobs= 4.59>Ftab=3.97, (2) students' achievement in descriptive writing with introvert personal trait was higher than that with extrovert personal trait with Fobs= 4.90>Ftable=3.97, (3) there is interaction between techniques and personal traits on students' achievement in descriptive writing with Fobs=6.58>Ftable=3.97. After computing the T-Test, the result showed that introvert students got higher achievement if they were taught by using roundtable teaching technique while extrovert students got higher achievement if they were taught by using clustering teaching technique.*

Keywords: *Extrovert, Introvert, Personal Traits, Teaching Technique, Writing*

I. INTRODUCTION

Writing is more than a medium of communication. It means that writing is not just the way to communicate to each other but also as means of ideas and emotional expression (Raymond, 1980). Writing makes word permanent, and thus expands the collective memory of human being. Spoken words disappear as soon as they are spoken, but writing freezes their thoughts, makes them visible and permanent so people can examine and test their quality. It can be seen that writing is a way of remembering because it makes word permanent and writing also is a good way to communicate because when writing, the writer really thinks about what he or she want to be communicated by writing it.

Students in Indonesia have been taught writing course since they were in the first class of Senior High School. But, it was found that they face some difficulties in writing. As Styati (2010) found that commonly, students are difficult in starting the writing, they got confuse about what to write and also about how to generate ideas. This is because of the lack of knowledge about the steps on writing was procedural factors that cause the difficulties for all students. And the most important thing is that, writing is usually get least attention in teaching learning in classroom, which make students are rarely exposed to writing.

Actually, they might have something to state in their mind, but they are often confused to express and develop their ideas into a good writing. Further, one of the students' problems is that they have difficulty in arranging information or ideas logically to achieve coherence in their writing, which is the foremost requirement in writing.

This matter also happens to the students in UHN (Universitas HKBP Nommensen) Pematangsiantar. This is because acquiring writing skill needs a lot of practice, and to produce a piece of essay needs long process. Most of researchers recognize this difficulty in writing is caused by the complexity of writing (Urquhart, 2005). The complexity of writing encountered by students involves the level skills of planning and organizing as well as the level skills of spelling, punctuation, word choice, grammar and usage. In reality, as the writer has observed the condition of the students in writing and found that the students' score of writing course was under the standard score. It can be seen from the English result study of the students in two semester final tests.

Table 1. The Scores of Writing in Final Semester Examination in UHN (Universitas HKBP Nommensen) Pematangsiantar

No.	Year of Study	The Scores Average	Standard Score
1.	2013/2014	66. 03	70
2.	2014/2015	64. 25	70

Based on the table, the results of the students' achievement in English writing are not good enough or still cannot pass the passing grade. It is still under the standard score of English which is specified by the academy, which is 70. As the writer has also observed the students' score in writing course is also low. The scores are taken from the written test in the final semester test. From this table below, the writer shows the scores of the students of third semester in writing. The result is shown in this following table:

Table 2. Scores of Writing on the Final Semester in UHN (Universitas HKBP Nommensen) Pematangsiantar

No.	Writing Scores	Year of Study 2013/2014		Year of Study 2014/2015	
		Amount of Students	%	Amount of Students	%
1	85-100	10	4. 90	23	17. 29
2	75-84	35	17.16	17	12.78
3	60-74	80	39. 21	88	66. 17
4	50-59	71	34. 80	5	3. 75

No.	Writing Scores	Year of Study 2013/2014		Year of Study 2014/2015	
		Amount of Students	%	Amount of Students	%
5	0-49	8	3.92	-	-
	Total	204	100%	133	100%

From the above table, it can be seen that only 4. 90 % of the students of third semester can achieve 85-100 scores on the year 2012/2013. In the year of 2013/2014, only 17.29% of students can reach above 85 scores in writing test. Most of the students can only achieve above 60 to 74. It means that the students' achievement in writing at the third semester of Universitas HKBP Nommensen is still low.

In order to gain the improvement of the students' writing ability, the writer is going to apply Roundtable and Clustering technique on it. There are many kinds of teaching techniques that can be applied by the teacher. But this study concerns on two techniques called Roundtable teaching technique and clustering Teaching Technique. Roundtable Teaching Technique is one kind of cooperative learning that it is organized in group working. Roundtable can be used for brainstorming, reviewing, or practicing while also serving as a teambuilder (Kagan, 2009). The key here is the question or the problem lecturers have asked the students to consider.

The other technique to be used in this research is clustering technique. Rico (2000) tells that clustering can be used to generate ideas for writing any form of paragraph: essays, poems, short stories, business reports, song lyrics even novels. Clustering, with its access to the pattern-making design mind, is a powerful inspirational/organizational tool: it always reassures that someone has something to say. Best of all, someone doesn't have to worry about the sequence of ideas, connections and relationships as the cluster unfolds effortlessly. "Clustering, as already suggested, is a Design-mind function. Just as many natural forms come in clusters-grapes, lilacs, spider eggs, cherries-so thoughts and images, given free rein, seem to come in clusters of association." (Rico 2000:15).

Besides teaching techniques, students' writing achievement can be also affected by internal factors, namely, personality. Based on the nature of writing descriptive text that expressing ideas and generating the ideas into a paragraph for a particular point of view personally is involved and influenced by the students' personality, this study concerns with the personal style or personality especially introvert and extrovert on students' writing achievement. The problems are conceptualized as these following; Is the students' achievement in writing taught by using Roundtable Teaching Technique higher than taught by using Clustering Teaching Technique?, is the students' achievement in writing with introvert personal trait higher than students with extrovert personal trait? And Is there any interaction between teaching techniques and personal traits in teaching writing?.

