



---

## **Application of Literacy and Numeracy in Junior High School Learning**

**Gyta Krisdiana Cahyaningrum<sup>1</sup>, Didik Cahyono<sup>2\*</sup>**

Physical Education, Mulawarman University, Indonesia<sup>1</sup>

Physical Education, Mulawarman University, Indonesia<sup>2</sup>

Corresponding E-mail: [didikcahyono86@gmail.com](mailto:didikcahyono86@gmail.com)\*

*Received: 26-03-2024*

*Reviewed: 10-04-2024*

*Accepted: 28-04-2024*

### **Abstract**

The Numeration Literacy Program organized by the Ministry of Education and Culture and Technology in the Teaching Campus Program is a program that aims to improve the quality of education. The focus of this research examines the implementation of efforts to improve numeracy literacy skills through the 6th generation teaching campus program. This research method is a quantitative approach. The location of the study was carried out at State Junior High School 3 Tenggara Seberang, the study population included students and teachers. Data collection using observation techniques, interviews, documentation, as well as AKM pre-test and post-test. The results showed that the implementation of the campus teaching program batch 6 through collaborative activities in the numeracy literacy application program carried out, including school making, reading movement 15 minutes before learning, language month activities, literacy teaching in class, numeracy ice breaking, numeracy snakes and ladders, Literacy Numeracy quizzes and the application of technology adaptation. The results of the implementation of the program can increase students' AKM scores on literacy by 8% and numeracy by 3%. This study concluded that the implementation of the numeracy literacy program through the 6th generation teaching campus can improve numeracy literacy skills.

**Keywords:** Literacy, Numeracy, Teaching Campus, Junior High School

### **Introduction**

Numeracy literacy and adaptability to technology are fundamental abilities that play a role in determining the quality of a nation's education. In particular, the ability in literacy and numeracy competencies is the focus of learning and a standard of competence that students have to adapt to life outside the classroom. However, in reality, the ability of numeracy literacy and adaptation to technology in Indonesian students is still low and underdeveloped, lagging far behind other countries (Waldi, et al., 2022). By research conducted by Lisnawati, et al.,

(2022), the application of strategies carried out by teaching campus students focuses on fostering student motivation/interest in reading, activities in the form of familiarizing students with reading books, providing reading resources according to student needs and making interesting making reading (Palangda et al., 2023). So in its application, literacy is the most important basis of distribution in basic education even from an early age, and is included in functional skills that are very useful in everyday life. Numeracy skills also play an effective role in learning, working, and interacting with community life. Therefore, numeracy literacy skills need to be developed systematically and continuously, both in learning activities at school and outside school (Lestari, et al., 2022).

Learning today utilizes the help of technology to support the learning process, so teachers must be able to navigate learning applications and websites (Dash & Bhoi, 2024). On the other hand, there are areas in the 3T region (underdeveloped, frontier, and outermost areas) whose learning process cannot be carried out using technology due to economic constraints, internet networks, and others (Ali, Z., 2022). This can result in a loss of student enthusiasm and learning opportunities. Seeing the existing problems, by considering various factors, the Ministry of Education and Culture and Technology together with employees consider finding a meeting point for solutions that can solve these problems (Suputra et al., 2023). Then, through the teaching campus program, it was decided to involve students from all over Indonesia and together turn these challenges into hopes to improve the quality of Indonesia. The purpose of the campus teaching program is also to build collaboration between students and teachers to support the educational process in schools.

The results of the analysis of school needs in one of the Junior High Schools that are the target schools for the implementation of the Teaching Campus Program Class 6 of 2023, namely State Junior High School 3 Tenggara Seberang, Kutai Kartanegara Regency, East Kalimantan. Before the Teaching Campus Program is implemented, students first conduct a needs analysis at the target school which aims to give students an overview of the learning process carried out at school along with the completeness of facilities and infrastructure that support the learning process. Based on our observations, the school is located quite far from urban areas and is in a residential village, but access to the school is easy to reach. Network access to the internet at school is quite good. The school already has B Accreditation and the school has State status. The curriculum applied in daily learning is 2 curricula, namely, the 2013 curriculum and the independent learning curriculum for the 2013 curriculum (Noorhapizah et al., 2023) taught in grade IX and the independent learning curriculum taught in grades VII and VIII. Inside the room, each classroom is equipped with a reading corner, class information board, class organizational structure, evidence of student work on display, and educational room decorations. The environment around the school is also safe, peaceful, and comfortable, the community also supports school activities.

