The Effect of the Contextual, the Problem-Based, and the Group Investigation Learning Models on the Short Story Appreciation Ability Viewed from the Verbal Linguistic Intelligences

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ABSTRACT

The objectives of this research are investigate: whether or not there is a difference in the short story appreciation ability among the groups of students instructed with the contextual teaching and learning (CTL), the problembased learning (PBL), and the group investigation learning (GI) models; whether or not there is a difference in the short story appreciation ability between the students with the high verbal linguistic intelligence; and whether or not there is an interaction of effect between the learning models and the verbal linguistic intelligences on the short story appreciation ability.

This research used the experimental research method with the factorial design of 3x2. Manipulations were done to the variables of the learning models. The experimental groups were exposed to special treatments; the group was instructed with the Contextual Teaching and Learning, problem-based learning, and GI models. The experimental groups also differentiated into the students with the high linguistic verbal intelligence and those with the low verbal linguistic intelligence. The population of the research was the students in Grade V of Nationally Standardized Primary Schools of the Office of Education and Culture of Central Java province in Academic Year 2011/2012. The samples of the research were the students in Grade V of 15 Primary Schools in five regencies/cities as many as 530 students. The samples of the research were taken by using the multi stage area random sampling technique. The data of the short story appreciation ability as well as those of the linguistic verbal intelligences were collected through tests. The data were validated by using expert judgment, and their reliability was tested by using Kuder –Richardson (KR-20)'s formula. They were then presented tables and graphs and analyzed by using the two-way analysis of variance.

The results of the research are as follows. 1) The short story appreciation ability of the students instructed with the contextual teaching and learning (CTL) model is better than that of the students instructed with the problembased learning (PBL) model and that of the students instructed with the GI model. In addition, the short story appreciation ability of the students instructed with the PBL model is as good as that of the students instructed with the GI model. 2) The short story appreciation ability of the students with the low linguistic verbal intelligence is better than that of the students with the low linguistic verbal intelligence. 3) There is an interaction between the learning models and the linguistic verbal intelligences. The short story appreciation ability of the students with the high linguistic verbal intelligence instructed with the CTL model (A_3B_2) is better than both those instructed with the PBL model (A_2B_2) and those instructed with the GI model (A_1B_2). In addition, the short story appreciation ability of the students with the low linguistic verbal intelligence instructed with the PBL model (A_2B_1) is as good as that of the students instructed with the GI model (A_1B_1).

Keywords: Learning model, contextual, problem-based, group investigation, short story appreciation ability, and linguistic verbal intelligence

1. Introduction

Learning to be a good teacher at present time needs a long and complex but exciting process. Talking about the learning process, many educational managements are increasingly aware of the importance of the learner-centered learning approach. The prevailing teacher-centered approach is regarded as an old-fashioned one and needs to be changed (Ching and Gallow, 2000) in which the learning process is centered on the teacher, the learning is merely emphasized on the coverage and delivery of the learning materials, but the learners are left less active.

The way how a learning process is conducted will very much influence the learners on how to educate themselves. Bruce Joyce et. al (2009: 7) claim that a successful teacher is not the one who is charismatic and persuasive, but the one who involves the students in the tasks bearing cognitive and social contents, teaches them how to accomplish the tasks productively. We can take an example that although it is necessary for the students to learn how to lecture clearly and fluently, they shall study something from the lecture. A successful educator will always teach the students how to absorb and master the information generated from his or her explanation. Meanwhile, Effective learners shall be able to describe the information, ideas, and wisdoms of their teachers and use the learning resources effectively. Therefore, the main role of teaching is to produce powerful learners.

The learners need more than what we can give through the use of a learner-centered approach that is able to equip them with competency, knowledge, and a series of skills that they need from time to time. Conversely, when they remain passive learners through the use of a teacher-centered approach, they are difficult to develop their thinking, interpersonal, adaptive skills well.

According to Tan (2004), an idea that a teacher is most authorized of certain knowledge shall be changed nowadays. With the prompt development of information and communication technology such as internet, the knowledge is relatively easy to attain. Thus, the teacher is not the only person who has the knowledge resource. The students are easy to get knowledge that is not found in textbooks or in their handouts.

Based on the aforementioned background, the problems of the research are formulated as follows:

- (1). Is there any difference in the short story appreciation ability among the students instructed with the CTL model, the problem-based model, and the group investigation model?
- (2). Is there any difference in the short story appreciation ability between the students with the high verbal linguistic intelligence and those with the low verbal linguistic intelligence?
- (3). Is there any interaction of effect of the CTL model, PBL model, and GI model on the short story appreciation ability?

2. Theoretical Review

An adequately complete definition of short story is given by Edgar Allan Poe as quoted by Hudson (1953: 328). He claims that a short story is a prose narrative "requiring from half an hour to one or two hours in its perusal. Putting the same idea into different phraseology, we may say that a short story that can be easily read a single sitting. Yet while the brevity thus specified in the most obvious characteristics of the kind of narrative in question, the evaluation of story into a definite types has been accompanied by the development also of some fairly well- marked characteristics of organism. A true short story is not merely a novel on reduced scale, or a digest in thirty pages of matter which would have been quite as effectively or even more effectively handled in three hundred.

