

The impact of scientific and genre-based approach in english reading comprehension

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ABSTRACT (10PT)

The purposes of this study are to determine the more effective approach between: (1) the scientific and conventional approaches, (2) the genre-based and conventional approaches, (3) the scientific and genre-based approaches, (4) the scientific, genre-based and conventional approaches in the teaching of reading comprehension of narrative texts. The research was quasi-experimental with randomized pretest-posttest control group design. The results of the study showed that the implementation of scientific and genre-based approach in reading comprehension teaching leads to better reading comprehension ability of the students. The result proved that students were able to understand the items posttest of narrative texts after 12 meeting of treatments using those approaches and also there were significant difference after conducting treatments. It could be proved from the testing criteria of one-way ANOVA that the null hypothesis (H_0) was rejected and H_a was accepted if the value of p (probability) is lower than alpha 5% (0,05), the scientific approach is more effective than the conventional approach in the teaching of reading comprehension of narrative texts with the sig (p) ≤ 0.05 , the genre-based approach is more effective than the conventional approach in the teaching of reading comprehension of narrative texts, with sig (p) ≤ 0.05 , the scientific approach is more effective than the genre-based approach in the teaching of reading comprehension of narrative texts, with sig (p) ≤ 0.05 , and the scientific approach is the most effective of the three approaches under study. The findings revealed the great impact of scientific and genre-based approach, however probably is not significant if it is used in the other setting with the different background of the students.

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1. Introduction

Reading is a skill that always occupies a central position in the history of learning English (Sugirin, 2013, p.9). It is also stated by Nation (2009, p.8) that reading is a central activity in language activities, because it can improve other language skills such as listening, speaking, and writing that can provide useful and deliberate opportunities focus on language learning. Reading is an English skill that must be possessed by every student and is one of the activities that students need to develop early on to prepare students in every level of education. The ability of students' English reading comprehension is very important to develop. According to government regulations

Junior High School (SMP) students must be able to understand functional texts and text types in English in the school environment, understand the text structure and linguistic elements to carry out social functions. This can be seen in the English National Final Examination (UAN) questions, which almost all questions apply text with multiple choice answers so that junior high school students are really required to understand the texts. Hence, reading comprehension, especially text or English reading in junior high school, must always be trained.

Nunan (2003, p.74) believe that reading comprehension can be significantly enhance if the background knowledge can be activated by setting goals, asking questions, making predictions, teaching text structure, and so on. Students may need to begin the reading process by building up background knowledge. Therefore, it will make it easier the students for understanding English texts and also being easier analyzing each structures of sentence in the text. English reading habit should be improved and students must have a high motivation in reading English texts for helping them to improve their own vocabulary. The Ministry of Education and Culture's Research and Development revealed that the average of national examination results for English language subjects throughout Indonesia have decreased in recent years. It can be seen in one example of the decline in the results of the national examination.

Table 1. The average of English National Final Examination. (Kemendikbud, 2018)

The average of English National Final Examination	Number of School	Year
60.5	693	2016
55.15	693	2017
52.67	693	2018

Table 1 shows that the descent of the English national examination result. All the questions of English national examination are almost applying text with multiple choice answers, it explains that English reading comprehension is really necessary in order that students being able to answer English national final examination. It is also stated by Zuchdi (2008:22) that reading comprehension is the meaning acquisition from the written units being the broader units than words. It can be concluded that reading comprehension is one of the factors that must be mastered when someone read. Reading comprehension relate to the efforts and capability to remind the materials read and understand the important things in the texts.

English reading comprehension teaching have to be equalized with the teacher learning approach, thus the appropriate approach of English reading comprehension teaching is really necessary for improving students' reading comprehension in English texts, not only students' reading comprehension increases but also the teachers' teaching skills are also increasing, more creative and innovative in teaching and learning activities in the classroom. Some teacher are still applying traditional approaches for teaching and learning. That approach impacts the students' reading comprehension result, so the students have not fully understood their reading texts maximally. The appropriate approach of English learning can be applied in delivering materials to the students in order that students being able to understand the materials very well.