Before making and implementing the Collaborative Action Plan (RAK) in the form of work programs, Teaching Campus students first make observations by analyzing the conditions and needs of schools at State Junior High School 3 Tenggara Seberang. This observation aims to analyze the condition of the school from the state of the school environment starting from the environment around the classroom, classroom, library room, science lab room, and

## ***Application of Literacy and Numeracy in Junior High School Learning***

computer in this school. After observing the school environment both from the school environment, classroom environment, student needs, and school facilities, it was found that the results of the analysis were by the needs of the school including the State Junior High School 3 Tenggara Seberang is located in Kutai Kartanegara Regency which is crowded with people, has a school environment that is in very good condition. Consisting of six classrooms, some classes have a reading corner for students. In addition, classroom conditions and learning support tools are in good condition. State Junior High School 3 Tenggara Seberang has one teacher's room along with the principal's room, counseling guidance room, and administration room located in one location, has one large enough classroom that functions as a library, a science lab that has sufficient facilities but is not functioning properly, and a computer lab with adequate computer facilities and internet networks.

The result of the next observation is that State Junior High School Tenggara Seberang still uses the 2013 Curriculum for grade IX and the Merdeka Curriculum for grade VII and grade VIII in its learning and it was found that students have a low percentage of numeracy learning known as from the results of the previous Computer Based National Assessment (ANBK). Based on observations related to supporting school education and literacy and numeracy, researchers can identify the need for the implementation of appropriate special programs to increase the effectiveness of increasing numeracy literacy in target schools, especially in State Junior High School 3 Tenggara Seberang. The numeracy literacy program includes innovations in teaching methods, the use of creative learning media, and meaningful collaboration between students as a 6th-generation teaching campus team with teacher and student councils. Based on the results of the analysis above, this study aims to support the implementation related to the implementation of increasing numeracy literacy through the Teaching Campus Batch 6 program.

### **Literature Review**

(Sholehah, 2022) The teaching campus program is expected to foster responsible educators and local education. The implementation of the teaching campus program not only practices student learning directly at school but also helps educators to implement updated methods and foster confidence in facing the challenges of implementing an independent curriculum (Adellia & Himawati, 2021). This program is designed with the aim that educators can continue to learn and improve their skills so that they can do their best in implementing the curriculum and more importantly in applying the latest learning methods, teaching, and learning processes to the use of media that adapt the use of technology.

### **Research Method**

This study used a qualitative descriptive approach with direct observation in the field. Analyze the data obtained (in the form of words, images, and actions) and provide an overview or explanation of the situation or condition under study. Even though it is not expressed in the form of statistical numbers, expressions, and explanations are written in narrative descriptive

form. Since representation is objective, subjectivity in interpretation or interpretation can be avoided. The qualitative descriptive approach focuses on factual observations and questions obtained through observational studies, interviews, documentation, and data related to the AKM pre-test and post-test. Data collection techniques are carried out through the stages of observation, interviews, and documentation. The study was conducted for four months in the odd-numbered semester of 2023. The location of this research was carried out at State Junior High School 3 Tenggara Seberang, Kutai Kartanegara. Respondents consisted of 30 students of grade VIII.

The initial research phase was carried out through direct observation and interviews at target schools. Interviews are conducted through in-depth conversations conducted by interview to information from a respondent using several questions. The observations made resulted in participant observations. Documentation also includes data or variables in the form of notes, transcripts, images, as well as AKM pre-test and post-test. In the early stages of the study, observations were made in schools by the 6th batch teaching campus education program team consisting of student teams, DPL, PIC from State Junior High School 3 Tenggara Seberang, PIC from the Kutai Kartanegara Regency Education Office, and BPMP East Kalimantan.

## **Results and Discussion**

Campus teaching programs are implemented taking into account the declining literacy and numeracy skills of students at various levels of education, and educational imperatives involving adaptation to technology (Wisdayanti et al., 2023). This is especially evident in the limited reading comprehension and numeracy weaknesses that are common among secondary school students in target schools. As part of the campus teaching program, students are responsible for supporting and collaborating in educational, teaching, technology adaptation, and management activities.

Based on the results of intensive observations at school, the teaching campus student team implemented a program to collaborate to improve school performance by implementing full and motivating initiatives to improve the quality of education related to numeracy literacy and technology adaptation as well as management as a form of campus teaching program at State Junior High School 3 Tenggara Seberang implemented gradually by developing work programs through action design collaboration (RAK) tailored to the needs of target schools. One form of assessment to measure numeracy literacy ability is through AKM pre-test and post-test activities for grade VIII students. AKM activities aim to carry out numeracy literacy programs supervised by the Ministry of Education, Culture, Research and Technology. AKM activities were carried out on 31 grade VIII students of State Junior High School 3 Tenggara Seberang.

