Critical Thinking Analysis of Reading With Graphic Organizer Media in Elementary School

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Abstract - Critical thinking is learning that is more emphasized in the 2013 curriculum and 21st-century skills as the ability of students to solve problems against facts, for that we need analysis of students' abilities by using a graphic media organizer. This research is a descriptive quantitative study that provides a description of the numbers that are explained in words. The sample in this study consisted of 43 students in grade IV elementary school in the Gugus 1 Tampan. The results of the study analyzed students' ability to think critically with an average of 1.13 with less categories, and seen in indicators that identified initial problems with an average of 1.21, Understanding Reasoning with an average of 1.02, Identifying and interpreting statements and ideas with an average of 1.23 , and Identifying conclusions with an average of 1.05, each indicator that appears categorized as less. So it can be concluded that the ability to critical thinking in reading is still less.

Keywords: critical thinking, graphic organizer

1. Introduction

Critical thinking is not the same as arguing or criticizing others. The word "critical" to an argument is not synonymous with "disapproval" of an argument or the views of others. Critical assessment can be done on a good argument because critical thinking is neutral, impartial and not emotional. Critical thinking is able to improve learning outcomes (Baker, Rudd, & Pomeroy, 2001; Noone & Hogan, 2016; Kumar & James, 2015; Song, 2016; Samsudin & Hardini, 2019) for the curriculum in 2013 applied learning that is able to develop thinking skills critical in the learning process (Kurniaman & Noviana, 2013) which emphasizes 21st century skills. Critical thinking is needed for every Indonesian citizen and the most basic in elementary schools in order to survive in this global era (Fadhillah, 2017), so students are more responsible for their own learning, for active learning (Marlowe & Page, 2005; Cırık, Çolak, & Rich, 2015; Tuncel & Bahtiyar, 2015). In accordance with Government Regulation No. 17 of 2010 that learning in schools must improve critical thinking listed in the 2013 curriculum aimed at critical learning and able to develop individual student abilities on knowledge competencies and skills competencies that do not leave social competencies and attitudes (Kurniaman & Lazim, 2017).

This study aims to analyze the ability of elementary school students to think critically to see the impact of the 2013 curriculum which was implemented in 2013 which has now been in force for approximately six years. With the instrument used to obtain data in the form of graphic media organizer. The instrument of data retrieval, the ability of students to think critically in reading is a very important ability. Reading activity is to obtain information from written texts in the form of making conclusions and finding the main ideas (Hasan, 2017). Critical thinking in reading is an understanding of the process of constructing meaning by coordinating a number of complex processes. Using graphic organizers they are able to classify information within a section under a scheme adapted to the discourse created (Sam & Rajan, 2013). The use of graphic organizer instruments to measure students' ability to think critically in reading can demonstrate their ability to identify important concepts and

outline key ideas discussed so as to enhance critical thinking (Pratama, Rahmawati, & Irfani, 2017). The importance of analysis in the ability to think critically students in primary schools to provide an overview of the influence of the 2013 curriculum or the influence of teachers who are obstacles in the learning process. The government's design of 21st-century learning that emphasizes teachers must begin the step of changing traditional teacher-centred learning patterns into student-centred learning patterns (Haryanto, 2018). The existence of this research is able to provide useful input so that it can provide an evaluation of the weaknesses found in the field.

2. Methodology

The research method used is descriptive quantitative research is a research method that shows the phenomena that exist and provides a picture by using numbers as a reinforcement of research results that will be described in words in giving a picture of the numbers that appear in research (Sugiyono, 2015). The research locations in the Gugus 1 Tampan Elementary School consist of 2 public schools namely SDN 37 Pekanbaru and SDN 136 Pekanbaru with 43 students in grade IV according to the sampling according to the Slovin formula in Sugiyono (2015).

The process of data analysis is done by analyzing the ability of students in critical thinking in reading comprehension, analyzed using statistics by looking for critical thinking abilities of the answers of elementary school students in reading comprehension tests in measuring critical thinking by using the formula:

$$P = \frac{F}{N} \text{ X } 100$$

Information:
P = Critical Thinking Ability
F = Frequency of Score Obtained
N = Ideal Amount

The following assessment criteria are calculated from the results obtained on the critical thinking abilities of elementary school students in reading comprehension with graphic organizer media so that the abilities are classified according to table 1.