There are some researchers who had done a research about roundtable teaching technique, clustering teaching technique and personality. First, Handayani (2012) had conducted a research SMA N 1 Ngaglik, Sleman in the academic year 2011/2012 about roundtable teaching technique in learning descriptive writing. She found that the students who are taught using roundtable technique have better writing skill than those who are taught using direct instruction. In other words, the use of roundtable technique is more effective than direct instruction. Based on the research findings, it can be concluded that roundtable technique is more effective than direct

instruction for teaching students' writing skill at the tenth grade students of SMA N 1 Ngaglik, Sleman in the academic year 2011/2012.

Second, Styati (2010) also did a research about clustering teaching technique to descriptive writing. The research was carried out at IKIP PGRI Madiun from March to July 2010. It was an experimental research and the result of the study leads to the conclusion that the students who are taught clustering technique has better writing ability than those who are taught using direct instruction. In other word, the use of clustering technique is more effective than direct instruction. The research findings imply that the use of clustering technique can affect the student's writing competence optimally. It is proved from the research findings showing that students who are taught using clustering technique have better writing competence than those who are taught using direct instruction.

II. THEORETICAL REVIEW

2.1 Writing

Nazario et al. (2010: 5) stated that writing is a form of thinking. Our brains process ideas in different ways: mathematically, musically, and visually. But our use of language is the basis of all thinking. It allows us to share ideas, pass on knowledge, engage in debate, and advance our understanding of the world. In college, writing is the vehicle through which we learn new ideas and share them with one another.

Writing is a complex process that allows writers to explore thoughts and ideas, and make them visible and concrete. Writing encourages thinking and learning for it motivates communication and makes thought available for reflection. When thought is written down, ideas can be examined, reconsidered, added to, rearranged, and changed. Writing is most likely to encourage thinking and learning when students view writing as a process. "Critical thinking is emphasized, so that students become aware of the impact of their choice of words, sentences and organizational techniques on the effectiveness of their writing" (Zemach 2000:1).

Henning (2005) stated that writing is not to be viewed as a *representation* of a writer's thinking, but as a process of thinking that uses written language, and also as observable performance of what goes on in the mind of the author (how the author uses knowledge for inquiry). Thus thoughts are not "converted" to writing, but are part of the process of making written text, which in its final form is a product of good thinking and of knowing.

Nunan (2003: 88) defines that writing is the process of thinking to invent ideas, thinking about how to express into good writing, and arranging the ideas into statement and paragraph clearly. It indicates that the learners are expected to explore the ideas and make them into good paragraph. Besides, writing is both a physical and a mental act. It is the physical act of committing words or ideas to some medium, whether it is an object or a symbols or an email message.

Hence, it can be concluded that writing is a form of thinking and a process of thinking as well with complex process that allows writers to explore thoughts and ideas, and make them visible and concrete as an observable performance of what goes on in the mind of a writer.

2.1.1 Descriptive Writing

Kane (2000: 351) stated that description writing is a written text in which the writer describes an object trough the sensory experience—how something looks, sounds, tastes. Mostly it is about visual experience, but description also deals with other kinds of perception. In

addition, Zemach (2000: 25) stated that a descriptive paragraph can be a description of people, places and processes. A descriptive paragraph explains how someone or something looks or feels and how something's done. Further Zemach also explained that in a descriptive text, a writer uses: 1). adjective: are words that tell us how things look, feel, taste, sound or smell. 2). using prepositions: tell us how a space is organized.

In a descriptive writing, a writer may describe thing, perception and feeling about something. This is as what Kane (2000: 351-352) said: "Whatever sense it appeals to, descriptive writing is of two broad kinds: objective and subjective. In objective description the writer sets aside those aspects of the perception unique to himself and concentrates on describing the percept (that is, what is perceived) in itself. In subjective (also called impressionistic) description a writer projects his or her feelings into the percept.

(Friedman, 2010:61) A descriptive writing gives a reader a mental picture of the subject that the writer is exploring. Typically, descriptive writing uses the five senses—sight, sound, touch, taste, and smell—to help the reader experience what the writer has experienced. A descriptive writer carefully selects vivid examples and specific details to reveal people, places, processes, events, and ideas.

Thus, it is concluded that description writing is a written text that gives a reader a mental picture of the subject that the writer is exploring that it can be a person, an object or it can be about any topic which is to describe a thing is to say how it looks, feels, sounds, smells or tastes.

2.2   Teaching Techniques
2.2.1   Roundtable Teaching Technique
Ekap (2010) noted that roundtable teaching technique is a technique requires a group or team working in the teaching learning process which requires all members to know and be ready to explain their group's answer(s), when students help their group mates, they help themselves and their whole group, because the response given belongs to the whole group, not just to the group member giving it. It can be concluded that roundtable teaching technique is a technique of brainstorming, reviewing, or practicing skill in writing which is used to stimulate creativity and deeper thinking as the value of multiple viewpoints and ideas as the result working in team.

Roundtable is two-step cooperative learning structures. In step one, the teacher asks a question with many possible answers and in step two the students respond in turn to make a list of possible answers for the questions. In this technique, the students pass a single sheet of paper and a single pencil around the table to record responses. Team members are encouraged not to skip turns, but if their thoughts are at a standstill, they are allowed to say "Pass" rather than to turn the brainstorm into a brain drizzle. Thus, there is almost universal participation in roundtable. Students use a single sheet of paper and pen for each group. Students in the group respond in turn to a question or problem by stating their ideas aloud as they write them on the paper. Each group member has a designated turn to participate and make a written contribution to the group's project. The group has a writing prompt, task, or question.