Referring to the statement, short story can be defined as a story in the form of prose that needs half an hour or an hour for readers to read it. In other words, we can argue that short story is a story which is easy and needs short time to read. However, such characteristics, that is, short and requiring not much time to read, have changed. The changes are along with the development of several characteristics of short story organisms. The real short story is not merely a novel in a small size or a summary of thirty pages which is as effective as or probably more effective to read than the novel of 300 pages. In other part of his writing, Hudson claims that "a short story must contain one and only are informing idea, and that this idea must be worked out to its logical conclusion with absolute singleness of aim and directness of method(1953:339)"

Short story is viewed as a literary work which has been written much up to the last current period. It is the most flexible to be presented in newspapers, in magazines or in short story collections. Currently, short story reading art occurs, which is pioneered by Putu Wijaya. This makes short story more popular. Several publishers have published the best short story collections for a certain year. Publishing companies such as Kompas and Gramedia have published the best short story collections for a year during the last 10 years. The short story anthology has also been arranged by Satyagraha Hoerip, Pusat Bahasa, Corrie Layun Rampan, and Pamusuk Enester.

The elements which build a short story are the same as those which build a novel. The similarities are shown by the following.

(1) Plot

The plot of short story is generally single, consisting of one series of events, until the story ends (not until the story is completed as many short stories including novel do not contain a clear completion, and the completion of the short story is given to the readers to interpret).

(2) Theme

Because of its shortness, short story only contains one theme. This is due to the single plot and the limited number of characters.

(3) Characterizations

The number of characters particularly the main characters involved in novels and short stories is limited. Compared to those in novels, the characters in short stories in terms of number of characters and data of the identity of the characters particularly the characterization are limited so that the readers must construct on their own the more complete descriptions of the characters.

(4) Setting

The description of settings of a short story does not require special details on the condition of the settings such as those related to the place and social conditions. Short story merely requires an outline description or an implicit description, which is able to give a certain atmosphere intended. However, a good short story

will only describe certain details deemed necessary. When the setting has rumbling depictions, it will precisely be felt boring, and its tension level decreases.

(5) Unity

A good short story should fulfill unity criteria, meaning that everything is told should support the main theme. The appearance of various events which follow one another and form a plot, although out of order, must be interrelated, which offers a unified world.

2.1 Phases for Short Story Appreciation

Appreciating a short story is a part of Indonesian literature appreciation learning. Syafii (1993:68) claims that the objective of the Indonesian language appreciation learning is to improve the students' Indonesian language appreciation ability. The definition of the literature appreciation ability is the one to recognize, understand, live up, enjoy, and appreciate Indonesian literature work.

- The phases taken by the teacher and the students in the short story appreciation learning are as follows:
- (1) The teacher gives a general explanation on the short story appreciation learning.
- (2) The students together with the teacher discusses the ways to understand and appreciate short stories, which include: 1) the background of short story creation, 2) information of author's autobiography, 3) form of structure (building elements) of short story which includes: theme, plot, character and characterization, setting, point of view, language style.
- (3) The students are asked to read a short story to understand the content and to feel and enjoy its beauty.
- (4) The students are asked to express their opinions in writing about the short story they have read in terms of the following:
 - a) The main issue conveyed by its author
 - b) The series of events in the short story
 - c) The main characters and their characterizations
 - d) The language use
 - e) The places where the events take place in the story, time, and atmosphere.
- (5) The students in turn read their opinions in front of the class.
- (6) The teacher and the students give responses to the opinions expressed by the students.
- (7) The teacher asks the students to write a simple short story in their own language. In this phase, in order that the theoretical concepts related to the definition of short story, the structure of short story (theme, plot, character, and characterization), and the language style of short story can be understood easily by the students, the teacher needs to give explanations by using the short story he or she reads for the students.

2.2 The Definition of the CTL model

Learning and Contextual Teaching and Learning have currently become one of the hot topics in the educational world. Strangely, there has not been any comprehensive guideline on the contextual teaching and learning which accurately explains what the contextual teaching and learning is, and why it is successful. It is important for us to see how a new point of view arising from the science is and changes our attitudes on education.

There are three principles in the contextual teaching and learning, namely: interdependence, differentiation, and self-regulation (Capra, 1996. Johnson and Brown, 2000; Margulis and Sagan, 1995, Swimmie and Berry, 1992). these are not merely an abstraction but the principles are to regulate and support everything including all of the life system as proposed by Greenfield:

- 1) Interdependence principle: Interdependence principle means cooperation. The students are helped in determining the problem, designing plan, and searching for problem-solving. Cooperation will help them to know that listening to each other will guide them to their success.
- 2) Differentiation principle: The word of differentiation refers to continuous encouragement from the universe to result in a limited diversity, difference, and uniqueness.
- 3) Self-regulation: This principle is the self-organization to support the brain ability to learn to remember, be worried, be proactive, and regulate behavior so that it results in a different self (Johnson, 2009:68).

