



Analysis of Numeracy Literacy Skills in Grade V Students of SDN 3 Kaliyoso Kudus

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Article Info	Abstract
Article History: Received : 19/8/2025 Revised : 27/8/2025 Accepted : 28/8/2025	The low level of literacy in Indonesia is partly due to low interest in reading. Literacy related to critical thinking skills is numeracy literacy. This numeracy literacy is related to mathematics. This study aims to analyze the numeracy literacy skills of grade V students. Numeracy literacy research on mathematics learning uses descriptive qualitative data analysis. The subjects of this research were fifth grade students at SDN 3 Kaliyoso Kudus. The instrument used was a test sheet in the form of KPK and FPB questions, then interviews were conducted to further analyze students' literacy and numeracy skills. Based on the research results from 40 fifth grade students at SDN 3 Kaliyoso Kudus there are 11 students who have low level numeracy literacy skills, 23 students have medium level numeracy literacy skills, and 6 students have high level numeracy literacy skills. So it is concluded that the mathematical numeracy literacy skills of fifth grade students at SDN 3 Kaliyoso Kudus, especially in the KPK and FPB material, are in the medium category.
Keywords: numeracy literacy; mathematics; KPK and FPB.	

INTRODUCTION

Numeracy literacy is one of the student competencies that will be measured in the minimum competency assessment (MCA) as a parameter of the quality of learning and education at each level of the education unit. Numeracy literacy is also part of the knowledge and skills of 21st century students in learning related to mathematical concepts in reasoning, analyzing, and interpreting data (text, symbols, graphs, and numbers) to solve contextual problems in everyday life (Rahmawati, 2021).

In this era, technology plays an important role in everyday life. It is not surprising that technological developments allow people to create new values. Observing the conditions of technological development in this era, literacy is crucial in dealing with this era. Literacy is something that must be mastered by every

community in Indonesia. However, literacy skills in Indonesia currently tend to be low, one of the factors behind the lack of ability or interest in reading in students is the weak ability in critical thinking. Low interest in reading also has an impact on several sectors, for example education. Hawa (2018: 2) revealed that Indonesia participated in PISA from 2000 to 2012 and finally in 2015, from the results of PISA 2015 student performance is still relatively low. The Program for International Student Assessment or PISA conducted by the OECD is a study to evaluate education participated by more than 70 countries around the world. One of the education evaluated by OECD is mathematics, namely on numeracy literacy.

The Ministry of Education makes efforts to improve literacy skills through the Teaching Campus program. Annisa (2022: 55) revealed that the objectives of the Teaching Campus Program are to: foster a sense of empathy in students towards the problems of the community around them; refinement of thinking skills in collaborating across domains of knowledge and diverse student origins in solving the problems they face to advance students' insights, character, and soft skills to encourage and advance national development by increasing community motivation to participate in development strengthening the role and practical contribution of universities and students to the development of the country. Therefore, the efforts of the Ministry of Education and Culture through the Teaching Campus Program are expected to increase literacy or interest in reading in students. Along with the development of science, the term literacy has expanded its meaning.

Numeracy literacy is defined as the ability to access, use, interpret and communicate information that has been obtained by utilizing mathematics as the basis for problem solving ideas in everyday life. In literacy, there are interesting things to study more deeply about numeracy literacy which became the government's basic literacy program in 2016. Numeracy literacy limits its scope in certain areas. The components in the implementation of numeracy literacy cannot be separated from the coverage material in mathematics. The scope of material in numeracy literacy includes: 1) number 2) addition, subtraction, multiplication and division; 3) estimation; 4) pattern and probability; 5) fraction, decimal, percentage, ratio and average; 6) space and shape (geometry); 7) statistical information (charts, tables and other data); and 8) measurement.

It is concluded that numeracy literacy is closely related to mathematical problem solving. Delivered by NCTM, without problem solving the benefits of learning mathematics are limited. The problem solving referred to in numeracy literacy is not limited to solving problems in math problems. In the context of numeracy literacy, students are required to be able to find contextual solutions to the problems at hand. In this regard, reasoning armed with numeracy literacy becomes an absolute thing. Mathematical problems in the form of problems or other things are used to stimulate students' cognition in exploring the mathematical ideas they have obtained. The numeracy literacy pattern that is carried out regularly is

expected to strengthen the reasoning of the relationship between mathematical concepts that have been obtained so that the understanding of these concepts can be strong and easily implemented in field problems (Erdy Poemono et al, 2021).