Implementation of AKM (Minimum Competency Assessment) Class and Student Assessment which aims to measure students' basic abilities and monitor student learning outcomes. This assessment is specifically for grade VIII students at the First Mennah School level. AKM was attended by 31 students and was held twice, namely the first AKM Class pre-

## *Application of Literacy and Numeracy in Junior High School Learning*

test held at the beginning of the assignment in October 2023 and the second AKM Class post-test held at the end of the assignment period on Saturday, November 25, 2023. The results of AKM implementation are presented in a bar chart as follows:

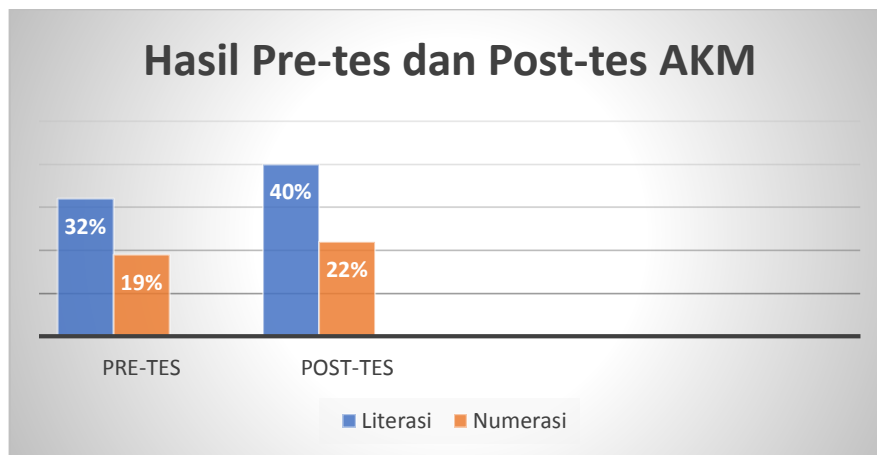


Figure 1. AKM pre-test and post-test result bar chart

The bar chart above shows the results of the pre-test implementation on literacy by 32% and pre-test numeracy by 19%, while in the post-test implementation, there was an increase in the results of the assessment on literacy by 40% and numeracy by 22%. From these results, it can be stated that there is an increase in literacy and numeracy understanding in students at State Junior High School 3 Tenggarong Seberang. This is influenced by other implementation activities carried out to support the improvement of literacy and numeracy skills by holding collaborative work programs as follows:

1. Literacy programs that have been running are making school making, reading movements 15 minutes before learning, holding language month activities, and providing literacy teaching in the classroom.
  - a. Making School Mading Previously, during observation, we found a blackboard that was unused and damaged. Therefore, we use the blackboard to be used as a school making, where the making contains information and literacy that can be read by all students.
  - b. Reading Movement 15 Minutes Before KBM The reading movement program 15 minutes before KBM is carried out regularly every day and according to the schedule we have made. The activity is carried out every 07.30 or right after the first hour of the bell. Students are given 15 minutes for literacy activities, namely by reading books in the library. After that, students return to class for the learning process. It aims to familiarize students with reading while preparing students' brain performance before learning. This is applied to all students from grades VII to IX. Our strategy in implementing this program is to make a card where each student must write the conclusion of the book he has read. In addition, occasionally we apply the storytelling method in utilizing the 15 minutes.
  - c. Language Month Activities The procurement of Language Month activities is carried out as an effort to improve students' literacy skills and also as a place to change classrooms that were initially lacking in literacy for the better. Language

month activities coincide with the teaching campus festival activities that we hold so that in festival activities we include literacy elements such as poetry reading competitions, digital poster competitions, and classroom decoration competitions. Where the hope is that after this activity, students' classrooms will become literate with information such as picket schedules, class making containing information such as subject schedules, and others that are also related to hygiene.

