The Influence of the Probing Prompting Model on Students' Mathematics Learning Outcomes at SDN 2 Kayangan

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Article Info	Abstract
	This research aims to describe whether there is an influence of the Probing Prompting Model on the Mathematics Learning Outcomes of Grade 4 Students at SDN 2 Kayangan. This research was carried out at SDN 2 Kayangan on class 4 students in the second semester of the 2023/2024 academic year. The method used in this research is quantitative with a quasi-experimental method in the form of Pretest-Posttest Group Design. The population in this study were 4th grade students at SDN 2 Kayangan. The sample for this research consisted of 26 students. Data collection techniques use tests and documentation and data collection instruments use pre-test and post-test. The validity of this research uses validity tests and reliability tests. The data analysis technique uses descriptive analysis, the normality test uses (Klomogrov Smirnov Test) and the homogeneity test uses (Lavene Test). Meanwhile, hypothesis testing uses the T-test or T-Test which produces tcount 13,832 > ttable 0.388 which proves that there is an influence of the probing prompting model on mathematics learning outcomes.

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1. INTRODUCTION

Law number 20 of 2003 concerning the national education system, states that. Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble morals and skills that treat themselves, society, nation and state (Wahab et al., 2021:2).

So, the author can conclude that, education is a conscious and planned effort which aims to realize the learning process, the potential possessed by students. Education in this case is very important, with education a person will gain knowledge, understanding, skills to face challenges in this increasingly advanced era of globalization.

The teacher is the spearhead who has direct contact with students as a source and object of learning. No matter how good and ideal an educational curriculum is, without it being balanced with the teacher's ability to implement it, everything will be less meaningful. Especially in the current era of globalization, there should be a change in the role of teachers. The teacher no longer plays a role only as the only source of learning but plays more of a role as a learning manager (Wina Sanjaya, 2016:95).

A learning model is a plan or pattern that is used as a pattern in planning learning in class or learning in tutorials. The learning model refers to the learning approach that will be used, including teaching objectives, stages in learning activities, learning environment, and classroom management (Harefa in Martimas et al, 2023: 5).

So, it can be concluded that, the use of learning models is very important because having the right learning model used can also make it easier for a teacher to present teaching material. Learning models can also make it easier for students to receive and understand

the material that will be delivered, as well as the need for teacher understanding and skills in implementing appropriate learning models that suit the needs used in every learning activity at school.

Based on initial observations made by researchers in class 4 during the learning process, learning appeared monotonous, due to the lack of precise use of the learning model used by the teacher in delivering the material. The learning model that should be used by teachers to deliver material must be in accordance with the characteristics of students and the material to be delivered must be appropriate to the teaching material, so that the learning objectives will be achieved as well as student learning outcomes.

Meanwhile, the results of interviews with class 4 homeroom teachers showed that in this class there were mathematics problems related to low student learning outcomes in understanding the concept of mathematical sentences and calculations. Apart from that, in this material students are not yet able to use integer arithmetic operations, do not understand how to use brackets "( )", in applying the four basic operations of arithmetic mixtures on integers, understand the sequence of operation steps involving brackets "( )", understand the general and special relationships of calculations involving brackets "( )". Below is a table of students' mathematics score results. The average mathematics score for grade 4 students at SDN 2 Kayangan is that the average score for semester 1 (one) exam is 73.96 while the KKM is 75. The mathematics score for grade 4 students does not meet the KKM because it is less than the KKM of 75.

In line with the problem above, the solution to overcome this problem is to apply a probing model where the teacher can present a series of questions that guide and explore students' thinking processes that link students' knowledge and experience.

2. METHOD

This research was carried out using quantitative methods with the type of research, namely quasi-experimental with the form of a pretest-posttest group design. This research was carried out in class 4 at SDN 2 Kayangan. The population in this study was all 4th grade students at SDN 2 Kayangan for the 2023/2024 academic year, totaling 26 students. The sample in this study was all 4th grade students at SDN 2 Kayangan, totaling 26 students, 16 boys and 10 girls.Data collection techniques use tests and documentation and data collection instruments use pre-test and post-test. The validity of this research uses validity tests and reliability tests. The data analysis technique uses descriptive analysis, the normality test uses (Klomogrov Smirnov Test) and the homogeneity test uses (Lavene Test). Meanwhile, hypothesis testing uses the T-test or T-Test.This research intends to explain the influence of the probing prompting model on students' mathematics learning outcomes. Where the object of this research is grading 4 students at SDN 2 Kayangan for the 2023/2024 academic year.

3. RESEARCH RESULT
1. Control Group with Mathematics Learning Results

Table. 1 Pretest- Posttest Control

No	Abbreviated Name	Pre-Test Results	Post Test Results
1	NA	32	40
2	IWB	36	44
3	K.G	40	44
4	KKA	52	56
5	NO	44	52
6	KAA	46	50
7	MI	32	46

8	F.A	36	50
9	ATZ	44	48
10	NYS	40	52
11	SP	52	56
12	GJK	56	60
13	ZBR	48	52

2. Experimental Group with Mathematics Learning Results

Table 2. Experimental Pretest-Posttest

No	Abbreviated Name	Pre-Test Results	Post Test Results
1	AF	32	96
2	D	40	88
3	SO	44	80
4	MLI	36	76
5	STZ	52	92
6	SGAR	44	80
7	RHR	56	88
8	TA	64	96
9	A	56	96
10	FSN	60	88
11	DH	36	92
12	A.M	52	88
13	m	40	96

3. Hypothesis test

According to Ghozali, the t statistical test is a test that shows how much influence an independent variable individually has in explaining the dependent variable. This t statistical test or t-test was carried out using a significance level of 0.05 (α=5%),

able IV.8 Cronbach's Alpha if Item
Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Question1	13.65	41,995	,511	,918
Question 2	13.77	42,665	,498	,918
Question3	13.12	42,826	,419	,919
Question4	13.27	40,765	,677	,915
Question 5	13.42	41,454	,530	,918
Question6	13.65	42,395	,440	,919
Question7	13.19	41,922	,524	,918
Question8	13.19	43,042	,328	,921
Question9	13.23	42,265	,442	,919
Question10	13.65	43,035	,329	,921
Question11	13.12	41,626	,657	,916
Question12	13.19	42,002	,510	,918
Question13	13.12	41,306	,721	,915
Question14	13.27	40,445	,731	,914
Question15	13.65	42,635	,398	,920
Question16	13.23	41,625	,551	,917
Question17	13.23	42.105	,469	,919
18 Question18	13.69	41,742	,589	,917
Question19	13.38	39,686	,819	,912
Question20	13.35	39,915	,789	,913
Question21	13.19	42,242	,467	,919
Question22	13.23	41,545	,565	,917
Question23	13.35	41.115	,592	,917
Question24	13.69	42,302	,484	,918
Question25	13.31	42,062	,448	,919

Table IV.11 *Paired Samples Statistics*
Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	pretest-posttest experimental class	47.08	13	10,218	2,834
		88.92	13	6,763	1,876
Pair 2	Pretest control	42.92	13	7,772	2,156
	Post control	50.00	13	5,598	1,553

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