Not only that, numeracy literacy that is promoted can also train students' creativity in determining the right problem solving strategy. In response to this, it is not surprising that in the implementation of the 2013 curriculum today, many math books are found that contain Higher Order Thinking Skill (HOTS) questions. This type of problem indirectly requires students to have higher-level thinking skills. Not just knowledge and formulas. Problems of this type encourage students to use reasoning in constructing problem solving ideas. With this kind of reasoning students are able to hone reflective, metacognitive, creative, logical and critical abilities. It is concluded that numeracy literacy has actually been widely implemented in the questions contained in the 2013 curriculum math book. In this regard, researchers are interested in examining how far the teaching materials in circulation shape students' numeracy literacy skills. This study aimed to determine the numeracy literacy skills of grade V students at SDN 3 Kaliyoso Kudus.

Based on observations made by researchers at SDN 3 Kaliyoso Kudus, the level of numeracy literacy of students is still low. Students still experience obstacles to numeracy literacy, namely in working on a math story problem. The obstacles faced by students include the lack of student stimulus in carrying out mathematical reasoning activities, because some students consider reading to be a boring activity, less or minimal literature to develop innovations in implementing literacy programs. These obstacles experienced by students cause the ability to read mathematics in grade V students of SDN 3 Kaliyoso Kudus is still lacking. There are still many students who think that reading, especially in math learning, is considered boring for students. Because students think that math is a difficult and boring subject coupled with doing math problems in the form of story problems, it makes students reluctant to get excited about doing it. So here, the role of the teacher is important to be able to improve numeracy literacy skills in grade V students of SDN 3 Kaliyoso Kudus.

This research was conducted on the basis of previous research conducted by Winata, et al (2021) with the title "Analysis of Numeracy and Reading Literacy Skills of Class XI Students of MA Islamiyah Senori Tuban" in the journal Proceedings of the National Seminar on Research and Community Service which focuses on numeracy and literacy skills of students. This research is based on the results of researcher observations showing that the madrasah is still experiencing obstacles related to learning programs. The point of difference between current research and previous research is that the focus of current research lies on students' numeracy skills at the elementary school level. The results of this study concluded that the reading literacy skills and numeracy skills of students in class XI MA Islamiyah Senori Tuban are still fairly low.

The research by Maulidina and Sri H. (2019) regarding “Profile of Numeracy Ability of High-Ability Elementary School Students in Solving Mathematical Problems” which is based on the results of the researcher's observations obtained the conclusion that students in class IIB SDI Sunan Ampel II Trosobo Sidoarjo Regency still have difficulty in solving problems related to problems that require mathematical thinking skills. The current researcher adopts the theory contained in this study related to indicators in determining students' numeracy skills at the elementary school level. The point of difference with the current research is the selection of research objects related to the research location. This previous research was conducted in Sidoarjo Regency, precisely at SDI Sunan Ampel II Trosobo. While the current research was conducted in the Kudus City area, precisely at SDN 3 Kaliyoso, which has different characteristics when viewed from the research location.

Based on the above, this study aims to analyze how the numeracy literacy skills of SDN 3 Kaliyoso students in mathematics learning and describe what factors can affect students' numeracy literacy skills at SDN 3 Kaliyoso Kudus. Based on the objectives and some of the theories presented previously, the researcher will conduct research with the title “Analysis of Numeracy Literacy Skills in Grade V Students of SDN 3 Kaliyoso Kudus”.

METHODS

The research method used in this research is descriptive qualitative type. Qualitative research is research that aims to understand phenomena related to the researcher's experience, for example behavior, observation, motivation, action, and others comprehensively and with verbal and linguistic descriptions in a natural context and using natural methods. The research was conducted with the research subjects of fifth grade students at SDN 3 Kaliyoso. The research subjects were taken through purposive sampling technique with a total of 40 people.

