

## Improvement of Language Understanding using Sentence Identification Methods in Mathematics Subject of Story Matter in 4th Grade MI

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### **Abstract**

This aims of study is to improve the understanding of language by identifying the main sentence in mathematics subject especially in the story matter. The methods of this research is class room action reseach by doing two cycles process. The collecting data method was obtained by observation, test, and documentation. Data analysis process was done by using an interactive model consisting of four components of analysis including data colection, selection, presentation, and conclusion.

Based on the results, sentences identification learning method can be increased language understanding to solve the problem of story matter in mathematic subject in 4th grade in MI. Thus, it could be concluded that in mathematics learning by using sentences identification methods can be used to increase MI student ability to solve the story of matter. By the methods, the students will be easy to understand the sentences, so thet can finish and solve the test, and also they can made their sentences on their mind.

**Keywords:** Story matter; sentences indentification methods; language understanding; mastery learning

## INTRODUCTION

Education is a way to create and develop the human according to their potential. By education, it can support and to educate the life of this nation. Because of it, education is a process to guidance and teaching which carried out individually or groups to build their character by the main aim in accordance with the national education goal contained in Law No. 20 of 2003. Wisudawati (2017:1) suggested, if everyone had their rights to get a education by 9 years compulsort education. Technical education and proffesinal had to be there and high level education had to be accessed by everyone.

The government had carried aout in various ways to realize the educational objective that have been formulated in in the law rules. But, the results were fare from the expectation both od learning process and outcomes. It can be showed from the results of data survey regarding the elementary school level (MI/SD) from international institutions like International Education Achievement (IEA). It was showed that MI/SD students in Indonesia got rank in 38th out of 39 of participants according to Propenas 2000 (Rohman, 2009:7). Based on the survey, it showed that Indonesian education could not complete yet well. Therefore, the government made an effort to solve it. One of the government's effort is to make improvements in education field by carried out in learning process.

A good relationship between students and teachers is the most important factor in learning process to achieve the education main goals. In addition, the learning process was influenced by several interrelated variables seems

like curriculum, teacher, and teaching (Siswoyo et al., 2007:123). In accordance by the opinion, John W Santrock (2008: 7—8) said that the good teacher is who had teaching skills and good knowledge. The professional teachers had good teaching strategies and supported by their methods, goal, implementation, learning design, and classroom management. Teachers must be able to motivate, communicate and connect with the students who came from different background well.

The teachers had to be able to arise of student's interest in learning, creating a comfortable and interesting learning environment, so they can inspire them to learn. The learning process should be focused on the activity of the students to keep the learning environment alive. It was accordance by the fourth basic of competencies that must be possessed by the teacher as listed as in Undang-Undang No 14 2005 1st paragraph. To build the citizenship educated, the paradigm need to be changed. By rearranging the education system, it would be a profesional sistem. It would be also a new paradigm. The practice of learning would ne shifted into learning that relies more on cognitive and constructivism (Annurrahman, 2013: 2).

The cognitive theory of students must be supported by methods, infrastructure and other invoices, including the teacher's factors that are important for students' intelligence (Cho & Lee, 2017:10). One way to grow the intelligence of students' minds is by facilitating things that can facilitate the difficulties of students. For example on mathematics subjects, in the description questions there is a story problem, where the story matter material is still considered difficult for students one of the factors is because

students' language understanding is still lacking, so that if students can understand the language, they will most likely be able to solve the problem and can help complete the learning. Given that the story matter material has a high value weight. For this reason, researchers are eager to give a way out. In this case the researcher raises one of the learning models to make it easier to solve the story problem, namely by identifying the main sentence.

The story matter questions are questions that are presented in the form of short stories (Abidin, 1989: 10). Stories revealed can be a matter of daily life or other problems. The weight of the problem revealed will affect the short length of the story. The greater the weight of the problem expressed, allows the length of the story presented. Problem story is a question that can be presented in oral or written form, story questions in the form of writing in the form of a sentence that illustrates activities in everyday life.

In this study, the story matter in question is a matter in the form of a story in mathematics that is related to several subjects taught in class VI MI / SD. So, almost every subject can be made into a form of story matter. In delivering material about the story, this can be done using several appropriate and interesting models. Through these steps, the success of the teaching and learning process in the material of the story matter was carried out by teachers and students in the class. However, based on the results of observations in the field, the reality that occurred at MI 2 Gesing Kandangan, as a place of research has not been in accordance with the

expected conditions, so that the problem arises that is not complete student learning outcomes.

After knowing the characteristics of elementary mathematics, elementary school teachers should understand the level of intellectual development of elementary school students so that they can do elementary mathematics well if they consider mathematics and students who learn (Adina & Colomeischi, 2015:743; Hartini, 2010:30). From a number of opinions that we have read, no one has discussed the identification model of the subject matter that can improve language comprehension. For this reason, this research needs to be carried out and continued, because this research is important for children. Sentences students are able to solve Mathematical story matter so that the average grade value can reach the established KKM. To solve the problem, it is necessary to have an alternative solution that can be taken, namely by applying the method of identifying the main sentence. This learning method can train students to be more careful when faced with story problems in math problems. This will make it easier for students to understand the lesson and make students more active in the learning process.