	Phase	Teacher's Behavior
Phase I	Giving orientation on the learning to the students	- Develop ideas that the students will learn meaningfully by working on their own, finding on their own, and reconstructing their new knowledge and skills on their own.
Phase II	Organizing the class (into many groups) so that it is alive	 Conduct as far as possible the inquiry activities for all topics
Phase III	Motivating the students to be more dominant	 Develop the curiosity of the students by raising questions
Phase IV	Encouraging the students more communicative	- Create "learning community" (learning in groups)
Phase V	Being oriented to learning environment of the students	- Present "model" as a learning example
Phase VI	Developing the effective learning result	- Conduct reflection at the end of the class
Phase VII	Analyzing and evaluating the learning process	- Hold the actual evaluation through various ways

Table 1: The Phases of the CTL model

2.3 The Definition of the PBL model

According to Orhan Akinoglu and Ruhan Ozkardes Tondogau (2007) problem-Based Learning (PBL) is a method of learning in which students first encounter a problem, followed by a student-centered inquiry process (Neufeld & Barrows, 1974, Schmidt, 1993, Boud & Feletti, 1997, Barrows, 2000). Both content and the process of learning are emphasized in PBL. Many variants of PBL have evolved during the past 30 years and yet its essential elements have remained relatively constant. Axiomatic to PBL is that the problem comes first without advance readings, lectures, or preparation, serving as a stimulus for the need to know. Typically, five to eight students work collaboratively in a group (tutorial), together with one or more faculty facilitators (tutors), to identify and define problems, develop hypotheses to explain the problem(s), and explore preexisting knowledge relevant to the issues.

Problem-based learning is a learning method in which the students first encounter problems, and this is followed by the investigation process which is centered on the students (Neufeld & Barrows, 1974, Schmidt, 1993:422-432, Boud & Feletti, 1997, Barrows, 2000:13-25).

The PBL model can be defined as the learning activities which emphasize on the problem-solving process which is encountered scientifically. There are three characteristics of the problem-based learning. First, the problem-based learning is a series of learning activities, meaning that in its implementation, there are some activities that the students must conduct. This learning model does not expect that the students merely listen, write, and then memorize the learning materials, yet the students become active to think, to communicate, to search for or to process data, and finally to draw conclusion. Secondly, the learning activities are directed to problem-solving. The problem-based learning places the problem as the keyword of the learning process, meaning that without problem(s), there is not a learning process. Thirdly, the problem is solved through scientific thinking approach. Thinking with scientific method is a deductive and inductive thinking process. This thinking process is done systemically and empirically. The former means the scientific thinking is done through phases, and the latter means that the problem-solving is based on the accountable data and facts.

	Table 2: T	ne Phases	of the F	BL model
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		Phase	Teacher's Behavior		
Phase 1	:	Giving the orientation on the	The teacher discusses the learning objectives, and		
		problem(s) to the students	describes and motivates the students to get involved in the		
			problem-solving activities		
Phase 2	:	Organizing the students to conduct	The teacher helps the students to define and to organize		
		research	the tasks related to their problems		
Phase 3	:	Helping independent or group	The teacher helps to encourage the students to get		
			appropriate information to conduct experiments and to		
			search for solutions.		
Phase 4	:	Developing and promoting the	The teacher helps the students to plan and to prepare the		
		results	appropriate results and helps them to extend to others		
Phase 5	: /	Analyzing and evaluating the problem-	The teacher helps the students to conduct reflection on the		
		solving process	investigation and process they have done.		

2.4 The Definition of the GI model

a. Definition

The group investigation method was designed by Harbert Thelen (Sugiyanto, 2010:46), and then expanded and improved by Sharn et.al. from Tel Aviv University. The group investigation is frequently seen as the most complex and difficult to be implemented in the cooperative learning. Compared to the contextual teaching and learning and the problem-based learning, the GI model involves the students as of the planning such as determining the topic and the way(s) to learn it through investigation. This model demands the students to have good communications and group process skills. In the GI model, the class is generally divided into many groups, and each group consists of four to five students with heterogeneous characteristics. The grouping can also be based on the pleasure of friendship or the same interest on a certain topic. The students have a topic which is probably learnt according to the in-depth investigation on the various chosen topics, and then prepare and present a comprehensive report in front of the class.

Daniel Zingaro (2008:74) defines the group investigation as follows: In GI, students form interest groups within which to plan and implement an investigation, and synthesize the findings into a group presentation for the class [2]. The teacher's general role is to make the students aware of resources that may be helpful while carrying out the investigation. GI includes four important components (\the four I's"): investigation, interaction, interpretation and intrinsic motivation. Investigation refers to the fact that groups focus on the process of inquiring about a chosen topic. Interaction is a hallmark of all cooperative learning methods, required for students to explore ideas and help one another learn. Interpretation occurs when the group synthesizes and elaborates on the findings of each member in order to enhance understanding and clarity of ideas. Finally, intrinsic motivation is kindled in students by granting them autonomy in the investigative process.