2.2.2   Clustering Teaching Technique
Reid (1993: 6) stated that clustering is a type of prewriting that helps writers to generate, develop, and arrange the writer's ideas. It can be said that clustering helps the learners in developing their idea. The goal of clustering is to determine the intrinsic grouping a set of unlabeled data. It can be shown that there is no absolute "best" criterion which would be independent of the final aim of the clustering. In conclusion clustering is a powerful tool or

technique of prewriting it taps into the right brain, which drives creativity for by passing the writer's logical, orderly sign-mind consciousness to touch the mental life, thought, image and sensation of the writer to stimulate and to develop the writer's idea that is difficult to say. Clustering is a technique to help writer generates ideas and arranges them into good writing.

Clustering is the result of active design mind participation that brings to the writing process an awareness of having grouped together, connected and related relevant elements of an idea out of the infinite possibilities available to our brain. Through clustering, students or writers make a pattern around a given nucleus word, and as they write, that clustered pattern exerts its power to such an extent that we are largely incapable of leaving the writing "hanging". Rico also describes clustering as a phenomenon of nonlinear connection around a "storm center of meanings" which she calls "nucleus". A nucleus word or short phrase acts as the stimulus for recording all the associations that spring to mind in a very brief period of time.

Table 3. Differences between Roundtable and Clustering Teaching Technique

No	Roundtable Teaching Technique	Clustering Teaching Technique
1	Roundtable is a technique which can be used for brainstorming, reviewing, or practicing skill while also serving as a teambuilder (Kagan: 2009).	(Rico, 2000) Clustering is a technique for bypassing the writer's logical, orderly sign-mind consciousness to touch the mental life of day dream, random thought, image and sensation
2	A group work or team work where each student will write as many responses to the question as they can in the time the teacher gives until finally they write the complete text.	A group work where each student jots and clusters every single word from their mind, during this process is done; the teacher may not limit their time until the students think they finally have enough and appropriate ideas to form their writing.
3	No talk during the discussion	Each member of the team, can sometimes talk as they revise and choose the idea they're going to write
4	The questions from the teacher are used as the stimulus for the students to starts their writing.	Nucleus is used as the stimulus for the students to start their writing.

2.3 Personal Traits

Matthews et al (2009: 3) stated that everyday conceptions of personality traits make some key assumptions. First, traits are stable over time, second, traits are different among people and third, traits influence one's behavior. Most people would accept that an individual's behavior naturally varies somewhat from occasion to occasion, but would maintain also that there is a core of consistency which defines the individual's 'true nature': the unchangeable spots of the leopard.

2.3.1 Introvert

In psychology, introversion defined as "the state of, or tendency towards being wholly or predominantly concerned with an interest in one's own mental life". "Introversion, on character that extroverts do not have the other hand, is the extent to which a person derives a sense of wholeness and fulfillment apart from a reflection of this self from other people. "Introvert can have an inner strength of character that extroverts do not have" (Brown 2007: 167).

2.3.2 Extrovert

Extrovert (extroversion) is the extent to which a person has a deep-seated need to receive ego enhancement, self esteem, and a sense of wholeness from other people as opposed to receiving that affirmation within oneself (Brown 2007: 166). Extroversion or extraversion defined as the ability of turning the interests and energies of the mind toward events, people and things in the world about us. Extroverts actually need other people in order to feel "good". Extroversion is commonly thought to be related to empathy, but such may not be the case. The extroverted person may be actually behaved in an extroverted manner in order to protect his or her own ego, with extroverted behavior being symptomatic of defensive barriers and high ego boundaries.

III. RESEARCH METHOD

This research was carried out by applying a quantitative approach with an experimental design. The design used in this research was the 2 x 2 factorial one since it observes more than one variable. In this research, there are two independent variables; the first independent variable was teaching techniques, which have two kinds; Roundtable teaching technique and Clustering Teaching Technique as a Cooperative Learning, and the second independent variable was personal traits (which were the attributive variable) that have two kinds too; extrovert and introvert. While dependent variable was the students' achievement in writing. Thus, the research design is two-way ANAVA (Analysis of Variance) as shown in table below:

Table 4. The Study Design (Factorial Design 2 x 2)

Teaching Techniques Personal trait	Techniques	
	RT3 (B1)	CT2 (B2)
Introvert (A1)	A1 B1	A2B1
Extrovert (A2)	A1 B2	A2B2

Notes:
A1   = Students with Introvert Personal Trait
A2   = Students with Extrovert personal Traits
B1   = Roundtable Teaching Technique
B2   = Clustering teaching Technique
A1B1 = the students who have introvert personal trait and are taught by using RT3 (Roundtable Teaching Technique).

A2B1 = the students who have introvert personal trait and taught by using Clustering Teaching Technique as a cooperative learning.

A1B2 = the students who have extrovert personal trait and are taught by RT3 (Roundtable Teaching Technique) using as cooperative learning.

A2B2 = the students' achievement who have extrovert students and are taught by CT2 (Clustering Teaching Technique) as cooperative Learning.

3.1 Population and Sample
3.1.1 Population

The population of this research is students of third semester in UHN (Universita HKBP Nommensen) Pematangsiantar which consists of 5 classes with 40 students each class and 200 altogether. This campus is located in on Jalan. Sangnawaluh no.4 Pematangsiantar.