Furthermore, based on the previous study that investigated the implementation of scientific approach in the English learning teaching (Nugraha, 2017), focused on fostering the students' critical thinking and developing high thinking level of students' learning behavior using scientific approach. And also, the previous study about the effect of genre-based teaching on EFL learners' speaking performance found that the genre-based raised tasks significantly improved EFL learners' speaking performance (Khatibi, 2014). Thus, It actually has not been known yet the appropriate learning approach for reading comprehension teaching in the classroom using scientific and genre-based approach. There are some approaches that estimated applicable focusing on reading comprehension teaching, however this study focused on using scientific and genre-based approach. According to Gunning (2010:1), reading comprehension strategies are previewing, predicting, summarizing, visualizing, connecting and questioning. That strategies are conducted in the scientific approach (Nugraha, 2017) and Brookfiled (2012:131) also said that what critical reading is all about is assessing the accuracy and validity of a piece of work. This means that we will usually find aspects of research, philosophy, or theory that we dislike, disagree with, and find incomplete or

overly narrow in the reading comprehension process. Scientific approach can be said as simple method, with three step process, begin by carefully observing some part of nature, if something emerges that is not well understood, speculate how about its explanation, and then find some way to test those speculations. Each step, observing, explaining, and testing, is nicely illustrated by the historical event we have just described. According to Feez (2002:24-27), genre-based approach is based on three assumptions about language learning: learning language is a social activity, learning occurs more effectively if teachers are explicit about what is expected of students, and the process of learning language is a series of scaffolded development steps which address different aspects of language. Genre-based approach is the content of a text-based syllabus is based on whole texts which are selected in relation to learner needs and the social contexts which learners wish to access.

Statement of the Problem

An interesting classroom affects the successful of teaching learning process. In case of reading comprehension, teacher has not applied the appropriate approach for teaching learning activities, it effects lack of students' enthusiasm in reading comprehension English text. Students are still having difficulties to understand English text because of their low reading habit, their lack of vocabularies. Students are provided uninteresting topic of texts. Taking into consideration the shortcoming of that classes, this study investigates the effectiveness of scientific and genre-based approach in reading comprehension teaching. It also investigates which approach will be more effective between scientific and genre-based approach in reading comprehension teaching.

Research Questions

This study focuses on the effectiveness of scientific and genre-based approach in reading comprehension teaching on narrative text for grade VIII SMP Negeri 1 Muntilan. The following questions were designed to achieve the goals of the study, this research addressed the following questions:

1. Are there any significant differences among scientific, genre-based and conventional approach in reading comprehension teaching?
2. Is the scientific approach the most effective approach among genre-based and conventional approach in reading comprehension teaching?
3. Which approach is more effective between scientific and genre-based in reading comprehension teaching?
4. Which approach is more effective between scientific and conventional in reading comprehension teaching?
5. Which approach is more effective between genre-based and conventional in reading comprehension teaching?

Literature Review

Richards (2002:290) said that reading strategies, which include asking questions, making predictions, checking those predictions and summarizing or paraphrasing. Asking questions aim to guide based on the purposes for figuring out the answer related to the questions that appear when read the books. Predictions is to get the whole important content and context of the books. Checking those predictions is to separate the main thoughts from the whole of developing thoughts. Summarizing is the activity aims to arranging the information that have been achieved by written or spoken for remember the read information. In case of that reading teaching, teachers are expected assisted in reading learning planning effectively by creating kind of activities in the classroom, because teachers have the highest role to achieve the successful learning and teaching adjusted the students' needs and characteristics.

Schirmer (2010:11) stated that reading comprehension involves understanding what the author has written. Reading comprehension involves the comprehension towards what the author written. Nation (2009: 27) explained that reading comprehension is intensive reading that can aim at understanding a particular text. Reading comprehension is intensive reading that being able to guide understanding the texts. It is also agreed by Linse (2006:71) defined reading comprehension refers to reading for meaning, understanding, and entertainment. It involves higher-order thinking skills and

is much more complex than merely decoding specific words. Reading comprehension points to the meaning, comprehension and entertaining. Those things involve the higher and more complex thinking ability than reading words by words.