This means that the group investigation forms the groups of students with certain interests, which are then planned, investigated, and synthesized the presentations of class groups. The primary role of the teacher is to make the students aware of having resources that can help them during the investigation. The group investigation has four important components, namely: investigation, interaction, interpretation, and intrinsic motivation. Investigation refers to the fact that the groups focus on the process of raising questions of a chosen topic. Interaction is opinion of all the cooperative learning methods required by the students to explore the ending of each member in an attempt to improve the understanding and the clarity of ideas. Finally, intrinsic motivation lights up on the students by giving them autonomy in the investigation process.

b. The Objectives and Assumptions of the GI model.

The assumptions which underlay the development of the cooperative learning model of the group investigation according to Bruce Joyce, et al. (2009: 302) are as follows:

- 1) The improved synergy in the form of cooperation will improve the motivation which is much bigger than that of the competitive individual environment. The social integrative groups have a larger influence than those formed in pairs. Feelings of connectedness results in a positive energy.
- 2) The members of the cooperative groups can learn from each other. Each learning will have larger assistance than the learning structure which causes isolation between one student and the other students.
- 3) The interaction among the members will result in cognitive aspects such as social complexity; create an intellectual activity that can develop the learning when it is collided with the single learning.
- 4) Cooperation will improve the positive feelings to one another, diminish isolation and seclusion, build a relation, and give a positive view on other people.
- 5) Cooperation improves self-esteem not only through the learning which must develop but also through the feelings of being respected and appreciated by other people in an environment.
- 6) The students experiencing and undergoing task fulfillment as well as feeling to have to cooperate can improve their capacities to cooperate productively. In other words, when the number of students to get opportunities to have cooperation is larger, they will increasingly adept in the cooperation. This will be very useful for their social skills in general.
- 7) The students including children can learn from exercises to improve their cooperation ability.

Table 3: The Phases of the GI model First Phase Second Phase The students are confronted with a condition which is full of The students explore reactions against the puzzles and which is confusing (either planned or unplanned) situation Third Phase Fourth Phase The students formulate the tasks and regulate the lesson (in terms Independence and learning group of definition, role, task, etc.) Fifth Phase Sixth Phase The students analyze the progress and process. recycling the activities

2.5 Verbal Linguistic Intelligence

According to Gardner (Moleong, 2004: 44-47, Muslihudin & Agustin, M. 2008: 62-63), verbal linguistic intelligence is the ability to talk, to use language, and to use words effectively. The verbal linguistic intelligence in the children refers much more to their ability to arrange a clear thought and are able to use this clear thought competently through words to express their thought through, speaking, reading, and writing (Lewin, 2005: 11, Muslihudin & Agustin, M. 2008)

The verbal linguistic intelligence is the ability of children to process the language, have alertness in understanding structure, meanings, and language use either in a written form and in spoken form (the children usually are very fast in memorizing new words, like to tell a story, have a big curiosity upon new things etc.)

The Characteristics of the Verbal Linguistic Intelligence

The children with the verbal linguistic intelligence (Muslihuddin & Agustin, M. 2008: 63) are indicated by their activities as follows:

- a. Like to tell a story or to spin s yarn
- b. Very fast to learn through the use of new words
- c. Love to read
- d. Love stories and poems
- e. Very easy to memorize song lyrics and like to sing simple songs
- f. Spell the words easily and accurately
- g. Posses more vocabulary and more extended vocabulary than his/her peers
- h. Like to talk before his/her peers
- i. Enjoy playing with language of sounds
- j. Love to play with the language of sounds
- k. Like the play with fingers.

2.6 Framework

- 1. The difference of the short story appreciation ability of the students instructed with the CTL model, those instructed with the PBL model, and those with the GI model.
- 2. The difference of the short story appreciation ability of the students with the high verbal linguistic intelligence and those with the low verbal linguistic intelligence.
- 3. The interaction of effect between the learning models and the verbal linguistic intelligences on the short story appreciation ability.
- a. The short story appreciation ability of the students instructed with the GI model and with the verbal linguistic intelligence is better than that of the students instructed with the group investigation model and with the low verbal linguistic intelligence.
- b. The short story appreciation ability of the students instructed with the problem-based learning and with the low verbal linguistic intelligence is as good as that of the students instructed with the GI model and with the low verbal linguistic intelligence.
- c. The short story appreciation ability of the students instructed with the contextual teaching and learning is as good as that of the students instructed with the GI model and with the low verbal linguistic intelligence.
- d. The short story appreciation ability of the students instructed with the problem-based learning and with the high verbal linguistic intelligence is as good as that of the students instructed with the GI model and with high verbal linguistic intelligence.
- e. Theshort story appreciation ability of the students instructed with the CTL model and with the high verbal linguistic intelligence is better than that of the students instructed with the GI model and with the high verbal linguistic intelligence.
- f. The short story appreciation ability of the students instructed with the PBL model and with the high verbal linguistic intelligence is better than that of the students instructed with the PBL model and with the low verbal linguistic intelligence.
- g. The short story appreciation ability of the students instructed with the CTL model and with the low verbal linguistic intelligence is as good as that of the students instructed with the PBL model and with the low verbal linguistic intelligence.
- h. The short story appreciation ability of the students instructed with the contextual teaching and learning and with the high verbal linguistic intelligence is better than that of the students instructed with the PBL model and with the high verbal linguistic intelligence.
- i. The short story appreciation ability of the students instructed with the CTL model and with the high verbal linguistic intelligence is better than that of the students instructed with the low verbal linguistic intelligence.