3.1.2 Sample

In this research, the sample was chosen by using multistage cluster random sampling with lottery technique. This technique was chosen because the sample that is taken for this research was the classes not the students. The sample of this research is 2 classes of third semester as the experimental groups namely class A and B. First class (A) will be taught by using Roundtable Teaching Technique, and the second class (B) will be taught by using Clustering Teaching Technique as cooperative learning. Then the students of each class were divided into extrovert personal traits and introvert one.

3.2 The Instrument of Data Collection

In this research, there are two kinds of instrument will be used. They are: the writing test to know the students' achievement in writing descriptive, and the instrument of questionnaire which is used to investigate the students' personality.

3.2.1 Writing Test

To measure the students' descriptive writing achievement, the instrument in the form of writing test was administered. The type of writing test performed in this study was responsive writing (Brown, 2004) namely write a short descriptive text. Responsive writing requires learners to perform a limited discourse of level, connecting sentences and logically connected sequences of two or three paragraphs.

To score the writing ability, Weigle (2002:116) proposed "analytic scoring". In analytic scoring, scripts are related to several aspects of writing or criteria rather than given a single score. The scripts might be rated on such features as content, organization, vocabulary, language use, grammar or mechanics. Analytic scoring schemes thus provide more detailed information about a test taker's performance in different apsects of writing and information about those acpects in an efficient manner. The five aspects are differently wighted to emphasize first content (30 points) and next language use (25 points), with organizations (20 points) and vocabulary are weighted equally (20 points) and mechanics receiving very litle emphasize (5 points). The first four scales are related to communicative effectiveness, while the others relate to acuracy. The whole score is acumulated and the highest score is 100.

3.2.1.1 The Validity of the Writing Test

In order to make the writing test valid, the writer used construct validity because the test of writing was constructed based on a single construct of writing theory. Construct validity ensures that the assessment measures the construct it claims to measure. This type of validity can also show how the measure relates to other measures as a defined in the construct. Construct validity refers to the extent to which an assessment measures an ability construct important for writing performance and it also refers to the extent to which a measure adequately assesses the construct it purports to assess. The test must be done by using the construction of writing which involves the content, organization, language use, vocabulary and mechanics.

3.2.1.2 The Reliability of Writing Test

Calculating a correlation between the scores was determined by using the formula which was used in this research the correlation coefficient was computed by using Pearson Product Moment Formula:

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

Notes:

r_{xy} = the coefficient correlation; N = number of students; X = the score of each item; Y = the total score

3.2.2 Students' Personal Traits Questionnaire

Personal traits is the characteristic includes virtually everything about a person—mental, emotional, which is stable over time and are different among people, that influence one's behavior. The characteristics are differentiated based on by how a person perceives internal and external stimuli or functions: merely establishing what is there (sensation), interpreting and understanding the meaning of what perceive (thinking), evaluating of how desirable or pleasant it is (feeling), and forming apparently inexplicable hunches or conclusions without using any of the other functions (intuition). The instrument of questionnaire was employed to find out the students' personality in terms of introvert and extrovert. The questionnaire was dominantly about the characteristic of introvert and extrovert. The characteristics were used as the indicators and concluded as behavioral differences of extrovert and introvert in terms of sociability or openness, impulsiveness, activity level and excitability. These indicators were used to make questionnaire as the instrument to investigate the students' personality.

The questionnaire was made from the characteristics between introvert and extrovert personal traits. The characteristics were differentiated based on the way they (both introvert and extrovert students' personal traits) establish something, the way interpreting and understanding the meaning of what to perceive, the way they evaluate of how desirable or pleasant is something, the way they conclude something without using any of the other functions. The answer will be varied in whether the students agree, strongly agree, undecided, disagree and strongly disagree.

3.2.2.1 The Validity of Questionnaire

In order to make the questionnaire valid, the researcher used content validity which is a term used in connection with a tests' content. Content validity refers to the extent to which examinees believe the instrument is measuring what it is supposed to measure. Content validity

represents the content of interest that will be measured. For example to investigate the students' personality, the definition of the concept should be defined which involve the aspects that finally are used as the indicators. All the questions in the questionnaire are made through the indicators.

The instrument was measured by using the Likert Scale. A Likert scale assesses attitudes towards a topic by presenting a set of statements about the topic and asking respondents to indicate for each whether the students are strongly agree (5 points), agree (4 points), Undecided (3), disagree (2) and strongly disagree (1). In this research, the writer also had a group to have a try out on the translated questionnaire. The researcher took different but rather similar subjects and apply similar with the condition of the research as possible. The aim of this try out was to figure out the best condition needed by sample subjects for the best result, to know the possible responses and questions from the sample.

3.2.2.2 The Reliability of Questionnaire

Test- retest reliability was used to determine the reliability of the students' personality questionnaire. In order to consider the value of reliability, a formula was required. The formula which was used in this research was Alpa Cronbach to compute the correlation coefficient.

$$r_{II} = \left(\frac{n}{n-1}\right)\left(1 - \frac{\sum \sigma_i^2}{\sigma_t^2}\right)$$

Notes:

n	: Numbers of items
$\sum \sigma_i^2$	: Variance of the total score
σ_t^2	: Sum of score variance of each item
r_{II}	:The reliability of the questionnaire

Arikunto (2010) stated that the criteria of reliability can be categorized into five categories:

0.0 - 0.20	= the validity is very low
0.21 - 0.40	= the validity is low
0.41 - 0.60	= the validity is fair
0.61 - 0.80	= the validity is high
0.81 - above	= the validity is very high

3.3 Data Analysis

The technique of analyzing data used for this research was the two-way analysis of variance with the level significance $\alpha = 0.05$. It is used to test the hypothesis which was stated in the previous so that the result of this research was gathered.