Data collection techniques used were tests and interviews. In this study, researchers gave test sheets to students as many as 40 research subjects to see students' numeracy literacy skills. Then next, the researcher conducted an interview on the research subject with the aim of getting the data that had been obtained by the researcher analyzed and then used as material for discussion in this study. The test instrument given consisted of 4 questions. The question contains an essay. This research uses descriptive qualitative data analysis. Steps in conducting qualitative descriptive data analysis include data reduction, data display and data verification or conclusion.

RESULT AND DISCUSSION

Based on information from 40 students who were the subjects of the study, three categories of reading in mathematics were obtained. These three categories consist of basic, intermediate, and advanced. First, students have reading skills that are still in the basic/low level category. This can be seen from the acquisition of worksheets of math problems about KPK and FPB given.

Based on the interview results, quite a number of students revealed that they had difficulty in linking mathematical concepts to story problems whose solutions used KPK and FPB. The student only answered correctly 1 out of 4 story problems that were distributed. Based on the results of the worksheet, students have not been able to relate and apply critical thinking to math reading skills in determining the right way to solve problems. There were 11 students in this category.

Second, students have math reading skills in the medium category. Where 23 out of 40 students can answer correctly 2 to 3 of the 4 problems given. Based on the interviews conducted, students encountered difficulties in working on the problem on the last number. However, students can still connect it to mathematical concepts. So it can be concluded that students at this level are able to relate and apply critical attitudes in mathematical literacy and numeracy.

Third, students have math reading skills in the high category. Where only 6 out of 40 students can answer correctly 4 of the 4 problems given. Based on the results of interviews that have been conducted, the student revealed that he felt familiar with working on the problems distributed. Students have no difficulty connecting math concepts to everyday life. Students also revealed that they often do independent learning exercises at home and feel no difficulty when getting problems to solve problems regarding KPK and FPB using tables.

Based on the research that has been conducted, the researcher knows that most of the fifth grade students of SDN 3 Kaliyoso Kudus have math reading skills in the moderate category. Classroom teachers are expected to play a role in conducting enrichment or improvement activities on questions that are still not mastered by students so that later numeracy literacy activities in learning mathematics KPK and FPB and other materials can run well and the results of numeracy literacy in class V can be better than before.

Students who have mathematical numeracy literacy skills that are still in the low category reveal if they have difficulty in solving the problems distributed. These students have not been able to master the material, so they have not been able to solve the problems given and have not been able to relate to the problems they have encountered in everyday life.

So, the next role of the teacher in improving the ability of mathematical numeracy literacy in these students is to carry out enrichment or improvement on the material which according to these students is quite difficult to do. If the students have been able to do the improvement on the KPK and FPB materials well, then the

numeracy literacy skills in class V SDN 3 Kaliyoso have improved well. Therefore, it is clear that teachers have a very important role in improving math numeracy literacy skills.

Students who have a high level of mathematical numeracy literacy feel able to work and relate it to problems they encounter in everyday life. When working, students feel not so familiar with the problems given. Because some students in this category often do independent exercises at home assisted by their parents and other students participate in tutoring activities. Here the role of the teacher is to be able to give awards, appreciation, or rewards to students who have numeracy literacy skills in the high category. It is intended that these students are always eager to learn math, especially on story-shaped problems.

CONCLUSIONS AND RECOMMENDATIONS

This research was conducted on grade V students at SDN 3 Kaliyoso Kudus. Based on the results of the research, fifth grade students at SDN 3 Kaliyoso Kudus have moderate literacy skills. Looking at the results of student worksheets in the form of problems solving KPK and FPB using number tables, there are 11 students who have low-level numeracy literacy skills, 23 students have medium-level numeracy literacy skills, and 6 students have high-level numeracy literacy skills. So it is concluded that the mathematical numeracy literacy skills of most fifth grade students at SDN 3 Kaliyoso Kudus, especially in the KPK and FPB material, are in the medium category.

The role of the teacher here is needed in improving the ability of mathematical numeracy literacy in grade V students. Teachers must do enrichment or improvement on material that students find difficult to do. If the students are able to do the improvement on the KPK and FPB materials well, then the numeracy literacy skills in class V SDN 3 Kaliyoso will improve well. Therefore, teachers have a very important role in improving math numeracy literacy skills.

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