2.7 The Hypotheses of the Research

Based on the theoretical studies and the framework, the proposed hypotheses of the research are as follows:

(1) The short story appreciation ability of the students instructed with the CTL model is better than that of the

students instructed with either the problem-based learning or the group investigation learning.

- (2) The short story appreciation ability of the students with the high verbal linguistic intelligence is better than that of the students with the low verbal linguistic intelligence.
- (3) There is an interaction of effect between the learning models and the verbal linguistic intelligences on the short story appreciation ability of the students. In the students with the high verbal linguistic intelligence, the contextual teaching and learning is better than either the problem-based learning or the group investigation learning, and the problem-based learning is as good as the group investigation learning. In the students with the low verbal linguistic intelligence, the three learning models are equally good. The short story appreciation ability of the students instructed with the three learning models and with the high verbal linguistic intelligence is better than that of the students with the tree learning models and with the low verbal linguistic intelligence.

3. Research Methodology

3.1 Research Design

The design employed in this research was the factorial design of 2 x 3. The design refers to the design claimed by Ary, D, L,C.Jacobs, and A. Razaveih (1985:283).

The pattern of the factorial design of 2 x 3 is presented in the following figure:

Table 4: The Factorial Design of the Research

a b	b ₁	b ₂
a_1	ab_{11}	ab_{12}
a ₂	ab ₂₁	ab ₂₂
a ₃	ab ₃₁	ab ₃₂

Remarks:

- a₁ : group investigation learning model (GI)
- a₂ : problem-based learning model (PBL)
- a₃ : contextual teaching and learning model (CTL)
- b₁ : low verbal linguistic intelligence ability (LVLI)
- b₂ : high verbal linguistic intelligence ability (HVLI)
- ab_{11} : the collection of scores of the group of GI –LVLI
- ab_{21} : the collection of scores of the group of PBL-LVLI
- ab_{31} : the collection of scores of the group of CTL-LVLI
- ab_{12} : the collection of scores of the group of GI -HVLI
- ab_{22} : the collection of scores of the group of PBL-HVLI
- ab_{32} : the collection of scores of the group of CTL –HVLI

3.2 Data Gathering Technique

In this research, the data of the research were gathered through tests. The test method is a method or a tool to conduct research through test items, questions, or assignments in which the test items or questions were chosen selectively and standardized (Budiyono, 2003:54). The test method in this research was used to gather the data on the learning achievement in the short story appreciation ability and those of the verbal linguistic intelligence following the treatment. For the former, the test used the multiple choice form and short essay, and for the latter the test used the test of attitude scale by adopting the Likert model in Azwar Saifuddin (1997:139), (see Appendix 13, Page 282. Prior to their use for the data gathering, the tests were tried out to find out their validity and reliability, differentiability, and difficulty level. The items of the tests which met the requisites were used as the instruments of the research, but those which did not meet the requisites were deleted.

3.3 Data Analysis Technique

The data gathered were analyzed by using the statistic comparative test, that is t test, analysis of variance, and multiple comparative test.

1. First hypothesis

- $H_{0A}: \alpha_i = 0$, for all of Value i; i = 1,2,3 (there is not any difference of effect of the group investigation learning, problem-based learning, and contextual teaching and learning on the short story appreciation ability)
- $H_{0A}: \alpha_i \neq 0$, There is at least one of the group investigation learning, problem-based learning, and the contextual teaching and learning which is different in the short story appreciation ability.

2. Second hypothesis

- H_{0B} : $\beta_j = 0$, for all of Value j; j = 1,2 (there is not any difference of effect between the high verbal linguistic intelligence and the low verbal linguistic intelligence on the short story appreciation ability)
- $H_{0B}: \beta_j \neq 0$, there is a difference in the short story appreciation ability between the students with the high verbal linguistic intelligence and those with the low verbal linguistic intelligence.

3. Third hypothesis

- H_{0AB} : $\alpha\beta_{ij} = 0$, for all of Values i = 1,2,3 and j; j = 1,2 (there is not any interaction of effect of the group investigation learning, problem-based learning, and the contextual teaching and learning on the short story appreciation ability)
- H_{0AB} : $\alpha\beta_{ij}\neq 0$, there is at least one of the differences in the the short story appreciation ability based on the interaction of effect between the learning models (the group investigation learning, problem-based learning, and the contextual teaching and learning) and the verbal linguistic intelligences (high and low).