Before the technique of analysis data to be used, there are two important things which needed to be tested, namely the normality and the homogeneity of the data. Before the technique analysis data used, there are two important things which needs to be tested, namely the normality and the homogeneity of the test.

3.4 Statistical Hypotheses

The Statistical hypothesis were tested and formulated as follows:

Hypotheses 1:   Ho: μA1 = μA2

                            Ha: μA1 > μA2

Hypotheses 2:   Ho: $\mu B1 = \mu B2$
                    Ha: $\mu B1 > \mu B2$
Hypotheses 3:   Ho: $AxB = 0$
                    Ho: $AxB \neq 0$

$\mu A1$ = the mean of achievement in writing of the students with introvert personal trait
$\mu A2$ = the mean of achievement in writing of the students with extrovert personal trait
$\mu B1$ = the mean of achievement in writing of the students taught by using Roundtable Teaching Technique.
$\mu B2$ = the mean of achievement in writing of the students taught by using Clustering Teaching Technique.
A><B   = the interaction between Roundtable Teaching Technique and Clustering Teaching Technique and the students' personal traits
A   = teaching techniques
B   = personal traits
μ = the mean of achievement in writing

IV. FINDINGS AND DISCUSSIONS

4.1   Findings
The findings of this research are described through some calculation explained in some tables below:

4.1.1   Testing Hypothesis
The hypothesis of this research is verified by two-way analysis of variance (ANOVA) with factorial design. Thus the data description is seen as this following table.

Table 9. Two-Way ANOVA with 2x2 Factorial

PERSONAL TRAITS (A)	TEACHING TECHNIQUES (B)		Total
	Roundtable (B1)	Clustering (B2)	
Introvert (A1)	N Y = 26	N Y = 18	N Y = 44
	$\sum$ Y = 1931	$\sum$ Y = 1265	$\sum$ Y = 3196
	y = 287,12	y = 237,61	y = 524,73
Extrovert (A2)	N Y = 14	N Y = 22	N Y = 36
	$\sum$ Y = 977	$\sum$ Y = 1565	$\sum$ Y = 2542
	y = 236,36	y = 498,59	y = 734,95
Total	N Y = 40	N Y = 40	N Y = 80
	$\sum$ Y = 2908	$\sum$ Y = 2830	$\sum$ Y = 5738
	y = 523,47	y = 736,20	y = 1259,67

This data description with factorial design is used for further calculation of two-way ANOVA and that the result is as the following:

Table 10. The Calculation of the Two-Way ANOVA

Source of Variance	JK	Df	RJK	$F_{Observed}$	F_{table} $F_{0,05;1;76}$ =	Description
A	76,05	1	76,05	4,59		Significant
B	81,21	1	81,21	4,90	3,97	Significant
Inter AB	109,01	1	109,01	6,58		Significant
AB	1260	76	16,57	-		Significant
Total	1525,95	79	-	-		

From the descrition of above, some findings can be concluded as this following:

1. The mean of students with introvert personal trait taught by using roundtable teaching technique is higher than the mean of students with extrovert personal trait taught by using roundtable teaching technique;
2. The mean of students with introvert personal traits taught by using roundtable teaching technique is higher than the mean of students with introvert personal trait taught by using clustering teaching technique;
3. The mean of students with introvert personal trait taught by using roundtable teaching technique is higher than the mean of students with introvert personal traits taught by using clustering teaching technique;
4. The mean of students with extrovert personal trait taught by using clustering teaching technique is higher than the students with introvert personal trait taught by using clustering teaching technique;
5. The mean of students with extrovert personal trait taught by using roundtable teaching technique is higher than the mean of students with introvert personal trait taught by using clustering teaching technique;
6. The mean of students with extrovert personal trait taught by using clustering teaching technique is higher than the mean of students with extrovert personal trait taught by using roundtable teaching technique.

4.1.2 The Effect of Teaching Techniques on Students' Writing Achievement

Regardless of students' personal traits, students who were taught writing by using roundtable teaching technique, 77.98 ± 5.89, had higher score compared to students who were taught writing by using clustering teaching technique, 72.95 ± 6.66. In addition, the result of ANOVA test shows that $F_{observed}>F_{table}$ in which the $F_{observed}$ is 4.59 and F_{table} is 3.97. Therefore, the null hypothesis was rejected. Thus, students gained 6.85% more score when taught by using roundtable teaching technique to students using clustering teaching technique. As a result, the first hypothesis of this research formulated that the students' achievement in descriptive writing taught by roundtable teaching technique is higher than taught by clustering teaching technique is true. The effect of technique on students' achievement can be seen in the figure below.
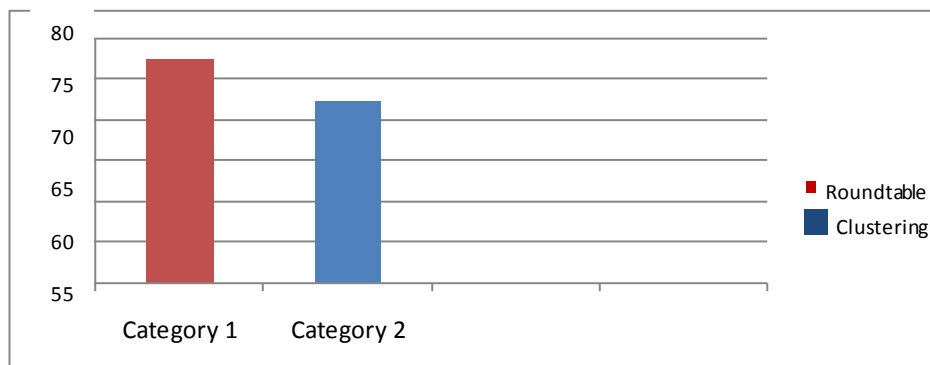
Fig. 1 The effect of techniques on students' writing achievement

