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Increasing Literacy and Numeracy and Adapting Technology Through the Campus Teaching Program

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Abstract: This research aims to determine the increase in students' literacy and numeracy skills. With a population of SD Inpres Rawe students and as a sample, namely fifth grade students at SD Inpres Rawe. The method used in this program is an interactive and participatory approach. The final results of the Teaching Campus program were significantly able to improve the literacy and numeracy skills of students at SD Inpres Rawe. After this program was implemented for four months, there was an increase in the average literacy score by 85% and the average numeracy score by 65% based on the pretest and posttest results. This program provides an opportunity for students to make a positive contribution to basic education, while students benefit from a learning approach that is innovative, interactive and focused on improving literacy and numeracy.

INTRODUCTION

Education is one of the most important aspects in every individual's life. In the world of education, the basic abilities that students must have are literacy and numeracy knowledge and introduction to technological adaptation. Education plays an important role in developing potential and preparing future generations.

Through education, a person can gain the knowledge, skills, and understanding necessary to succeed in personal and professional life. Education not only provides access to information and knowledge, but also helps in forming good attitudes, values and ethics (Santika, 2020; Adri, 2023). With quality education, individuals have a better opportunity to achieve



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their goals and make meaningful contributions to society and the world. By providing quality education for each individual, this can also provide opportunities for them to grow and develop, achieve better potential, and become agents of positive change for society and the world as a whole. One of the most important aspects in education is literacy and numeracy skills. Literacy and numeracy skills are two important aspects of education that provide a strong foundation for individual progress in various areas of life.

Literacy and Numeracy are the knowledge and skills to use various types of numbers and symbols to solve practical problems in everyday life and then analyze information displayed in various forms and interpret the results of the analysis to predict and make decisions. Literacy is a process of human interaction between education and students to achieve educational goals. Literacy involves the ability to read, write, and understand text. With good literacy skills, individuals can obtain knowledge from various sources, communicate effectively, and understand complex information (Lisnawati & Ertinawati, 2019). Meanwhile, numeracy skills involve understanding numbers, mathematical operations, and their application in real situations. With strong numeracy individuals abilities, can develop essential problem-solving, analytical and logical skills in various fields, including science, technology and economics (Kemendikbud, 2017). Good literacy and numeracy skills provide a solid foundation for individuals to become active, critical and independent citizens in facing the challenges of an increasingly complex and diverse world. Literacy skills can help students enrich vocabulary knowledge, add new information and insights, and increase understanding of the world. Literacy skills can also help students improve their learning abilities. Numeracy literacy skills are a person's ability to use, explain and represent mathematics various contexts, including mathematical reasoning skills and the ability to use concepts, procedures and facts to describe, explain and predict events that can be used to solve everyday problems.

Meanwhile, numeracy skills can train students to think logically and

critically in solving everyday problems. With this ability, students can identify problems, analyze situations, and find appropriate solutions using numbers and data (Patriana et al., 2021; Putri, 2021). Therefore, it is important for educators and parents to pay special improving students' attention to literacy and numeracy skills. Based on the results of observations at SD Inpres Rawe, classroom learning activities have not yet led to an increase in students' literacy and numeracy skills. At SD Inpres Rawe, the literacy movement implemented for students is reading books 15-30 minutes before the first lesson starts. Reading activities are also very important for students so that students not only get the material provided by the teacher, but also make students accustomed to reading, both reading words, reading syllables, reading fluently, and reading comprehension. This activity was carried out because the school has implemented differentiated learning in several classes starting from class 4, class 5 and class 6. Literacy learning activities at SD Inpres Rawe include the provision of a reading corner to grow students' knowledge and provide

opportunities for students to express themselves. his work in the classroom and can be read by all students. Literacy is not just reading, but the ability to analyze reading understand the concepts behind the writing. Literacy is broadly defined as a language skill which includes the ability to listen, write, read, speak and the ability to think which is part of it. Padmadewi & Artini (2018:1) literacy programs can be implemented in stages by considering school readiness, school capacity readiness, and reading material readiness. The literacy and numeracy movement that has been implemented can encourage motivate students to have an interest in developing students' abilities to apply number concepts and arithmetic operation skills in everyday life.

