# DIFFICULTIES OF ELEMENTARY SCHOOL STUDENTS IN RESOLVING PROBLEMS OF POLYGON WIDE AREA 

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#### Abstract

Mathematics is a human activity, so that human life can not be separated from mathematics, both in theory and practice. Troubleshooting is the most important topic in learning Mathematics. However, it is a complex process that has many components. One is the difficulty of students in solving many broad terms. Students are hard to find two wake contained in the wake polygon. Students are hard to find unknown measurements, because students do not understand the question. So that teachers should guide students from the beginning to the end so that students can work on the problem by either. In this article the author would like to discuss about the difficulties VI.C grade students of SD Negeri 81 Pekanbaru (elementary school) in solving problems of broad polygons contained in the textbook publisher grants are used by teachers as a handbook and reference.


Keyword: Difficulties, Mathematics, polygon.

## Introduction

Mathematics is a human activity, so that human life can not be separated from mathematics, both in theory and practice. There are many jobs that require mathematical knowledge and skills, so students need to be equipped with adequate mathematical skills so that they can compete in the age of technology and information that is growing rapidly.

Problem solving is the most important topic in Mathematics learning. According Akinoglu (2007) Problem solving model allows students to learn new knowledge to deal with problems that must be solved However, it is a complex process that has many components. One of them is the students' difficulties in solving the broad facet problem. Students find it difficult to find the 2 wakes contained in the wake of the many facets. Students find it difficult to find unknown measurements, because students do not understand the problem. So the teacher should guide the students from the beginning to the end so that students can do the problem well.

Many learning theories that have been designed in the implementation of learning mathematics, including the theory of constructivism Vygosky. Vygotsky argues that learning will occur evidently and effectively when children cooperate with other children in a supportive environment, in the guidance of a more capable person, teacher or adult. In mathematics, constructivism has been extensively researched, applied, and tested in different classroom situations. From various experiments it has generated many views that influence the development, modification, and innovation in learning.

In this article the authors want to discuss about the difficulties of students of class VI.C SD Negeri 81 Pekanbaru (elementary school) in solving many facet problems contained in the book package
publisher Erlangga used by teachers as a handbook and reference students of class VI.C SD Negeri 81 Pekanbaru.

## Method

The method used by teachers is still with conventional methods. The teacher explains briefly and then gives examples and learners to do the exercises 1 widespread material in terms of many wake up flat in the book publisher Erlangga as a handbook of learners and teachers. The number of students in the test is 33 students with 16 male students and 17 female students.

## Result and Discussion

The ability to think mathematics especially high-level mathematics thinking is needed by learners, related to the needs of learners to solve problems faced in everyday life. Some of the thinking skills that can improve process intelligence are critical thinking skills, creative thinking skills, brain organizing skills and analytical skills. Because critical thinking skills are indispensable in doing jobs and in solving problems that exist around the learner's environment, it is clear that learners should be equipped with good critical thinking skills. According Ozkahraman (2011) Critical thinking is the process of seeking, obtaining, evaluating, analyzing, synthesizing and conceptualization of information as a guide to develop one's thinking with selfawareness, and the ability to use this information to add creativity and taking risks. Therefore, the ability to think especially concerning the activities of mathematics needs to get special attention in the process of learning mathematics.

But the reality in the field, not as expected. The results of tests conducted in class VI.C in SD Negeri 81 Pekanbaru (elementary school) still many who get low score in because the critical thinking ability of learners still not developed. The low ability of critical thinking and creative mathematics learners can be seen from the answers of learners in doing math problems in schools that are still not satisfactory. Indicator of Critical Thinking Ability in the study include the ability of students to: Recognize assumptions, perform inference, deduction, interpretation and evaluate argumentsWatson and Glaser (in Amri and Ahmadi, 2007).