4.1.3 The Effect of Personal Traits on Students' Writing Achievement

Writing Achievement of students with introvert personal trait, 73.60±12.68, had higher score compared to students' writing achievement with extrovert personal trait, 66.28±10.87. In addition, the ANOVA test shows that $F_{observed} > F_{table}$ in which the $F_{observed}$ is 4.90 and F_{table} is 3.97. Automatically, the null hypothesis was rejected so that the second hypothesis formulated that students' achievement in descriptive writing with introvert personal trait is higher than the students' achievement in descriptive writing with extrovert personal trait is true. The effect of introvert and extrovert personal trait on students' writing achievement can be seen in figure below.
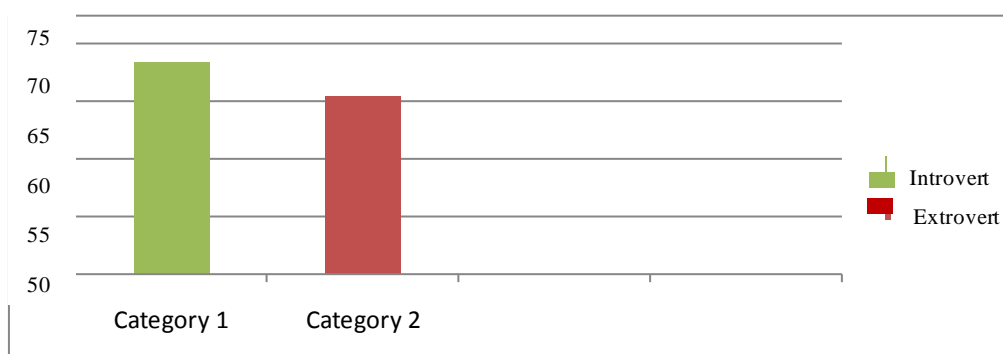

Fig. 2 The effect of introvert and extrovert personal trait on students' writing achievement

4.1.4 Interaction between Teaching Techniques and Personal Traits on Students' Achievement in Descriptive Writing

There is interaction between the teaching techniques and the personal traits. From the result of ANOVA calculation in interaction, it is known that the Fobserved = 6.58 is higher than Ftable= 3.97 in addition it shows that there is a rejection of the null hypothesis. In further, it emphasizes the interaction patterns that the students with introvert personal trait are eligible to be taught by using roundtable teaching technique while the students with extrovert personal trait are eligible

to be taught by using clustering teaching technique. One more test was needed to strengthen the interaction from each combination between teaching techniques and students' personal traits. The test done here is Tuckey-test. The, the result of the test is as the following.

Table 11. The Result Calculation of Testing Hypothesis by Using Tuckey-Test

No.	Statistics	$T_{observed}$	T_{table}	$T_{observed} > t_{table}$ = Significant
1	$H_0 : A_1 = A_2$ $H_a : A_1 > A_2$	2,773	1,991	Significant
2	$H_0 : B_1 = B_2$ $H_a : B_1 > B_2$	3,577	1,991	Significant
3	$H_0 : A_1B_1 = A_1B_2$ $H_a : A_1B_1 > A_1B_2$	3,683	2,018	Significant
4	$H_0 : A_1B_1 = A_2B_1$ $H_a : A_1B_1 > A_2B_1$	3,644	2,024	Significant
5	$H_0 : A_1B_1 = A_2B_2$ $H_a : A_1B_1 > A_2B_2$	2,617	2,013	Significant
6	$H_0 : A_1B_2 = A_2B_1$ $H_a : A_1B_2 > A_2B_1$	2,465	2,042	Significant
7	$H_0 : A_2B_2 = A_1B_2$ $H_a : A_2B_2 > A_1B_2$	2,758	2,024	Significant
8	$H_0 : A_2B_2 = A_2B_1$ $H_a : A_2B_2 > A_2B_1$	2,737	2,032	Significant

4.2 Discussions
4.2.1 Students' Achievement in Descriptive Writing taught by Using Roundtable Teaching Technique is Higher than by Using Clustering Technique

The use of various teaching technique is very important for students. It also occurs in teaching writing from the data result it was concluded that roundtable teaching technique is higher than clustering teaching technique. Theoretically, roundtable is a technique which can be used for brainstorming, reviewing, or practicing skill while also serving as a teambuilder. Each group member has a designated turn to participate and make a written contribution to the group's project. The group has a writing prompt, task, or question (Kagan, 2009).

Reid (1993: 6) stated that clustering teaching technique is a type of prewriting that helps writers to generate, develop, and arrange the writer's ideas. It can be said that clustering helps the learners in developing their idea. The goal of clustering teaching technique is to determine the intrinsic grouping a set of unlabeled data. It can be shown that there is no absolute "best" criterion which would be independent of the final aim of the clustering.

In roundtable teaching techniques students work in group which it will be very helpful to shape and structure the students' writing and help students to make the linguistic choices in the students' writing. Every student will express their ideas freely; the multiple answers or ideas proposed by the member of group will encourage creativity and deeper thinking. This activity builds positive interdependence among team members because of the shared writing surface, but

more importantly, it builds team cohesion and reinforces the power of teamwork because students see in action the value of multiple viewpoints and ideas.