The purpose of conducting this research is to see how literacy and numeracy develop as well as the introduction of technological adaptation where the objects of research are class V students at the researcher's placement school, namely SD Inpres Rawe, using a qualitative descriptive method where researcher acts as an observer. The

results of this research show that class V students are very interested in learning to play while learning using learning media and learning methods carried out in groups are more effective so that students' literacy and numeracy skills increase. Learning can achievement in the classroom for SD Inpres Rawe students is still below the average of 65% because students still minimal have understanding regarding literacy and numeracy learning implemented in school, so students' abilities regarding numeracy literacy are still very minimal and require special guidance from each teacher. This needs to be done considering that there are still many underdeveloped schools, especially elementary schools, which still require special attention in developing learning (Widiansyah & Fitriansyah, 2022). This is caused by several factors, including those related to literacy, namely, there are still many students who are not fluent in reading, so the teacher divides the students into several groups according to their respective levels of reading comprehension, namely reading comprehension groups, reading words, reading syllables, and

fluently. read Meanwhile, for numeracy, there is only one mathematics subject teacher, and there is a lack of student understanding regarding numeracy, and there are still many students who think that learning related to numeracy is boring because only relies on formulas calculations, numeracy learning is implemented at SD Inpres Rawe, namely making addition trees and getting into the habit of reminding basic multiplication every morning before class starts in order to improve the quality of student learning. By getting into the habit of reminding basic multiplication, it can help students in solving numeracy problems starting from grades 4, 5 and 6. SD Inpres Rawe is one one school that is the target of the campus teaching program for class V. During the assignment period, students carry out programs provided by the campus teaching team, namely assistance with student literacy and numeracy activities, technology adaptation and school administration which is carried out following a program that has been agreed with the school.

The Ministry of Education, Culture, Research and Technology launched the Teaching Campus program to provide opportunities for students throughout Indonesia develop their abilities according to their individual talents and interests. Developing learning methods that attract students' interests and talents to be more creative. (Putri, 2018; Adri, 2023) which aims provide to opportunities for students to learn and develop themselves through teaching experience in elementary schools. The main targets of this program are Elementary Schools (SD) and Junior High Schools (SMP), the Teaching Campus Program provides opportunities for students to learn outside the classroom by becoming partners with teachers in the learning process at the educational level. Through this program the role of students is needed to provide better learning to schools and hone creativity. Apart from that, students will have the opportunity to hone their soft skills and character, as well as gain teaching experience that can be recognized in various forms and also to be better prepared to face the world of work.

This program is motivated by the need for student assistance in assisting teachers and students at school. Teaching Campus involves students at each campus from various educational backgrounds to help with the teaching and learning process at school. Rahmah & Triristina (2021). The aim of this program is to improve the quality of learning in schools. Through the Teaching Campus program, students can develop teaching skills, make positive contributions to the world of education, and help improve students' literacy and numeracy skills at school. This program provides benefits both for students in self-development, as well as for teachers and students in improving the quality of education.

METHODS

This research method uses a type of descriptive research method which aims to describe a form of phenomenon or change in students related to literacy and numeracy through campus teaching program activities at SD Inpres Rawe. According to Suharsimi Arikunto (2013:3) descriptive research method is research that is intended to investigate conditions, or other things that have been mentioned, the results

of which are presented in the form of a research report. In descriptive research, phenomena include forms, activities, characteristics, changes, relationships, similarities and differences between phenomenon another. and According to Sugiyono (2012:13),descriptive research is research carried out to determine the value independent variables, either one or more variables (independent) without making comparisons, or connecting them with other variables. descriptive research method is to determine the relationship or changes in students regarding literacy and numeracy at SD Inpres Rawe and to develop critical and creative thinking skills while training each student to appear active in their group, and to collaborate openly with other students.

Research subjects are people who respond or answer written or verbal questions. The subjects in this research were 22 class V students at SD Inpres Rawe. The object of this research is SD Inpres Rawe with the aim of finding out student improvements related to Literacy and Numeracy. The data collection method is carried through direct observation of students

through literacy and numeracy activities. The data obtained can determine students' abilities regarding literacy and numeracy and can also determine the extent of students' understanding regarding literacy and numeracy.