- d. We also do literacy teaching in the classroom Efforts to improve literacy in the classroom, for example, provide fun learning such as making literacy puzzle games and word search games. Where we apply this when there are empty hours/teaching assistance. This activity can help students who initially have difficulty reading and lack confidence so that eventually all students can read well and feel more confident. This effort can improve literacy (Maharani et al., 2024).
2. Numeracy In terms of the program that has been running is collaborating with subject teachers to create fun learning by using an ice-breaking numeracy game and also other numeracy programs, using media such as snakes and ladders, numeracy, and providing fun quizzes. This numeracy program is carried out when there are empty hours and during mathematics subjects.
3. Technology adaptation The technology adaptation program that has been running is Canva application training aimed at students who have an interest in designing and training on making PPTs by grade VIII students. In addition, our technology adaptation is in terms of electing the student council president and vice president digitally by utilizing the existing Chromebook.
4. Library Revitalization and Management Another program that has been running is the Library Revitalization and Management program. Where to revitalize the library, we reorganize existing books, including books in the prayer room and the warehouse. First of all, we sorted out the tiered books according to the curriculum and separated them between fiction and non-fiction literacy books. After that, we reactivated library administration by creating a guest book and a book borrowing list. In addition, we coordinate with the library coordinator to determine the schedule for the library hygiene picket and the schedule for its use in literacy activities.
5. Making Reading Corner/Literacy Corner The creation of reading corners in each class was previously constrained due to the lack of availability of existing reading books. So, to follow up on this, we use festival activities as a place to decorate the classroom with one of the conditions, namely that the class has a reading corner / simple literacy corner. As for the literacy activities that we originally planned to read, we transferred 15 minutes to the library.
6. Revitalization and Utilization of Science Laboratories The next program that has been running is the revitalization program and laboratory utilization. Where the laboratory room that was previously like a warehouse full of goods we rearranged and cleaned. We also display some practicum tools in the closet. Not to forget we made an inventory of items in the laboratory. As a form of utilization of the science laboratory, we hold a practicum learning which is carried out with class VIII and also class IX. Our practicum material adapts to the material they are studying.

## *Application of Literacy and Numeracy in Junior High School Learning*

7. Environmental Conservation The environmental conservation program that has been running is a collaborative P5 learning program in terms of making hydroponic plants. The plants planted are kale and celery. We teach students to use used goods such as bottles that can be used as hydroponic plant media.
8. Student Character Development The student character development program that runs is the SASIS (Welcome Student Greetings) program which we routinely do every morning by shaking hands with students in front of the gate.
9. Program Helps School Activities In addition to some of the programs that we have planned above, several activities have also been carried out that involve us campus students teaching in the agenda of helping school activities, including holding tutoring for students who will take part in the Olympic competition, careful intelligence, and ANBK preparation tutoring. In addition, assisting the "Voice of Democracy" activity which is one of the P5 projects carried out by the school, namely in electing the president and vice president of the student council.

Reflection and evaluation of the implementation of the Good Things program obtained during the assignment period are related to caring attitudes between others, caring for small things that are neglected and become benefits for others. MBKM programs are believed to be useful for improving additional competencies and relevant to the needs of graduates in the future (Meke, et al., 2022). In addition, the good things felt by students during the assignment period are related to how to behave and interact well with students and teachers. Then, teamwork is also an important value in a program. Based on student perceptions, the campus teaching program not only provides classroom teaching experience but can also help improve students' working skills and soft skills (Suwanti, et al., 2022). The implementation of Teaching Campus activities can provide capital for students to become themselves who have high loyalty and dedication to the country through education, students can also add insight and experience outside of college (Fisabillillah & Rahmadanik, 2022). The challenges faced during the assignment period are related to time management. Sometimes, the program implemented is still connected with other activities so it allows other programs to be forgotten. In addition, challenges in terms of conditioning learners. With the diverse nature of students, it is quite a challenge in terms of directing it.

### **Conclusion**

The Numeracy Literacy Program organized by the Ministry of Education, Culture, Research, and Technology in the Teaching Campus Program is a program that can improve the quality of education by implementing programs that support student learning in learning literacy that trains reading and writing skills applied in the school making program, reading movements 15 minutes before learning, holding language month activities, and provide literacy instruction in the classroom. As well as literacy programs are carried out in collaboration with subject teachers to create fun learning by using an ice-breaking numeracy game and utilizing the use of media such as numeracy snakes and ladders (Ultrasi) and providing fun Lit-Num quizzes and the application of technology adaptation. The results of the implementation of the numeracy literacy program showed an increase in the AKM assessment

on literacy by 8% and on numeracy by 3%. So it can be concluded that the implementation of the numeracy literacy program through the 6th generation teaching campus program can improve the numeracy literacy skills of grade VIII students of State Junior High School 3 Tenggara Seberang.

### **Acknowledgments**

Thank you to the Ministry of Education, Culture, Research and Technology for organizing the 6th batch of the Teaching Campus program in 2023. We would also like to thank various stakeholders who have helped and participated in supporting the sustainability of this program, namely BPMP East Kalimantan, and Kutai Kartanegara District Education Office. Thank you to State Junior High School Tenggara Seberang who has been willing to cooperate and provide valuable experience and knowledge to the student team, PIC, DPL, Choir PT campus teaching batch 6 during the assignment. The teaching campus is not only a place for teaching and learning but also a place for our students to develop their potential and become useful in the world of education. Everything in the series of teaching campus assignments has benefits both personally and socially.