4. The Results of the Research

1. Initial Short Story Appreciation Ability

- a. The description of the result of pre-test on the short story appreciation ability of the students instructed with the CTL model. Based on the result of the data analysis, the descriptive statistical scores of the pre-test on the short story appreciation ability of the students instructed with the CTL model are as follows: the mean score is 52.24, the standard deviation score is 6.50; the highest score is 69.60, and the lowest score is 36.87.
- b. The description of the result of pre-test on the short story appreciation ability of the students instructed with the PBL model. Based on the result of the data analysis, the descriptive statistical scores of the pre-test on the short story appreciation ability of the students instructed with the problem-based learning are as follows: the mean score is 51.82, the standard deviation score is 6.6; the highest score is 67.38, and the lowest score is 33.97.
- c. The description of the result of pre-test on the short story appreciation ability of the students instructed with the GI model. Based on the result of the data analysis, the descriptive statistical scores of the pre-test on the short story appreciation ability of the students instructed with the group investigation learning are as follows: the mean score is 52.81, the standard deviation score is 6.24; the highest score is 67.70, and the lowest score is 36.07.
- d. The parallel test on the initial short story appreciation ability among the students instructed with the CTL model, the problem-based learning, and the group investigation learning. Based on the result of the one-way analysis of variance (ANOVA), the value of F_{count} is 1.072 at the significance level of 0.343, which is larger than the value of the cut off with the confidence level of $\alpha = 0.05$, meaning that there is not any difference in the initial short story appreciation ability of the students in Grade V of Primary Schools in Central Java province with the total average score of 52.29.

The following table is the result of the one way analysis of variance.

Table 5: The result of the one-way analysis of variance

ANOVA

DATA					
	Sum of				
	Squares	df	Mean Square	F	Sig.
Between Groups	89.107	2	44.554	1.072	.343
Within Groups	21906.336	527	41.568		
Total	21995.443	529			

2. The Description of Research Data of the Short Story Appreciation Ability

- a. The Description of the result of the short story appreciation ability of the students instructed with the CTL model. Based on the result of the data analysis, the descriptive statistical scores of the pre-test on the short story appreciation ability of the students instructed with the CTL model are as follows: the mean score is 80.04, the standard deviation score is 10.073; the highest score is 99.86, and the lowest score is 60.13.
- b. The Description of the result of the short story appreciation ability of the students instructed with the PBL model. Based on the result of the data analysis, the descriptive statistical scores of the pre-test on the short story appreciation ability of the students instructed with the CTL model are as follows: the mean score is 63.51, the standard deviation score is 8.386; the highest score is 86.53, and the lowest score is 50.01.
- c. The Description of the result of the short story appreciation ability of the students instructed with the GI model. Based on the result of the data analysis, the descriptive statistical scores of the pre-test on the short story appreciation ability of the students instructed with the CTL model are as follows: the mean score is 45.438, the standard deviation score is 9.77; the highest score is 89.93, and the lowest score is 20.24.

3. Distribution Normality Test

The summary of the result of the distribution normality test calculation is presented in the following table.

 Table 6: The Summary of the Result of the Distribution Normality Test

		Kolmoge			
Variable Data Distribution	Statisti c	df	Sig.	(p-Value)	Conclusion
The short story appreciation ability of the students instructed with the CTL model.	0.038	175	0.200		Normal
The short story appreciation ability of the students instructed with the PBL model.	0.047	183	0.200		Normal
The short story appreciation ability of the students instructed with the GI model.	0.065	172	0.069		Normal
The short story appreciation ability of the students with the low verbal linguistic intelligence	0.058	256	0.072		Normal
The short story appreciation ability of the students with the high verbal linguistic intelligence	0.049	274	0.063		Normal

4. Variance Homogeneity Test

The result of the Levenue test is presented in the following table

Table 7: The Summary of the Variance Homogeneity Test between Groups of the students

				Levene Si	atistic	
No.	The data tested	dfl	df2	F	Sig (p- Value)	Conclusion
1	The short story appreciation ability of the groups of students instructed with the learning models	2	527	0.956	0.38	Homogenous
2	The short story appreciation ability of the groups of students with the verbal linguistic intelligences (high and low)	1	528	0.047	0.829	Homogenous

5. Data Analysis and Hypothesis Testing

Prior to the hypothesis testing, so as to get a thorough result the result of the two-way analysis of variance of the data on the short story appreciation ability of the groups of students instructed with the CTL model, the PBL model, and the GI model and with the hig and low verbal linguistic intelligence is presented as follows.

1. Data Analysis The result of the mean score of the short story appreciation ability of each group of students is presented in the following table.