RESULT AND DISCUSSION Result

Based on the results of initial observations at SD Inpres Rawe, researchers found that the literacy and numeracy abilities of fifth grade students at SD Inpres Rawe were still very low due to low student interest in learning and low student motivation to and inadequate supporting infrastructure, thereby reducing student motivation to learn, especially literacy and numeracy. students are very low. After the researchers made observations and found several problems, one of which was weak literacy and numeracy skills in both low and high classes. After recording these problems, the researcher created several programs or activities that could overcome these problems, including: 1) Creating a Literacy Corner, where students read for 10-15 minutes before the teaching and

learning process begins 2) Training students' memory about multiplication, counting the concept of the number 3). Carrying out class AKM where the subjects are fifth grade students at SD Inpres Rawe with the aim of finding out students' abilities in both literacy and numeracy 4) Learning while playing with letters with students in lower classes where there are still some students who don't know letters 5) Inviting and guiding students to diligently read 1 or 2 books during the week in the library. From several activities that were the aim of the research, namely implementing AKM for classes, especially in class V, the results of implementing AKM found the following: 1) In Literacy, some students were faster and able to understand explicit or real information and found it difficult to conclude a problem from idea of a topic 2). In Numeracy, some students are able to determine and discover the concept of numbers but find it difficult to solve a problem regarding simple equations, multiplication or division operations. 3) Apart from that, fifth grade students are also more interested in learning

when the learning process is carried out while playing.

The literacy and numeracy abilities of class V students at SD Inpres Rawe are still below average, with the number of students being 22 people. The results of interviews with class teachers related to learning to improve students' Literacy and Numeracy at SD Inpres Rawe, where students are more likely to accept and follow what the teacher says, in other words, teachers play a more active role in the learning The process. application inappropriate learning methods will trigger students' problems in learning so that students will tend to be more passive, not daring to ask questions and express opinions, so that these weaknesses will arise when the teacher gives assignments. Literacy at SD Inpres Rawe has implemented literacy activities where students have been grouped based on their level of reading ability, namely reading words, reading syllables, reading fluently, and reading comprehension which are carried out for 10-15 minutes before the start of class time. This activity aims to improve the literacy and numeracy skills of students at SD Inpres Rawe.

Activities that have been carried out at SD Inpres Rawe include the Literacy Work Program for creating reading corners, reading corners are created in every classroom in the school, such as hanging or sticking writing containing motivational words for learning, cleaning and decorating classroom corners to make them comfortable. occupied, and provides a variety of books tailored to the grade level and interests of students. The aim is to increase student motivation in literacy activities. In its implementation, the teacher homeroom becomes facilitator to motivate and guide students in participating in habituation every morning.

Based on the understanding of numeracy and the existence of problems related to students' lack of abilities, it is deemed numeracy necessary to provide tutoring to improve students' numeracy abilities. The purpose of numeration is to increase students' memory numeration such as multiplication, addition, subtraction and simple division and to motivate students to learn numeration. In this activity, researchers provide guidance with students in order to improve student numeracy. Meanwhile, for school numeracy movement activities, namely by cultivating or familiarizing students remembering multiplication starting from class 3, class 4, and class 5. In the initial pretest activity in class V , the number of students taking AKM Literacy and Numeracy is 22 students. Researchers say that there are still many students who have not reached the minimum literacy and numeracy levels when taking the pretest. Numeracy literacy is important not only in educational aspects but also in social and community sustainability.

Based on the results of the observations, obstacles that researchers found at SD Inpres related to numeracy were that students had not mastered basic multiplication, so many students were not able to solve arithmetic questions well because basic multiplication had not been mastered by students, especially class V students at SD Inpres Rawe. There is a lack of understanding student regarding numeracy, and there are still many students who think that learning related to numeracy is boring because only relies on formulas

calculations. Class hours begin in order to improve the quality of student learning, with the habit of reminding basic multiplication to help students in solving numeracy problems starting from grades 4, 5 and 6 at SD Inpres Rawe. The main problem that causes students to still not be able to complete numeracy literacy-based learning is teachers who have not familiarized students with literacy and numeracybased questions.

Discussion

The school literacy movement (GLS) implemented at SD Inpres Rawe is by reading a book for 10-15 minutes before learning time starts. Students can read freely any type of book, it can be a textbook or a non-fiction book. Students are asked to explain what they have read. The implementation time is every day before learning takes place. Based on the results of observations, the obstacles that researchers found at SD Inpres related to literacy were that there were still many students who were not yet fluent in reading, so the teacher implemented literacy activities where students were divided according to their respective levels of reading comprehension. Meanwhile,

for Numeracy activities, students did not yet mastering basic multiplication so that many students cannot solve arithmetic questions well because basic multiplication has not been mastered by students, especially class V students at SD Inpres Rawe. Literacy and numeracy can be interpreted as the ability to read and write, whether in the form of letters, symbols or numbers, includes which the ability understand the idea or meaning or idea the problem (Hamzah.2020:20). Students made simple wall art which they created and then attached it to the outside wall in front of the library. In practice, the homeroom teacher can become a facilitator to motivate and guide students in their participation in school media with the aim of increasing students' self-confidence and creativity and increasing students' interest in literacy and helping to create a literacy environment at school.