Zuchdi (2008:22) stated that reading comprehension is the meaning acquisition from the written units being the broader units than words. It can be concluded that reading comprehension is one of the factors that must be mastered when someone reads. Reading comprehension relates to the efforts and capability to remind the materials read and understand the important things in the texts. Reading comprehension is the constructive process in which the students create the meaning based on their knowledge. Deeper topics are developed as the basic knowledge and the student's capability for the increasing generalization. The topics will lead the students determine the important information. Including finding main ideas, identifying supporting details, comparing, constructing, noticing similarities and differences, inferring, predicting drawing conclusions, those are the keys for thinking skills, including the vocabularies as the main component as well in comprehension consciously developed. (Gunning, 2010: 1)

Reading comprehension skills are assumed in the top of order and in the class of higher order thinking. That aspects consist of understanding the simple meaning, the significant meaning, evaluation or research, the flexible reading speed based on the condition, mastering the vocabularies, familiar with the basic structure in the writing such as paragraphs and the language characteristics. Hence, reading comprehension is the process for interpreting what is read based on their own knowledge about the topics presented before. Brown (2001: 306-310) state that there are some strategies can be conducted in reading comprehension: identify the purpose in reading, use graphemic rules and patterns to aid in bottom up decoding (especially for beginning level learners, use efficient silent reading techniques for relatively rapid comprehension (for intermediate to advanced levels), skim the text for main ideas, scan the text for specific information, use semantic mapping or clustering, guess when it is certain, analyze vocabulary, distinguish between literal and implied meanings.

According to some experts stated in the literature review, reading comprehension concerns with higher order thinking, it means that the skill of higher order thinking must be conquered by students for achieving the good result when dealing with the reading comprehension. Scientific approach is the one approach that concerns dealing with higher order thinking skills which is asking questions, making predictions, checking those predictions and summarizing or paraphrasing, those are part of scientific approach. Scientific approach is the discipline and knowledge approach functionally dealing with some issues. Type of scientific approach is scientific method. Scientific method is the procedure that include some thought acts, work map, technique, the step for achieving the new knowledge or developing the current knowledge (Tim Dosen Filsafat Ilmu, 2007:128). In the teaching and learning process, scientific approach should be applied because this method often used by scientists. In some circumstances, according to Carey (2011:3), at the most basic level, scientific method is a simple three-step process. Begin by carefully observing some part of nature." If something emerges that is not well understood, speculate about its explanation and then find some way to test those speculations. Each step—observing, explaining, and testing—is nicely illustrated by the historical event we have just described.

Scientific approach is the scientific method which is consist of three simple process, started by investigating the issues, if there is something not understandable well, considering the clarification and finding out some ways to evaluate that considerations. Other steps are conducting the observations, presenting and assessing what already planned by giving some planned activities.

Scientific approach in reading comprehension also has been stated by ministry education law No. 65 2013 about the process standard for 2013 curriculum. All the school must be applied 2013 Curriculum including the independent schools. It is stated that the goals of teaching consist of attitude, knowledge and skill elaborated for every level education. There of those competences have the different psychological process. Attitude is achieved by the activities of accepting, doing, appreciating, understanding and applying. Knowledge is achieved by the activities of remembering, understanding, applying, analyzing, evaluating and creating. Skill is achieved by the activities of observing, questioning, trying, comprehending, applying and creating. The characteristic of competence and the difference of acquisition affect the characteristic of the process standard.