## **METHODS**

This research was carried out in class VI MI Gesing, Kandangan Subdistrict, Temanggung Regency with the number of research subjects being 17 students consisting of 8 female students and 9 male students. The research time is carried out from July to November 2018 odd semester 2018/2019.

The methods must be as accountable as possible to explain in details any issues related to the study design, context, procedures, data analysis, validity or credibility technique, etc. The methods in line with the educational scope of this journal are qualitative, quantitative, and action research or mixed methods (Newton & Burgess, 2008). The procedure for classroom action research was generally carried out in two cycles. Cycles I and II consist of 2 meetings, each meeting duration is  $2 \times 35$  minutes. Each cycle consists of four stages, namely: (1) action planning, (2) implementation of actions, (3) observation, and (4) reflection.

## DISCUSSION

In this section, the results of research and discussion are presented in accordance with the research actions, namely to find out that the method of identifying the main sentence can improve the understanding of language in the mathematics subject matter in class VI MI/ SD. Based on the Indonesian Dictionary, improvement is a process of action, to increase business and so on. Or, a process of change becomes better. Whereas, learning outcomes are characterized by changes in behavior. Although not all behavioral changes are the result of learning, learning activities are generally called behavior changes (Aunurrahman, 2014: 37).

Sopiatin and Sohari Sahrani, 2011: 64 suggested that learning outcomes are the potential students have after they receive the learning process. Learning outcomes achieved by students are very closely related to learning and the formulation of instructional objectives planned by the teacher before. According to the Great Dictionary of Indonesian Language, etymologically

learning means "trying to gain a personality of science". This definition has the understanding that learning is a person's activity to achieve intelligence or knowledge (Rahyubi, 2014:2). From some of the opinions above, it can be concluded that learning outcomes are the abilities possessed by students after receiving their learning experiences in both cognitive, affective and psychomotor abilities. While the results of learning are abilities possessed by students after he receives his learning experience. From some of the opinions above, it can be concluded that learning outcomes are the abilities possessed by students after receiving their learning experiences in both cognitive, affective and psychomotor abilities. While the results of learning are abilities possessed by students after he receives his learning experience.

In this study, the subjects studied were grade VI students at MI Maarif 2 Gesing Kandangan, Temanggung Regency, which numbered 17 students. Subjects that become the object of research studies are Mathematics subjects, subject matter of integers and fractional operations, and carried out during class VI lesson at MI Ma'arif 2 Gesing Kandangan.

The research used the sentences identification method in 2 cycles, each cycle consists of 4 stages, namely: planning, implementation, observation and reflection. The implementation of the first cycle was held on August 6, 2018 and this implementation was carried out in accordance with the semester VI semester mathematics mathematics program. Competency standards carry out integer counting operations in problem solving. In this Cycle I planning process the teacher plans the learning process by making lesson plans, student observation sheets, and teacher observation sheets.

*Cycle I Process*

In this study conducted by researchers, namely compiling the RPP which contains a series of teaching and learning using the method of identifying the main sentence. The material that will be discussed is integer counting operations on the problem of the story; prepare a set of questions and answers that are used in the method of identifying the main sentence related to integer count operations material; preparing teaching materials used for practicum; prepare a sheet of student learning activities and teacher observation sheets; and compile a cycle I evaluation question.

In this classroom action research, the teacher conducts learning actions while the researcher acts as an observer. In the implementation of actions the things that must be done by the teacher during the learning process using the method of identifying the main sentence are as follows: (a) The teacher conveys the learning objectives and *apresepsi* to students; (b) The teacher delivers learning material to students about integer counting operations material; (c) The teacher explains how to solve the story problem by identifying the subject matter in the material; (d) The teacher conducts questions and answers about integer counting operations; (e) After completion the teacher's question and answer gives a task in the form of a story to be done individually; (f) After completing student work, continue with the discussion and discussion of the story matter; (g) The teacher gives the opportunity to students to ask questions about things that students have not yet known; and (g) The teacher provides reinforcement and gives



conclusions from each material; (h) The teacher gives a follow-up and ends the study by praying.

Observation data explains information from the results of observations that: students are less enthusiastic in the learning process; students are still joking with friends while being explained; Students are still acute or doubtful in expressing their opinions; Students are less active in answering teacher questions; There are still students who are confused by the instructions of the learning process given by the teacher; and Students are still confused when learning takes place.

Observation sheet in cycle I were written below:

Number	Observation Aspect	yes	No
1	Teaching and learning activities: <b>Introduction</b> The teacher begins learning by saying hello and leading the prayer to begin learning.	√	
	The teacher prepares a learning material about integer counting operations	√	
	The teacher conveys the learning objectives in accordance with the Basic Competencies to be achieved	√	
2	<b>Core</b> The teacher delivers learning material to students about integer counting operations material. As well as	√	

explaining the method of identifying the main sentence in the material.

The teacher conducts questions and answers about the operation of integer counting using the method.