Table 1 Pre-Test Results Minimum Cumulative

Assessment				
Number	Name	Literacy	Numeracy	
1	AK	50	35	
2	DG	75	60	
3	GY	40	25	
4	JF	50	35	
5	MA	60	45	
6	MC	75	60	

1	1	7

verage		60%	45%
22	YD	68	53
21	YJ	65	50
20	YI	68	53
19	YF	55	40
18	YA	54	39
17	WM	42	27
16	TD	53	38
15	SA	65	50
14	MJP	73	58
13	MJ	67	52
12	MY	60	45
11	MV	65	50
10	MM	62	47
9	MK	43	28
8	MF	68	53
7	ME	62	47

When taking the initial pretest, it be seen that the learning achievements in the classroom for SD Inpres Rawe students are still below the average of 65% because students still have low understanding regarding literacy and numeracy learning implemented in school, so students need special guidance from each teacher. The main problem faced the low increase in student numeracy in class V of SD Inpres especially Rawe, in improving learning in solving numeracy problems. The Teaching Campus program provides students with a

good opportunity to be part of the changes in education in Indonesia. This activity certainly helps the development of student learning in class and outside of class both in terms of Literacy and Numeracy with aim of increasing students' enthusiasm for learning providing opportunities for students to collaborate with what they have learned in class and outside of class. This goal is to encourage and motivate students to hone their skills in everyday life. During the implementation of the post-test for fifth grade students at SD Inpres Rawe, it was discovered that the percentage of students who were able to answer competency tended to decrease in the pretest results. **Teachers** can make evaluation materials that encourage students to increase their competency abilities. So that the class AKM post test can improve and can answer students' competency abilities better.

Table 2 Post-Test Results Minimum Cumulative Assessment

Number	Name	Literacy	Numeracy
1	AK	75	55
2	DG	100	80
3	GY	65	45

4	JF	75	55
5	MA	85	65
6	MC	100	80
7	ME	87	67
8	MF	93	73
9	MK	68	48
10	MM	87	67
11	MV	90	70
12	MY	85	65
13	MJ	92	72
14	MJP	98	78
15	SA	90	70
16	TD	78	58
17	WM	67	47
18	YA	79	59
19	YF	80	60
20	ΥI	93	73
21	YJ	90	70
22	YD	93	73
Average		85%	65%

Based on the results of the numeracy literacy post-test in class V of SD Inpres Rawe, the average score for each student was very good. Literacy and numeracy are a person's skills in developing, applying understanding various sites through mathematical thinking for students, the better the student's learning outcomes will be. Based on the results of the numeracy literacy post-test in class V of SD Inpres Rawe, an average literacy score of 85% was obtained and an average numeracy score of 65%, it was stated that each student's numeracy literacy ability was very good. Literacy and numeracy are very important not only for educational aspects but also for social and community sustainability as well. Literacy and numeracy are very important to apply in student learning activities, where literacy and numeracy can help students solve existing so that they can help problems, students understand enable and students to think critically.

CONCLUSION

Literacy and numeracy are the knowledge and skills to use various kinds of numbers and symbols related to basic mathematics to solve practical problems in various contexts of daily life and analyze information presented in various forms. As for the meaning of numeracy and the existence problems related to students' lack of numeracy abilities, it isdeemed necessary to provide tutoring improve students' numeracy abilities. Based on the results of the numeracy literacy test in class V of SD Inpres Rawe, an average literacy score of 85% was obtained and an average numeracy score of 65% for each student was very

good. Literacy and Numeracy learning at SD Inpres Rawe has implemented literacy activities where students have been grouped based on their level of reading ability, namely reading words, reading syllables, reading fluently, and reading comprehension which is done for 10-15 minutes before class time. start. Meanwhile, for Numeracy activities, students are continuously trained every morning to memorize multiplication before class starts. This goal is to encourage and motivate students to hone their skills everyday life.