Strengthening the scientific approach, integrated thematic and thematic required being applied the learning based discovery or inquiry learning. Enhancing the students' ability to create the contextual work individually or as a group, so expected applying the teaching approach which is creating the master of piece by project based learning (Kemendiknas, 2013a:3). It can be concluded that scientific approach is the approach in English teaching learning especially reading comprehension by adopting the scientists' principles for investigating the issues by observing, questioning, exploring or experimenting, associating, and communicating. It's also agreed by Brookfield (2012:131), that what critical reading is all about is assessing the accuracy and validity of a piece of work. This means that we will usually find aspects of research, philosophy, or theory that we dislike, disagree with, and find incomplete or overly narrow. But we will also find aspects that seem to us well described, recognizable, and informative.

Other teaching approach can be applied in the reading comprehension teaching. One of them is genre-based approach. Genre is socially recognized ways of using language for particular purposes (Hyland, 2004:18). Genre is the ways to introduce language use socially for specific purposes. Genre determines the relation between language and the social environment itself, so it shows language as a system that has been used to express the meaning. Genre is the terminology for agglomerating the texts, re-explaining how the language use form to respond and repeat the certain situation. The conceptual of genre is based on the ideas for a community usually having difficulties to introduce the texts in which often used and being able to describe their own experiences by reading a text, understanding and written easily. The appropriate approach can be applied to implement genre is genre-based approach. According to Feez (2002:24-27), genre-based approach is based on three assumptions about language learning: learning language is a social activity, learning occurs more effectively if teachers are explicit about what is expected of students, and the process of learning language is a series of scaffolded development steps which address different aspects of language.

Genre based is the activities in the social environments and the well-collaboration between teacher and students and between one student and other students, so that the students learn how to interact through the activities in their own social environment. Genre-based approach is applied in the language teaching learning in order that the teaching learning more effectively if the teacher explain the language knowledge clearly as what the students expect. Genre-based is also the language teaching process in which applying a series of scaffolded development steps. In that development concept explained students and teacher have to collaborate and having the same right in the teaching learning process. Teacher helps students until they are independent in the teaching and learning process.

According to Hyland, Ahn (2012:4) says that, genres are as text types. The classification of genres as text types is reported to be particularly useful to both teachers and students as it provides a means of understanding different features of target genres. Genre is the text types in which explained to teacher and student in the understanding of text types. It aims to social objectives, concerning in the objectives of text type characteristic, interactive and sequence characters and also how the language collaborated systematically based on their contexts. Therefore, it can be concluded that applying genre-based approach not only to create the teaching products but also the teaching process. Genre-based concerns to social objectives as macro and not only as semantic micro in each words and sentences, but also generally for the wider social communication objectives. Each genre has number of characteristic; it makes different between one genre to other genre. Genre has specific objectives, the whole of grammatical, the form of linguistic specifically and share the culture knowledge each other.

Reading comprehension teaching applies cycles it is named teaching learning cycles or curriculum cycle. According to Feez (2001:28-31), the cycle of teaching learning consists of some levels; BKOF (Building Knowledge of Field), MOT (Modeling of Text), MOT (Modeling of Text), and JCOT (Join Construction of Text). Those cycles require applied in the reading comprehension teaching. Is is also stated by education ministry no. 68 2013 concerns that students of Junior High School must be able to understand the functional texts and text types in the school environment for conducting the social function (Kemendiknas, 2013b:63). Reading comprehension teaching, genre-based provide the students for understanding the texts.

Genre-based approach concerns the language teaching by applying text type having the strength because students will adjust the reading comprehension by understanding the texts based on the context. Furthermore, texts have been given being suited and guided based on the currents themes and topics. Genre-based approach lead students in the reading comprehension teaching belong to elements like joint construction and scaffolding (Feez, 2002:27). Joint construction leads students to discuss the English texts together and share the learnt information, knowledge and skill each other from the reading comprehension activities. Through scaffolding, teacher provides the self support to students by providing the explicit knowledge, leading, guiding students in the teaching learning practice, so teacher provide some real contributions to students not having understood yet correctly during discussion sessions and train the students being independents students Method.