After completion the teacher's question and answer gives the task in the form of a story matter to be done individually. After completion the teacher's question and answer gives the task in the form of a story to be done individually.

The teacher directs the students to work on the problem first that is on the question, by reading it clearly. Furthermore, students are encouraged to work on the story problem based on the main sentence, ignore the original story matter. The teacher gives an opinion to students that in this way it will be easier to work on the story so that the results will be biased accordingly which is expected. After the main sentence is arranged a new question is done according to the next step.

√

√

	After completing the work the students continue with the discussion and discussion of the story questions with the method of identifying the main sentence	√
	The teacher gives the opportunity to students to ask questions about things that students have not yet known about the method.	√
	Teacher gave some reinforcement	√
3	<b>Closing</b>	√
	The teacher gave some evaluation to the whole series of learning activities	
	The teacher concludes about the material for calculating integers and how to solve the story questions on the material using the method of identifying the sentence principal.	√
	The teacher carried out follow-up activities in the form of giving assignments both individual and group assignments to do at home	√
	The teacher ends the learning with the final prayer of study and closes with greetings.	√

The learning outcomes of the first cycle show that the activity of students in the learning process increases compared to the pre-cycle. The teacher acts as a facilitator, guide and motivator and the learning center is with students. During the observation, problems were still found, such as: management of less optimal time; Less optimal mastery of class when using a method of identifying the subject line; the teacher's voice was less loud in explaining the material; and some students have no understanding of the rules for the methods to identifying the subject line. With the existence of these problems, the researcher will take action on cycle II to improve learning outcomes in cycle I.

### *Cycle II*

Cycle II was carried out because the first cycle has not reached the indicator of success. This planning was based on the results of the reflection of the first cycle with the aim of improving learning outcomes. This second cycle was carried out in 4 stages, consist of planning implementation, observation and reflection.

#### *Action Planning*

In this study carried out by researchers as follows: Arranging the RPP that accepts learning learning using the principal sentence approval method. While the material to be discussed is fraction counting operations; preparing a set of questions and answers that are used in the method of identifying the main sentence related to fraction counting operations; preparing teaching materials used for experiment; prepare a sheet of student learning activities and teacher observation sheets.

### *Action*

In this classroom action research, the teacher conducted learning actions while the researcher acts as an observer. In implementing actions the things that must be done by the teacher during the learning process using the method of identifying the main sentence were as follows: The teacher conveys the learning objectives and *apresepsi* to students; The teacher delivers learning material to students about fractional counting operations and describes the method of identifying the sentence principal; The teacher conducts questions and answers about fractional count operations; Then, the teacher gives the task in the form of a story problem to be done individually; After finishing working on students, continue with the discussion and discussion of the story; The teacher gives the opportunity to students to ask questions about things that students have not yet known; the teacher provides reinforcement and provides conclusions from each material; and the teacher gives a follow-up and ends the discussion by praying.

### *Observation*

Based on the Minimum Completion Criteria (KKM) Mathematics subject matter the story class VI MI 2 Gesing was 75. The average value of the results of the student test in the first cycle was 80.76 and the percentage value of the student test results completed in cycle II was 94.11% of students. While the percentage of student test results was not completed as much as 5.89%.

In addition to learning outcomes, the teacher also observes student learning activeness. Observation was carried out in the learning process by emphasizing the observation of the cooperation that carried out by students activeness, creativity, and courage possessed by students. In addition to learning outcomes, the teacher also observes student learning activeness. Observation was carried out in the learning process by emphasizing the observation of the cooperation that carried out by students activeness, creativity, and courage possessed by students.

Based on the implementation of teaching and learning activities obtained information from the results of observations as follows: students are active with the motivation given by the teacher in the learning process; students are enthusiastic in following the learning process; students are confident in expressing their opinions and actively answering teacher questions; and learning outcomes and student activities optimal.

#### *Reflection*

The learning outcomes of cycle II showed about the student activities were increased from the learning process of the cycle I. Students looked enthusiastic in the learning process by using sentence indentification method. The teacher acted as a guide, motivator and facilitator (Kunlasomboon et al., 2015:1315). The sentence indentification method made students active because in the learning process students become more confident when working on story matter on mathematics. During observation, the problems found in the first cycle had declined and were corrected, not even appearing again.

## CONCLUSION

Based on classroom action research conducted at MI Ma'arif 2 Gesing Kandangan, Temanggung Regency, it can be concluded that the use of the method of identifying the main sentence can improve the learning outcomes of mathematics in the matter of the story of operations of integers and fractions. The increase in learning outcomes was marked by the value of students who reached KKM by 75. In the first semester of 17 students were known only 6 (35.29%) students were completed, while those that did not complete in the first cycle were 11 (64.71%). In the second cycle experienced an increase in students who completed reaching 16 children (94.11%) and students who did not complete, namely 1 (5.89%). So this research was stopped in the second cycle because it had fulfilled the percentage of completeness, and had achieved the objectives of the study, namely students' language understanding increased in the subject matter of mathematics subject matter using the method of identifying the main points of the sentence.

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