Can be seen in Table 1 of the results of a test of mathematics problems amounting to 5 questions as follows:

Table 1. Result of Students Test

| Number | Students Code | Value of Test |
| :---: | :---: | :---: |
| 1 | 01 | 40 |
| 2 | 02 | 30 |
| 3 | 03 | 20 |
| 4 | 04 | 70 |
| 5 | 05 | 70 |
| 6 | 06 | 70 |
| 7 | 07 | 80 |
| 8 | 08 | 80 |
| 9 | 09 | 70 |
| 10 | 10 | 60 |
| 11 | 11 | 60 |
| 12 | 12 | 50 |
| 13 | 13 | 50 |
| 14 | 14 | 60 |
| 15 | 15 | 60 |
| 16 | 16 | 60 |
| 17 | 17 | 80 |


| Number | Students Code | Value of Test |
| :---: | :---: | :---: |
| 18 | 18 | 80 |
| 19 | 19 | 80 |
| 20 | 20 | 90 |
| 21 | 21 | 90 |
| 22 | 22 | 50 |
| 23 | 23 | 30 |
| 24 | 24 | 30 |
| 25 | 25 | 30 |
| 26 | 26 | 20 |
| 27 | 27 | 80 |
| 28 | 28 | 100 |
| 29 | 29 | 20 |
| 30 | 30 | 10 |
| 31 | 31 | 10 |
| 32 | 32 | 20 |
| 33 | 33 | 70 |
| Sum |  |  |
| Average |  |  |

Seen from the data above students who get a value of 100 only 1 student with code 028 , students who get the value of 90 there are 2 students with code 020,021 , students who get the value of 80 there are 6 students with code $007,008,017,018,019,027$, students who score 70 there are 5 students with Code $004,005,006,009,033$. Furthermore, students whose value under the Minimum Passing Criteria for material area in terms of many in Elementary School 81 Pekanbaru there are 2 students get the value of 10 with the code 030,031 , students who get the value of 20 there are 4 students with code $003,026,029,032$, students who get a score of 30 there are 4 students With the code $002,023,024,025$, students who get a score of 40 there is 1 student with code 001 , students who get a score of 50 there are 3 students with code $012,013,022$, students who get the value of 60 there are 5 students with code $010,011,014,015,016$. Furthermore can be seen from Table 2 there are problems that are difficult to be done by students as follows:

Table 2. Difficult by Students

| Number | Number of Question | Students | Category |
| :---: | :---: | :---: | :---: |
| 1 | 1 | 7 student | False |
|  |  | 26 student | Right |
| 2 | 2 | 18 student | False |
|  |  | -15 student | Right |
| 3 | 3 | 20 student | False |
|  |  | 13 student | Right |
| 4 | 4 | 22 student | False |
|  |  | 11 student | Right |
| 5 | 5 | 31 student | False |
|  |  | 2 student | Right |

Can be seen from the data above then the students most difficulty in no 4 there are 22 students wrong in doing it nd only 11 people are correct, whereas in question no 5 there are 31 students who are wrong in doing it and there are only 2 students who actually do the problem. So it can be concluded that students have difficulties in working on the matter of the polygon wide area in the class VI.c SDN 81 Pekanbaru.

## Conclusion and Suggestion

## 1. Conclusion

Problems in mathematics are often questions that students must answer and solve. Many students still struggle to solve mathematical problems, especially on the many flat aspects that have been described above.

We know that childhood at the age of elementary school is the most effective age to develop the potential of children. At this time the pattern of growth and development, both physical development, social, emotional and cognitive children have developed optimally. The cognitive development of children at the age of seven to twelve years is at the stage of concrete operation that the child develops the concept by using concrete objects. Therefore, parents and teachers have a very important role in helping develop the potential that is in the child.

Potential developments should be tailored to the abilities and characteristics of each child. In general, elementary school age children are the age of children who are still at the stage of learning while playing Therefore we as teachers should be good at teaching materials that match the level of student development potential. We need to know how to make it easy to teach the material so that children can easily understand the material.

## 2. Suggestion

Teachers need to work to make our children reason in math. They can increase their critical and creative thinking through the process of learning mathematics. For that, teachers need to design learning materials well, so that our children, in addition to absorbing teaching materials, able to reason. In the process, our students will enter the discourse with a strict math language. This is a good opportunity for our children to learn to speak the right way with the right disclosure. If teachers in the classroom and parents at home are able to provide a quality learning process of mathematics as above, then our children will be able to reason critically, actively, and creatively. Surely this requires all of us to learn continuously.

Hopefully this article that I have made this can be useful for the reader, it is expected the reader can analyze again about the difficulties of students of class VI in working on the problems of many wake up flat.

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