### **References**

- Adellia, R., & Himawati, I. P. (2021). Actualization of Student Roles through Campus Teaching Activities at SD Muhammadiyah Lahat. In *SNPKM: National Seminar on Community Service*, 3, 142-150.
- Ali, Z. (2022). Campus Teaching Program in Improving Literacy and Numeracy Skills of Elementary School Students (Case Study: SDN 17 Palu): Results of PENGABMAS. *Journal of Community Service and Educational Research*, 1(2), 77-84.
- Dash, S., & Bhoi, C. (2024). Exploring the Intersection of Education and Artificial Intelligence: A Comprehensive Review. *International Journal of Multidisciplinary Approach Research and Science*, 2(02), 601–610. <https://doi.org/10.59653/ijmars.v2i02.637>
- Fisabillillah, Y., & Rahmadanik, D. (2022). Implementation of the application of literacy and numeracy in the implementation of the 3rd batch teaching campus at SDN 1 Kedungkumpul, Sukorame, Lamongan Regency. *Community Development Journal: Journal of Community Service*, 3(2), 876-883.
- Lestari, S., Fatonahr, K., Halim, A., Aurra, L. M., & Rahmawati, S. (2022). Initiatives and Challenges of The Kampus Mengajar Program to Pursue Freedom to Learn. *Pedagonal: Jurnal Ilmiah Pendidikan*, 6(2), 203-210.
- Lisnawati, I. I., Julia, J., & Iswara, P. D. (2022). Implementation of Campus Students Teaching 2 in improving literacy skills in elementary schools. *Primary: Journal of Primary School Teacher Education*, 11(5), 1555.
- Maharani, T. I., Supriadi, S., & Nurdiansyah, E. (2024). Analisis Peran Mahasiswa Kampus Mengajar 4 di SD Inpres Layang Tua II Kecamatan Bontoala. *Jurnal Mirai Management*, 9(1), 301–307.



## ***Application of Literacy and Numeracy in Junior High School Learning***

- Meke, K. D. P., Astro, R. B., Bagenda, C., Sulaiman, S., Seda, P., & Djou, A. M. G. (2022). Student perceptions of the implementation design of independent learning independent campus: A survey of the law study program at the University of Flores. *Educational: Journal of Educational Sciences*, 4(1), 934-943.
- Noorhapizah, N., Prihandoko, Y., Pratiwi, D. A., & Saputra, M. D. (2023). Effectiveness of the 'BANGKIT' Program to Support the Implementation of 'Merdeka' Curriculum in Primary Schools in a Wetland Environment. *Journal of Education Method and Learning Strategy*, 2(01), 8–16. <https://doi.org/10.59653/jemls.v2i01.302>
- Palangda, L., Naharia, O., Sumual, S. D. M., Ebe, L. S., & Mandey, L. (2023). Analysis of Barriers to Implementation of the Independent Curriculum Study the Merdeka Campus in the Department Economic Education Manado State University. *International Journal of Multidisciplinary Approach Research and Science*, 1(02), 125–132. <https://doi.org/10.59653/ijmars.v1i02.64>
- Sholehah, I. Teaching Campus Program: Efforts to Equalize Education in the 3T Region during the Covid-19 Pandemic. *Jurnal Paradigma: Multidisciplinary Journal of Indonesian Graduate Students*, 3(1).
- Suputra, I. N., Basuki, A., Dharma, B. A., & Sakdiyyah, D. A. (2023). Implementation of Office Administration Practice Media to Welcome the Independent Curriculum. *Journal of Education Method and Learning Strategy*, 1(03), 114–125. <https://doi.org/10.59653/jemls.v1i03.166>
- Suwanti, V., Suastika, I. K., Ferdiani, R. D., Harianto, W., & Ketut Suastika, I. (2022). Analysis of the impact of the implementation of the teaching campus program on student perceptions. *JOURNAL of PAJAR (Education and Teaching)*, 6(3), 814-822.
- Waldi, A., Putri, N. M., Indra, I., Ridalfich, V., Mulyani, D., & Mardianti, E. (2022). The Role of Teaching Campus in Improving Literacy, Numeracy, and Technology Adaptation of Elementary School Students in West Sumatra. *Journal of Civic Education*, 5(3), 284-292.
- Wisdayanti, W., Hasan, H., & Nadjamuddin, L. (2023). Impact of Multicultural Based Education Learning In the Process of Social Integration at SMA Al Azhar Mandiri Palu. *Journal of Education Method and Learning Strategy*, 2(01), 44–53. <https://doi.org/10.59653/jemls.v2i01.311>