Furthermore, in roundtable technique, it advances the students' understanding of the subject matter. In addition, students learn how others write and learn, students learn how others reason and share different opinions. Besides, in roundtable, students work together to overcome disagreements.

Each techniques of teaching applied in the classroom have its own phenomenon which is interesting to be discussed in this point. The first is roundtable teaching techniques. In Roundtable the lecturer put the students in groups of three or four and each student in the group took out a piece of paper and wrote the question the lecturer told them to write on the top of the paper. The lecturer told them to begin and each student will write as many responses to the question as they can in the time the teacher gives. The lecturer will then say pass and the students will pass their list to the left and receive a new list from the right. It is important that the students do not repeat answers. There is absolutely no talking during this activity. Every members cannot express their ideas in the same range of time, there was one student can deliberately and spontaneously express his ideas in only a minute, while there was another students who wrote the ideas in more than two or three minutes. It was very surprising that the students were able not to repeat the answer. The process continued until all students get their own list back. The students are successfully did all the process begins with listing the ideas, passing the paper and until they finally choose five best ideas and wrote the whole text.

In contrast, the second technique is clustering teaching technique in which there is also phenomenon found in it. Clustering begins the center of a page (or on the blackboard) around which the students quickly jots down all of the free-associations triggered by the subject matter, using words or word phrases. By sharing their cluster patterns with others in the class, students can be exposed to a wide variety of approaches to the subject matter, which might generate further material for writing. Every student in the group could easily jot so many ideas in circles since they were free to write everything they can express everything as they want related to the topic (Lake Toba) without being worried of getting stuck in their prewriting activities. As the result they express or wrote so many ideas in their paper that they gets a little confusing in choosing the best or the most appropriate ideas to be used to write a complete text of descriptive writing.

From the explanation at the previous, empirically the achievement of students is their ability to generate ideas in composing a descriptive text. Empirical experience shows that students taught by roundtable teaching technique have higher achievement in descriptive writing. Based on the facts, it is concluded that roundtable teaching technique is more effective in improving students' achievement in descriptive writing.

4.2.2 Students' Achievement in Descriptive Writing between Students with Introvert and Extrovert Personal Traits

Students with extrovert or introvert significantly affect the product of their writing. And it will influence to how they interpret something, this will create different perspective to the same topic on the writing. As the result, the students' achievement in writing is influenced by the personal traits of the students. That is why introvert is better in writing than that of extrovert. It is because introvert is a subjective, sensing, thinking and judging type of person who is valuable characteristics of good writer.

Ditiberio (1989) stated that concerns to the ways of judging extrovert and introvert are distinguished into thinking versus feeling type. Extrovert person makes decision on the basis of principles and regards the process as highly objective, whereas the introvert person emphasizes the highly subjective nature of decision making and enters personal values into the process. Extrovert person presumably depend on structure in the composition process and are most likely to turn to mental or written outlines. The introvert person can overdo such structuring, worrying more about grammatical and logical format than about communication, they will write better when the topic interests them greatly.

In findings of this study indicate that introvert students are better in their achievement in descriptive writing that is shown by total mean of both personal traits on the average. In addition, the data analysis shows that students with introvert personal trait have higher achievement than students with extrovert personal trait. It means that students with introvert personal trait have higher achievement in descriptive writing than those students with extrovert personal trait.

4.2.3 The Interaction between Teaching Techniques and Students' Personal Traits on Students' Achievement in Descriptive Writing

From the research findings and hypothesis testing, it is known that there is significant interaction between teaching techniques and personal traits. The fact proves that teaching techniques and personal traits are two important points which significantly influence the students' achievement in descriptive writing. Schefee-test is calculated in order to know which samples interaction has better achievement in descriptive writing among the cells. The result indicates that students with introvert personal trait is worthy if it is matched with roundtable teaching method while students with extrovert personal trait is worthy if it is match with clustering teaching technique.

In addition, the roundtable teaching technique has higher achievement in descriptive writing because it is combined with the students having introvert personal trait. It is eligible combination because roundtable teaching technique is a powerful technique of writing encourages cooperation, critical thinking, peer learning and active participation toward an end product. There will be no talk during the discussion. Introvert person fulfill this characteristic, since introvert people are able to work independently. Until they finally come to group in order to revise idea, and put only the relevant elements of ideas. That's why this personal trait is suitable for roundtable teaching technique proven by the average score, 74.27

Meanwhile, the students who have extrovert personality taught by using clustering technique will be better in writing. Clustering teaching technique is a powerful technique of writing because it taps to the right brain of the writer which drives a creative idea. In jotting every idea, each students work by themselves. But, each member of the team can sometimes talk as they revise and choose the idea they're going to write. That's why this learning style is suitable for students with clustering teaching technique proven by the average score, 71.14.

From the result of calculation, it is known which sample interactions have better achievement in descriptive writing among the cells. It indicates that students with introvert personal trait taught by using roundtable teaching technique and students with extrovert personal trait taught by using clustering teaching technique have the most significant different among others. The students with introvert personal trait taught by roundtable teaching technique have better achievement in descriptive writing than students with extrovert personal trait by clustering teaching technique. In other word, students with introvert personal trait have better achievement

in descriptive writing if they are taught by using roundtable teaching technique while students with extrovert personal trait have better achievement if they are taught by using clustering teaching technique. As the result there is an interaction between roundtable and clustering teaching techniques and students' personal traits to the student's achievement in descriptive writing.