Table 8: The mean score of the short story appreciation ability viewed from the learning models and the verbal linguistic intelligences

		Learning Models											
		CTL		PBL		GI		Total					
		Mean	SD	Ν	Mean	SD	N	Mean	SD	N	Mean	SD	Ν
	Low	40.511	8.48	89	60.14	8.53	85	74.64	8.65	82	57.959	16.4	256
VLI	High	50.72	8.53	83	66.43	8.77	98	84.81	8.62	93	67.91	16.2	274
	Total	45.438	9.91	172	63.51	9.19	183	80.04	10	175	63.104	17	530

The next analysis result is that of the two-way analysis of variance as presented in the following table. Table 9: The Summary of the two-way analysis of variance of the short story appreciation ability

Sou	rce	Sum of Squares	df	Mean	F	Sig.
				Squares		(p)
Main Effect	Between A	100676.666	2	50338.333	680.216	0.000
Main Effect	Between B 10431.84		1	10431.84	140.964	0.000
2-Way	Inter-AB					
Interactions		451.849	2	225.925	3.053	0.048
Model		2225190.948	6	370865.158	5011.46	0.000
Residual		38777.79	524	74.003		
Total		2263968.738	530			

Remarks:

Between A

= between the GI model, the problem-based learning, and the contextual learning model

Between B = between the verbal linguistic intelligences

Inter AB = interaction of effect between the learning models and the verbal linguistic intelligences

2. Hypothesis Testing

a. First Hypothesis Testing

Table 10: The Short Story Appreciation Ability

Difference between	Mean Difference	Std. Error	Sig. (p)	Remark
$A_1 > < A_2$	18.071	1.030	0.000	Significant
$A1 > < A_3$	34.605	1.041	0.000	Significant
A ₂ >< A ₃	16.534	1.025	0.000	Significant

The result of the analysis shows that F_{count} of between A (between the learning models) is 680.216 with the p-value =0.000, in which the p-value is smaller than0.05, and therefore, the value of F_{count} is significant, meaning that Ho that claims "The short story appreciation ability of the students instructed with the group investigation and the problem-based learning is not different from that of the students instructed with the contextual teaching and learning" is rejected; and the alternative hypothesis that says "the short story appreciation ability of the students instructed with the GI model and the problem-based learning is different from that of the students instructed with the CTL model" is verified.

Based on the achieved mean score of the short story appreciation ability (See Table: 20), the short story appreciation ability of the students instructed with the CTL model is higher than that of the students instructed with the PBL model and the GI model. Thus, the result of the research verifies that the learning with the CTL model is better than that with the PBL model and the GI model in improving the short story appreciation ability of the students in Grade V of Primary Schools in Central Java province.

b. Second Hypothesis Testing

The result of the analysis shows that F_{count} of between B (the high and low verbal linguistic intelligences is 680.216 with the p-value = 0.000 in which the p-value is smaller than 0.05, and therefore the value of F_{count} is significant, meaning that H_0 that claims "The short story appreciation ability of the students with the high verbal linguistic intelligence is different from that of the students with the low verbal linguistic intelligence" is rejected, and the alternative hypothesis (H_1) that says "The short story appreciation ability of the students with the high verbal linguistic intelligence is different from that of the students story appreciation ability of the students with the high verbal linguistic intelligence is different from that of the students with the low verbal linguistic ability" is verified.

Based on the achieved mean score of the short story appreciation ability, the short story appreciation of the students with the high verbal linguistic intelligence is better than that of the students with the low verbal linguistic ability (67.9098 > 57.9592). Thus, the result of this research proves that the short story appreciation ability of the students in Grade V of Primary Schools in Central Java province with the high verbal linguistic intelligence is better/is higher than that of the students with the low verbal linguistic intelligence. c. Third Hypothesis Testing

The result of the analysis shows that the value of F_{count} of Inter AB is 3.053 with the p-value = 0.048 in which the p-value is smaller than 0.05, meaning that the value of F_{count} is significant. The result of this research proves that Ho that claims "There is not any interaction of effect between the learning models and the verbal linguistic intelligences" is rejected, and the alternative hypothesis (H₃) which says "There is an interaction of effect between the learning models and the verbal linguistic intelligences" is accepted.

Based on the achieved mean score from the highest to the lowest, conclusions are drawn as follows: (1) the highest mean score is 84.8068, and it is found in the group of students instructed with the CTL model and with the high verbal linguistic intelligence (A_3B_2) .

It is then followed by the group of students instructed with the CTL model with the low verbal linguistic intelligence ($A_3B_1 = 74.6389$), the group of students instructed with the PBL model with the high verbal linguistic intelligence ($A_2B_2 = 66.4334$), the group of students instructed with the PBL model with the low verbal linguistic intelligence ($A_2B_1 = 60.1371$), the group of students instructed with the group investigation and with the high verbal linguistic intelligence ($A_1B_2 = 50.7204$), and the group of students instructed with the GI model and with the low verbal linguistic intelligence $(A_1B_1 = 40.5113)$ respectively.