Having learning assistance can help students be more active in the classroom and outside the classroom. My suggestion is that the school where you are assigned can continue to implement the programs that have implemented, been especially regarding changes related to literacy and numeracy.

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REFERENCES

- Adri, H. T., Suwarjono, S., Sapari, Y., & Maryani, N. (2023). Merdeka Belajar Kampus Merdeka: Policy Direction and Implementation for Study **Progress** of Program. Continuous Education: Journal of Science and Research, 4(2), 13-22. https://doi.org/10.51178/ce.v4i2. 1446
- Adri, H. T., & Suwarjono. (2023). Developing Science E-Modules based on Scientific reasoning Skills for Primary Education Course . Jurnal Penelitian Pendidikan IPA, 9(8), 6480-6486. https://doi.org/10.29303/jppipa. v9i8.4727
- Arikunto S. 2013. Research Procedures: A Practical Approach. Jakarta: Rineka Cipta
- Banowati Amalia. (2021) Analisis Kemampuan Literasi Numerasi Siswa Smp Dalam Menyelesaikan Soal Cerita Pada Materi Aljabar. (S1) Skripsi, Undergraduate Universitas Muhammadiyah Malang.
- Ertinawati, I. L., and I. Lisnawati. "Literacy Through Presentation." Metaeducation Journal 1.1 (2019):3.
- Fachri, M., Rozi, F., & Putri, F.N. 2023. Increasing Student Literacy Abilities Through Learning Management. Educative: Journal of Educational Sciences, 5(2): 1055 -1068
- Hamza. 2020. Corona Tracker: Worldwide and predictions. Bull World Health orange,1(32), 1-32.
- Journal of Indonesian Values and Character Education (IVCEJ), 3 (1): 8-19 Teaching Campus Program Team.2023. Class 5 Teaching Guidebook. Teaching Campus Campus Program. Directorate General of Higher Education,

- Technology, Research and Ministry of Education and Culture. 2017. Guide to the National Literacy Movement.
- Ministry of Education and Culture. (2017).National Literacy Movement. (Online), (http://gln.kemdikbud.go.id)
- Ministry of Education and Culture. (2017) . Literacy and Numeracy supporting materials. Ministry of Education and Culture, 8(9),1-5
- Lisnawati, I & Ertinawati, Y. 2019. Literacy through Presentations. Journal of Metaeducation, 1(1): 1-12
- Nurhasanah, A.D. & Nopianti, H. 2021. The Role of Campus Teaching Program Students in Improving Competency at SDN 48 Central Bengkulu. Proceedings of the National Community Service Seminar, Lancang Kuning University. 166-173
- Patriana, W. D., Sutama, S., & Wulandari. M. D. (2021).Cultivating Numeracy Literacy for Competency Minimum Curricular Assessment in Activities at Muhammadiyah Schools. Basicedu Elementary Journal, 5(5), 3413–3430.
- Putri, Padmadewi, N. N., & Artini, L. P. (2018). Literacy in schools, from theory to practice. Bandung: Nilacak
- Princess. (2018). Character education for elementary school children in the digital era. AR-RIAYAHA: Journal of Basic Education, 2018, 2.1:37-50na
- Patriana (2021). Cultivating numeracy literacy for minimum competency assessment in curricular activities Muhammadiyah elementary

- schools. Basicedu Journal, 5(5), 3413-3430.
- Rahmah, A. N. A., & Triristina, N. Teaching (2021).Campus: Transformation Student of Learning Culture in Adapting to New Habits in Madura. National Multidisciplinary Conference, 01(01).
- Suswandari, M. (2018). Building a literacy culture for educational supplements in Indonesia. Bantara National Education Journal, 1(1), 20 - 32J
- Santika, I. G. N. N. (2020). Optimizing the Role of the Family in Facing Covid-19 Problems: A Literature Review. Scientific Journal of Social Sciences, 6(2), 127-137.
- Quantitative, Sugiyono. (2012).Qualitative, and R&D Research Methods. Bandung: Alphabeta
- Yunita, A. (2019). THE INFLUENCE OF THE SCHOOL **ENVIRONMENT ON LEARNING** MOTIVATION **AND** ITS IMPLICATIONS FOR STUDENT LEARNING **ACHIEVEMENT** (Doctoral dissertation, Siliwangi University).