V. IMPLICATIONS, SUGGESTIONS AND LIMITATIONS

Based on the data analysis and the research findings, it is concluded that: The students' achievement in descriptive writing by using roundtable teaching technique is higher than that taught by using clustering teaching technique; The introvert of students have higher achievement than students with extrovert personal traits; There is significant interaction between teaching techniques and personal traits on students' achievement in descriptive writing. On the other words, it can be said that the students' achievement in descriptive writing is influenced by the teaching techniques and students' personal traits.

5.1 Implications

The students' achievement in writing descriptive text taught by using roundtable teaching technique is higher that taught by using clustering teaching technique. In this research, the techniques were matched with the students' personal traits. The research findings and discussion indicate that the students' achievement taught by using roundtable teaching technique is higher than by using clustering teaching technique especially when it is taught for students with introvert personal traits. It is because the students with introvert personal traits presumably depend on structure in the composition process and are most likely to turn to mental or written outlines. The thinking types can overdo such structuring, worrying more about grammatical and logical format than about communication.

However, it does not mean that the clustering teaching technique is not as good as roundtable teaching technique. It is proven that the students' achievement taught by using clustering teaching technique can also achieve satisfactory score when it is taught to students with extrovert personal traits. It is because the way of composing a text suited for students with extrovert personal traits. That's why clustering teaching technique is suitable to be applied for students with extrovert personal traits.

The fact explained above also proves that actually all the personal traits of the students are good. Either introvert or extrovert had been able to achieve satisfactory score. Therefore, it cannot be argued that a personal trait is better than others because it comes naturally in the students' selves. What should be done is how to find eligible techniques of teaching for the personal traits so that their ability can be explored maximally.

5.2 Suggestions

There are some suggestions related to the conclusions and implications at the previous page. The suggestions are:
a. It is highly suggested for lecturers to use roundtable and clustering teaching techniques since these two teaching techniques are able to improve students' achievement in reading comprehension.

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b. It is highly suggested for lecturers to use roundtable teaching technique for a classroom dominated by students with introvert personal traits while for class dominated by extrovert students, lecturers are recommended to use clustering teaching technique.
c. Teacher should realize that the students' characteristics such as their personal traits before choosing the teaching techniques. Thus, the teaching techniques applied are matched with what they need. As the result, their brightness is able to be explored maximally.
d. Other researchers may take a further research in the area Roundtable and Clustering teaching techniques that will improve students achievement in descriptive writing. While still many weakness of this research, for the other research who want to conduct these techniques, it is suggested to learn more about the principles of roundtable teaching technique and clustering's principles in the application.

5.3 Limitations

This research had been conducted well but there are some weaknesses of this research which are difficult to avoid. They are:
1. The treatments in this research have been done by the lecturers in the campus in which the researcher was not in the classrooms. Thus, it was not conducted well even though all the steps in each teaching techniques had been explained in detail to them.
2. The students' activities outside campus were not controlled so that it was presumed that the students had ever obtained the material such as from English course.

REFERENCES

[1]   Brown, H. D. (2007). *Principles of language learning and teaching*. Pearson Education.
[2]   Brown, S. (1998). Criterion-referenced assessment: what role for research. In Black, H. & Dockerell, W. New Developments in Educational Assessment. *British Journal of Educational Psychology*, Monograph Series No. 3, 1-14.
[3]   Friedman, S et al. (2010). *Writing the Critical Essay*. Greenhaven Press.
[4]   Handayani, S. (2012). *The Influence Of Roundtable Technique And Students' Intelligence On Students' Writing Skill (An Experimental Research On Descriptive Writing To The Tenth Grade Students Of Sma Negeri 1 Ngaglik, Sleman, Yogyakarta In The Academic Year Of 2011/2012)*. Surakarta: Universitas Negeri Semarang.
[5]   Henning, E. (2005). *Finding your way in academic writing*. Hatfield, Pretoria: Van Schaik Publishers1064 Arcadia Street.
[6]   Kagan, S. (2009). *Building character through cooperative learning*. Port Chester, NY: National Professional Resources, Inc.
[7]   Kane, T S. (2000). *Essential Guide to Writing; Step-by-Step Approach for Organizing and Completing Your Work*. New York: The Berkley Publishing Group Oxford University press.
[8]   Matthews, G et al. (2003). *Personality Traits*. University of Cincinnati University of Edinburgh: Cambridge university press.
[9]   Nunan, D. (2003). *Practical English language teaching*. Singapore: Mc Graw Hill.
[10] Raymond, C. (1980). *Writing (Is Unnatural Act),* New York: Harper & Row.
[11] Reid, J. M., (1993). *Teaching ESL writing.* New York: Prentice Hall Regents.

[12] Styati, E. W. (2010). *The Effectiveness of Clustering Technique to Teach Writing Skill Viewed from Students' Linguistics Intelligence (An Experimental Research on Descriptive Writing for the SecondSemester of English Department of IKIP PGRI Madiunin the Academic Year of 2009/2010)*. Surakarta: Universitas Sebelas Maret.

[13] Urquhart, V and McIver. (2005). *Teaching Writing in the Content Areas*. Aurora: McREL.

[12] Weigle, S. C. (2002). *Assesing Writing*. United Kingdom, Cambridge: Cambridge University Press.

[14] Zemach, D. E at al. (2009). *Academic Writing from Paragraph to Essay*. Cambridge: The Cambridge University Press. www.cambridge.org/9780521838801