2. Method

This study was *quasi-experimental* research. It was used to find out the effectiveness of scientific and genre-based approach in reading comprehension teaching of narrative text for at SMP Negeri 1 Muntilan. Furthermore, to find out which approach was more effective for reading comprehension teaching. It used *Randomized Pretest-Posttest Control Group Design*. There were three groups consist of two experimental groups and one control group. Each groups were provided pretest and posttest, experimental groups were provided some treatments, and control group was no treatments. For considering the groups, it used simple random sampling. The study was in SMP Negeri 01 Muntilan at jalan Pemuda No. 161 Muntilan Jawa Tengah. The school have not implemented scientific and genre-based approach in reading comprehension teaching

The population of the study is 144 students of eight grade SMP Negeri 1 Muntilan divided into six classes (A, B, C, D, D and E)

Table 2. The detail of the number of the eight grade students of Negeri 1 Muntilan

Classes	Number of students
VIII A	24
VIII B	24
VIII C	23
VIII D	24
VIII E	24
VIII F	23
Total number	142

The sample of the study was selected using simple cluster random sampling. The sample of the study was taken for from the six classes which classified into two experimental classes, one control class and one trial class, class C as the first experimental group, class D as the second experimental class, class B as the control class and class E as the instrument trial class. Technique was used to collect the data was test by providing multiple choice test about reading comprehension particularly narrative text. Test was provided twice in the pretest before treatments and posttest after treatments. The instruments of this study was test which formulated for assessing the students' reading comprehension in narrative text. The validity of the instrument used is content validity, which formulated based on the materials was taught. After conducting trial test, instruments were analyzed by QUEST program to assure the validity, by considering INFIT MNSQ within 1,00 (the criteria is 0.77-1.30) and INFIT T 0,18 (the criteria -2,00-+2,00). It showed that the instruments of reading comprehension in narrative text was good in pretest and posttest. It fit with the model.

The item test was analyzed by QUEST for finding the reliability. The reliability of pretest instrument was 0,84 and posttest was 0,82. It showed that the reading comprehension test for pretest and posttest having the high coefficient. If the value of coefficient reliability is getting higher which means the items was reliable for conducting the research. The study used IRT (Item Response Theory) for analyzing the items by using 1 measurement, named 1-PL or Rasch Model with the criteria limit <-2,0 or > +2,0 ANOVA followed by Scheffe test. Before analyzing the data using that technique, the data must be tested using the test of analysis requirements, normality and homogeneity of variance test.

The normality test used Kolmogorov Smirnov test with the level significance is 5% ($\alpha = 0.05$) using SPSS 17.0 for windows. If the value of probability (p) is lower than $\alpha = 0.05$, the data are not in normal distribution. On the other hand, If the value of probability (p) is higher than $\alpha = 0.05$, the data will be in normal distribution. It showed that the value of probability for pretest and posttest of experimental and control groups were in normal distribution.

This study conducted the homogeneity of variance test to find out whether or not the samples researched have equal variance. To find out whether or not the three variables have equal variance, the data are analyzed using one-way analysis of variance (one-way ANOVA) by seeing the probability (sig) of levene statistic on the test of homogeneity of variance with SPSS 17.0 for windows. If the value of probability (p) obtained is lower than the level of significance ($p < 0.05$), the three variables do not have equal variance. On the other hand, if the value of probability (p) obtained is higher than the level of significance ($p > 0.05$), the three variables have equal variance. The technique used to analyze the data is one-way analysis of variance (one-way ANOVA). The testing criteria of one-way ANOVA is that the null hypothesis (H_0) is acceptable if the value of p (probability) obtained is higher than alpha 5% (0,05). On the other hand, the null hypothesis (H_0) is rejected if the value of p (probability) is lower than alpha 5% (0,05).

3. Findings and discussion

Tests of analysis requirements showed the normality test and homogeneity of variance test followed by ANOVA for pretest could be shown in table 3, 4 and 5. The complete test results was in the appendix.

Table 3. The result of the normality test of the pre-test of reading comprehension of narrative text.