The mean of difference of the Group Investigation Learning, the Problem-Based Learning, and the Table 11: Contextual Learning Models

		VLI
	Low	High
The GI model	40.5113	50.7204
The PBL model	60.1371	66.4334
The CTL model	74.6389	84,8086

The following is the result of the difference analysis of each group with (post-hoc test). Table 12: The result of the difference analysis with LSD

Difference between	Mean Difference	Std. Error	Sig. (p)	Remarks
$A_1B_1 > < A_1B_2$	10.209	1.313	0.000000000417328264940	Significant
$A_1B_1 > < A_2B_1$	19.626	1.305	0.0000000000000000000000000000000000000	Significant
$A_1B_1 > < A_3B_1$	34.128	1.317	0.0000000000000000000000000000000000000	Significant
$A_1B_2 > < A_2B_2$	15.713	1.283	0.000000032579871001618	Significant
$A_1B_2 > < A_3B_2$	34.086	1.299	0.0002267273403537676000	Significant
$A_2B_1 > < A_2B_2$	6.296	1.275	0.0000000000000000000000000000000000000	Significant
$A_2B_1 > < A_3B_1$	14.502	1.332	0.0000000000000000000000000000000000000	Significant
$A_2B_2 > < A_3B_2$	18.373	1.245	0.0000000000000000000000000000000000000	Significant
$A_3B_1 > < A_3B_2$	10.168	1.303	0.000000000352911287763	Significant

Remarks:

A_1B_1	=	Group Investigation learning	_	Low verbal linguistic intelligence
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Group Investigation learning A_1B_2 =

Problem-based learning A_2B_1 =

- High verbal linguistic intelligence

- Low verbal linguistic intelligence

 A_2B_2 =

Problem-based learning–High verbal linguistic intelligenceContextual Teaching and Learning–Low verbal linguistic intelligenceContextual Teaching and Learning–High verbal linguistic intelligence

 A_3B_1 = A_3B_2 =

5. Discussion

- 1. In the first hypothesis, it is proven that there is a significant difference of short story appreciation ability among the students in Grade V of Primary Schools in Central Java Province instructed with the Contextual Teaching and Learning, the problem-based learning, and the group investigation. Statistically, the average scores of the students instructed with the group investigation, the problem-based learning, and the Contextual Teaching and Learning are 45.4378, 63.5099, and 80.0424 respectively, meaning that the students instructed with the Contextual Teaching and Learning have a better/a higher short story appreciation ability than those instructed with either the group investigation or the problem-based learning.
- 2. In the second hypothesis, there is significant difference of short story appreciation ability between the students of Primary Schools in Central Java Province with the high verbal linguistic ability and those with the low verbal linguistic ability. The students with the high verbal linguistic intelligence have a better short story appreciation ability than those with the low verbal linguistic intelligence. The former tend to have the high learning ability. Thus, the short story appreciation ability can be determined by the how high the verbal

linguistic intelligence of the students is. The students with the high verbal linguistic intelligence tend to be more active in the learning process whereas those with the low verbal linguistic intelligence tend to be passive in the learning process. Therefore, the high or low verbal linguistic intelligence can determine the high or low learning effort or motivation of the students in the learning activities.

3. In the third hypothesis, the students instructed with the Contextual Teaching and Learning and with the high verbal linguistic intelligence (A_3B_2) have the highest average score that is 84.8068. Then, the next places are occupied by the students instructed with the Contextual Teaching and Learning and with the score of the low verbal linguistic intelligence $(A_3B_1)=74.6389$), the students instructed with the problem-based learning with the score of the high verbal linguistic intelligence $(A_2B_2)=66.4334$, the students instructed with the problem-based learning with the score of the high verbal linguistic intelligence $(A_2B_2)=66.4334$, the students instructed with the problem-based learning with the score of the high verbal linguistic intelligence of $(A_2B_1)=60.1371$, the students instructed with the group investigation with the score of the high verbal linguistic intelligence $(A_1B_2)=50.7204$), and the students instructed with the group investigation with the score of the low verbal linguistic intelligence $(A_1B_1)=40.5113$ respectively, meaning that the third hypothesis is verified. Thus, there is an interaction of effect between the learning models, the Contextual Teaching and Learning, the problem-based learning, and the group investigation learning and the scores of the high and the low verbal linguistic intelligence on the short story appreciation ability of the students of Primary Schools in Central Java province.

6. Conclusion

Based on the verification of the proposed hypotheses, conclusions are drawn as follows:

- 1. The story appreciation ability of the students of Primary Schools in Central Java province instructed with the Contextual Teaching and Learning (CTL) is better/higher than that of the students Primary Schools in Central Java province instructed with either the problem-based learning or the group investigation. The students instructed with the problem-based learning (PBL) have a better short story appreciation ability than those instructed with group investigate (GI). Meanwhile, the group investigation (GI) has the smallest impact on the short story appreciation ability building of the students in Grade V of Primary Schools in Central Java province compared to the problem-based learning and the Contextual Teaching and Learning.
- 2. The short story appreciation ability of the students in Grade V in Central Java province with the high verbal linguistic intelligence is better/higher than those in Grade V in Central Java province with the low verbal linguistic intelligence.
- 3. In the students with the high verbal linguistic intelligence, the use of the CTL model is more effective than either the problem-based learning or the group investigation learning, but the problem-based learning is as effective as the group investigation learning in the students with the low verbal linguistic intelligence. The use of the three learning models, the Contextual Teaching and Learning, the problem-based learning, and the group investigation, are equally effective.

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