Table 1. Students' Critical Thinking Ability in Reading Comprehension by Using Graphic Media Organizer

Average Interval Score	Category
3.60 – 4.00	Very Good
2.60 – 3.59	Good
1.75 – 2.59	Good Enough
0.60 – 1.74	Less Good
0.00 – 0.59	Very Less

3. Result and Discussion

This study provides an overview of students' critical thinking skills in reading, by conducting tests on students with a sample of 43 fourth grade students, with instruments in the form of graphic organizers to facilitate the analysis of critical thinking. The ability of students to think critically in reading will be seen in table

Table 2. Critical Thinking Ability in Reading

Respondents	Assessment Indicator				Total	Average
	1	2	3	4		
OK001	1	1	1	1	4	1
OK002	0	1	1	1	3	0.75
OK003	2	2	2	0	6	1.5
OK004	1	1	2	1	5	1.25
OK005	0	0	1	1	2	0.5
OK006	2	0	1	1	4	1
OK007	1	1	0	1	3	0.75
OK008	1	0	1	0	2	0.5
OK009	0	0	0	1	1	0.25
OK010	0	1	1	1	3	0.75
OK011	1	0	1	1	3	0.75
OK012	0	0	1	1	2	0.5
OK013	1	1	1	1	4	1
OK014	3	2	2	2	9	2.25
OK015	2	1	2	1	6	1.5
OK016	3	2	1	1	7	1.75
OK017	0	0	1	1	2	0.5
OK018	0	1	1	1	3	0.75
OK019	2	0	1	2	5	1.25
OK020	2	2	2	0	6	1.5
OK021	1	2	2	2	7	1.75
OK022	2	2	2	2	8	2
OK023	2	2	2	2	8	2
OK024	2	2	2	2	8	2
OK025	3	2	2	2	9	2.25
OK026	1	2	1	1	5	1.25
OK027	1	1	2	1	5	1.25
OK028	2	1	1	1	5	1.25
OK029	1	2	2	1	6	1.5
OK030	0	2	1	1	4	1
OK031	2	1	0	1	4	1
OK032	2	2	1	1	6	1.5
OK033	2	0	0	1	3	0.75
OK034	1	1	2	1	5	1.25
OK035	0	0	1	1	2	0.5
OK036	0	0	1	0	1	0.25
OK037	1	1	2	1	5	1.25
OK038	1	1	1	1	4	1
OK039	1	0	1	0	2	0.5
OK040	2	1	1	1	5	1.25
OK041	1	1	1	1	4	1
OK042	1	1	1	1	4	1
OK043	1	1	1	1	4	1
Total	**52**	**44**	**53**	**45**	**194**	**48.5**
Average	**1.21**	**1.02**	**1.23**	**1.05**	**4.51**	**1.13**

The ability of elementary school students to critical thinking in accordance with table 2 by giving an illustration that the number of students 43 people in class IV in the Gugus 1 Tampan, with an average of 1.13 with less categories. From the results of the analysis on the tests carried out by students, they have not provided a critical thinking picture of their answers simply copying from the text provided.

The results of the answers they provide are also still lacking in logic by providing suggestions and solutions to the problems given. For more details, it will be seen in table 3 a recapitulation of students' abilities in critical thinking seen in the assessment indicators.

Table 3. Recapitulation of Critical Thinking Results for Students in Class IV
Elementary School Gugus 1 Tampan

NO	Assessment Indicator	Total	Average	Category
1	Identify the initial problem	52	1.21	Less
2	Understanding Reasoning	44	1.02	Less
3	Identify and interpret statements and ideas	53	1.23	Less
4	Identifying conclusions	45	1.05	Less

In accordance with table 3, the recapitulation of the results of the critical thinking abilities of fourth grade students in SDN Gugus 1 Tampan, it is seen that students' abilities in the indicators identify initial problems with a total score of 52 with an average of 1.21 less categories, indicators understand reasoning with a total score of 44 with an average of 1.02 in the inadequate category, the indicator identifies and interprets statements and ideas with a total score of 53 with an average of 1.23, and the indicator identifies a conclusion with a total score of 45 with an average of 1.05 less categories.

The results of the study illustrate that the ability of Grade IV Gugus 1 Tampan Elementary School students is still lacking in critical thinking in reading. Whereas the ability to read is very important (Kurniaman, et al., 2018) in developing cognitive and able to improve critical thinking as capital to develop the ability of individuals to solve problems and encourage to reason in recalling factual concepts (Sobkowiak, 2016). Activities in critical thinking have not been seen in the learning process that fosters students to be more creative in identifying initial problems, understanding reasoning, identifying and interpreting statements and ideas, and identifying the conclusions of the number of students 43 people are still in the less category.

The demands of the 2013 curriculum and the improvement of 21st-century skills proclaimed by the government are still not going well. Seen in the results of research that gives a picture of students' ability to think critically that is still low even though having the ability to think critically is able to decide what to do and what to believe is part of the metagocnitif that requires individuals to be able to reflect the thought process (Malik, et al., 2018). The fact now in the era of globalization is critical thinking skills which basically must be mastered by elementary school students as a foundation in continuing to a higher level. Primary school students are expected to be able to make decisions about what they believe and make consistent and credible decisions (Bustami, 2009; Ku, 2009; Fisher, 2009; Carter et al., 2016; Bustami, Syafruddin, & Afriani, 2018). The success of the critical thinking ability test is being able to explain the achievement of the test indicators is the effect of the success of critical thinking.

4. Conclusion

Analysis of the ability of elementary school students in class IV Elementary School Gugus 1 Tampan in critical thinking in reading is still lacking for that it needs deeper analysis to look for problems that arise in the field. So knowing what obstacles are causing the ability of students in the category is less.

Acknowledgement

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