Class	Kolmogorov -Smirnov Z	Asymp. Sig. (2- tailed)
Experimental 1 (Scientific)	0,984	0,287
Experimental 2 (Genre- Based)	0,712	0,692
Control	0,699	0,712

Based on the test of analysis requirements, it was concluded that the data of the pre-test of experimental class 1, experimental class 2 and control class were on the normal distribution, where p is higher than $\alpha = 0.05$ ($p > 0.05$).

The homogeneity of variance test used in this study is levene statistic with SPSS 17.0. The result of the homogeneity of variance test is presented in the following table 4 and the complete test result was on the appendix.

Table 4. The result of the Homogeneity *Pretest* of reading comprehension of narrative text

Variabel	Levene's Test for Equality of Variance	
	F	Sig
Reading Comprehension of Narrative text	1,903	0,157

Table 4 showed that the value of p (probability) on levene test was 0,157 higher than $\alpha = 0.05$ ($0.550 > 0.05$). it meant that there was no difference in the value of variance of all the variables.

The result of the equal pretest using ANOVA showed F was 0,501 and probability (p) $> 0,05$ was 0,608, it showed there is no significant difference among experimental class 1, experimental class 2 and control class. Therefore, it was concluded that experimental groups and control group have equal condition before giving the treatment.

Table 5. The result of ANOVA Pretest

ANOVA Skor	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Between Groups	139.498	2	69.749	.501	.608
Within Groups	9466.812	68	139.218	.501	.608
Total	9606.310	70			

After the groups had equal condition before giving the treatment. Experimental group 1 was given some treatments using scientific approach in reading comprehension of narrative text, experimental group 2 was given genre-based approach in reading comprehension of narrative text and control group was no give any treatments. Then, after giving some treatments, students were provided posttest about reading comprehension of narrative text. Posttest was analyzed by using ANOVA one way followed by Scheffe test. However, before conducting posttest, must be conducted the test of analysis requirements which is normality test and The homogeneity of variance test among three groups. The normality test used Kolmogorov-Smirnov. It could be shown in the table 6.

Table 6. The Result of the Normality Test of Posttest

Class	Kolmogorov-Smirnov Z	Asymp. Sig. (2-tailed)
Experimental 1 (Scientific)	1,005	0,265
Experimental 2 (Genre-Based)	0,791	0,558
Control	0,731	0,659

Table 6 presented that all the classes were on the normal distribution, where p is higher than $\alpha = 0.05$ ($p > 0.05$). The homogeneity of variance test among three groups was concluded in the table 7.

Table 7. The Result of homogeneity of variance Test of Posttest

Variabel	Levene's Test for Equality of Variance	
	<i>F</i>	<i>Sig</i>
Reading comprehension of Narrative text	0,739	0,482

The result of the *lavene* in the table 7 was $p \geq 0,05$ it meant that H_0 was rejected. It could be concluded that there was no difference in the value of variance of all the variables.

The result of the equal posttest using ANOVA showed F was 0,501 and probability (p) $> 0,05$ was 0,608, it showed there is no significant difference among experimental class 1, experimental class 2 and control class. Therefore, it is concluded that experimental groups and control group have equal condition before giving the treatment.

The result of ANOVA, there were significant difference among the use of scientific, genre-based and conventional approach for improving reading comprehension of narrative text could be shown in the table 8.

Table 8. The Result of ANOVA Posttest

ANOVA SKOR	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
Between Groups	2327.881	22	1163.940.940	24..989	.000.000
Within Groups	3027.590	65	46.578.578		
Total	5355.471	67			

Based on the table 8, the result of ANOVA wit F was 24,989 and (p) $\leq 0,05$. Therefore, the use of scientific, genre-based and conventional approach for improving reading comprehension of narrative text having different significant for improving reading comprehension of narrative text, followed by *Scheffe* test to decide which the most effective approach implemented.

Table 9. The Result of *Scheffe* Test
Multiple Comparisons

SKOR Scheffe							95% Confidence Interval	
(I) PENDEKATA N	(J) PENDEKATAN	Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound		
1 Scientific	2 Genre-Based	7.34058*	1.99146	.002	2.3515	12.3297		
	3 Konvensional	14.55487*	2.05989	.000	9.3943	19.7154		
2 Genre-Based	1 Scientific	-7.34058*	1.99146	.002	-12.3297	-2.3515		
	3 Konvensional	7.21429*	2.03931	.003	2.1053	12.3233		
3 Konvensional	1 Scientific	-14.55487*	2.05989	.000	-19.7154	-9.3943		
	2 Genre-Based	-7.21429*	2.03931	.003	-12.3233	-2.1053		

^{a.} *. The mean difference is significant at the 0.05 level.

Based on the table 9, it could be concluded that there were the significant differences among scientific, genre-based and conventional approach for improving reading comprehension of narrative text. Scientific approach was the most effective approach among genre-based and conventional approach.

Hypothesis Testing 1

There were significant differences among scientific, genre-based and conventional approach for reading comprehension teaching of narrative text. The testing criteria is that the null hypothesis (H₀) was rejected and H_a was accepted. It showed in table 9, with mean difference was 14,55487 and probability (p) ≤ 0,05, so H₀ was rejected and H_a was accepted. It meant that there were the significant differences of reading comprehension teaching of narrative text among scientific, genre-based and conventional approach.

Hypothesis Testing 2

Scientific approach was the most effective approach among genre-based and conventional approach for reading comprehension teaching of narrative text. It was shown in the table 9 with mean difference was 14,55487 and probability (p) 0,003 ≤ 0,05, so H₀ was rejected and H_a was accepted.

Hypothesis Testing 3

There was significant difference between scientific and genre-based approach for reading comprehension teaching of narrative text. The result could be shown in the Scheffe test in table 9 with mean difference was 7,34058 and probability (p) 0,002 ≤ 0,05, so H₀ was rejected and H_a was accepted.

It was concluded that scientific approach was more effective than genre-based approach.

Hypothesis Testing 4

There was significant difference scientific and conventional in reading comprehension teaching of narrative text. The result could be shown in the Scheffe test in table 9 with mean difference was 14,55487 and probability (p) 0,002 ≤ 0,05, so H₀ was rejected and H_a was accepted. It was concluded that scientific approach was more effective than conventional approach.

Hypothesis Testing 5

There was significant difference genre-based and conventional in reading comprehension teaching of narrative text. The result could be shown in the Scheffe test in table 9 with mean difference was 7,21429 and probability (p) 0,002 ≤ 0,05, so H₀ was rejected and H_a was accepted. It was concluded that genre-based approach was more effective than conventional approach.

Discussion

Students requires reading comprehension ability to get the information and to understand the content and meaning such text. Understanding English text requires English vocabulary mastery and understanding the grammatical. Reading comprehension is necessary improved for preparing the students dealing with English final examination named Ujian Akhir Nasional (UAN) which is almost the items utilizing texts with multiple choice answer in order that the students of junior high school is demanded to understand the texts. Reading comprehension is not only reading an English texts but also understanding the context of the text, in order that the students get the new information, meaning and context from the comprehension process. Solving that problems, the teachers must the special treatments for improving students' motivation and interest joining reading comprehension in the school. Teacher should implement the appropriate approach creatively, innovative and fun, helping students for getting the new information from the text they have. By utilizing scientific and genre-based approach as the approach with some kind of interesting methods.

Learning teaching approach has the positive effects for reading comprehension ability consciously or unconsciously. Generally, the result of observation in the experimental classes showed there were any improvement of enthusiasm and motivation toward students with 12 meetings. Students showed their intention by following the learning process and doing some assignment well. Students began understanding the text by digging out topic of the text, themes, implicit and explicit information. The teaching learning process of control class was conducted as usual.

The significant differences among scientific, genre-based and conventional approach in reading comprehension teaching of narrative text

Based on the *scheffe* result, there were significant differences among scientific, genre-based and conventional approach for reading comprehension teaching of narrative text. The testing criteria is that the null hypothesis (H_0) was rejected and H_a was accepted. It showed in table 9, with mean difference was 14,55487 and probability (p) $\leq 0,05$, so H_0 was rejected and H_a was accepted. The finding of the study is consistent with the objective of teaching approach of reading comprehension. New approach must be implemented to improve students' ability particularly reading comprehension. By implementing some approach, teacher understood what approach or methods should be implemented based on the students' ability, needs and interest. After implementing scientific and genre-based approach as the new method of reading comprehension teaching in SMP Negeri 1 Muntilan, there were significant difference result among experimental classes and control class.

The scientific approach the most effective approach among genre-based and conventional approach in reading comprehension teaching of narrative Text

Scientific approach was the most effective approach among genre-based and conventional approach for reading comprehension teaching of narrative text. It was shown in the table 9 with mean difference was 14,55487 and probability (p) $0,003 \leq 0,05$, so H_0 was rejected and H_a was accepted. The finding of the study was consistent of the objective of scientific approach by observing, explaining, and testing is nicely illustrated by the historical event just described. Scientific method is a simple three-step process. Begin by carefully observing some part of nature. If something emerges that is not well understood, speculate about its explanation and then find some way to test those speculations Carey (2011:3). This approach proved that scientific approach having special treatments for reading comprehension teaching. Students was lead to have higher order thinking, it was unconsciously enhancing their curiosity. By implementing scientific method in the teaching learning activities, students were dealing with the process of observing the texts, questioning the texts, exploring the texts, associating the texts and communicating the texts. It helped students to dig out the texts they have.

The effectiveness between scientific and genre-based in reading comprehension teaching of narrative text

There was significant difference between scientific and genre-based approach for reading comprehension teaching of narrative text. The result could be shown in the *Scheffe* test in table 9

with *mean difference* was 7,34058 and probability (p) $0,002 \leq 0,05$, so H_0 was rejected and H_a was accepted.

It was concluded that scientific approach was more effective than genre-based approach. It was proved that scientific approach helped the students for investigating the problems by analyzing the texts, if there was something not understandable, considering some considerations and finding out some ways to assess those considerations or by doing observation to strengthen the descriptions.

The effectiveness between scientific and conventional in reading comprehension teaching of narrative text

There was significant difference scientific and conventional in reading comprehension teaching of narrative text. The result could be shown in the *Scheffe* test in table 9 with *mean difference* was 14,55487 and probability (p) $0,002 \leq 0,05$, so H_0 was rejected and H_a was accepted. It was concluded that scientific approach was more effective than conventional approach.

The effectiveness between genre-based and conventional in reading comprehension teaching of narrative text

There was significant difference genre-based and conventional in reading comprehension teaching of narrative text. The result could be shown in the *Scheffe* test in table 9 with *mean difference* was 7,21429 and probability (p) $0,002 \leq 0,05$, so H_0 was rejected and H_a was accepted. It was concluded that genre-based approach was more effective than conventional approach. It strengthened that genre-based approach helping students for reading comprehension of narrative text. It focused on the reading comprehension of text type. It had some benefits, because students have reading comprehension process based on the context of the texts. Furthermore, students were provided the texts based on such current topics or themes in their own social life.

4. Conclusion

The fundamental objectives of scientific and genre-based approach are to prepare the students understanding the texts particularly improving reading comprehension ability for the students. This study investigated the effects of scientific approach and genre approach in reading comprehension teaching to improve the students' reading comprehension ability. According to the findings of this research, implementing scientific and genre-based approach in reading comprehension teaching leads to better reading comprehension ability of the students. The result proved that students understand the items posttest of narrative texts after 12 meeting of treatments using those approaches. And also there were significant difference after conducting treatments. However, the impact of scientific and genre-based approach probably is not significant if it is used in the other setting with the different background of the students. Although there is no general consensus about the positive role of one specific form of scientific and genre based approach, applying those approaches for reading comprehension teaching can optimize the efficiency of teaching.

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