

# Kampus Mengajar: Developing Literacy and Numeracy Skills of Elementary School Students

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ARTICLE INFO	ABSTRACT
<p><b><u>Article History</u></b>                      Received : 02 Mar 2023                      Revised : 26 May 2023                      Accepted : 14 Aug 2023                      Available : 30 Aug 2023                      Online</p> <hr/> <p><b>Keywords:</b>                      Kampus Mengajar                      Literacy Skills                      Numeracy Skills</p> <hr/> <p><b>Please cite this article APA style as:</b>                      Holisin, I. &amp; Shoffa, S. (2023). Kampus Mengajar: Developing Literacy and Numeracy Skills of Elementary School Students. <i>Vygotsky: Journal of Mathematics and Mathematics Education</i>, 5(2), pp. 113-122.</p>	<p>This research aims to determine the implementation of the Teaching Campus as an effort to grow the literacy ability of elementary school students. The method used is descriptive with a qualitative approach. The subjects of the research consisted of students of SD Budi Yakin Surabaya and students of SDN Langkap Madura. Data were collected using questionnaires, interviews, and documentation techniques. The results showed that students' literacy and numeracy skills have grown and developed. This can be seen from the increased understanding of the material learned, students can retell their reading results well. Students' dependence on teachers when working on LKS is reduced. The recommendation for campuses is that campuses must be able to prepare students' abilities as well as possible so that campus teaching programs provide benefits to schools.</p>

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## 1. Introduction

Literacy and numeracy skills are topics that are currently being discussed in the world of education (Salsabilah & Kurniasih, 2022). Both abilities are absolutely possessed by all students. As the demands of the times, literacy and numeracy skills must often be taught from an early age (Tyas & Rahmawati, 2022). The term literacy is often used to refer to an individual's ability to read, write, speak, calculate, and solve problems according to their level of expertise (Syofyan et al., 2019). Literacy competence is related to students' ability to select and analyze information critically to be implemented in making decisions. Meanwhile, numeracy is the ability to implement the concept of numbers and counting operations and interpret quantitative information encountered in everyday life

(Kemendikbudristek, 2021; Setiawan & Sukamto, 2021).

Paying attention to the development of education, one of the things needed today is to have numeracy literacy skills in order to think critically (Novitasari et al., 2022). Numeracy literacy can be understood as a person's active reading ability to understand something better. The process of understanding involves not only cognitive skills but also awareness and experience. Numeracy literacy requires students to be more active and creative in solving problems (Ervaayani et al., 2016). Having adequate literacy and numeracy skills can enhance a person's life in a variety of ways (Suwarno, 2021). Unfortunately, Indonesian students' numeracy is still relatively low. This is according to the 2018 International Student Assessment Program (PISA) evaluation result, which shows that Indonesian students' math score of 379 ranks 74th out of 79 countries ((Novitasari et al., 2022; Saefurohman et al., 2021; Salvia et al., 2022). Low student scores indicate relatively low literacy in elementary school students (Tias & Rahmawati, 2022). According to research findings (Kholifasari, Utami, and Mariyam, 2020), students' mathematical literacy ability in terms of high learning independence has an average inability of 69.44% at the reasoning and argument stage, the medium category has an average inability of 57.41% at the devising stage of strategies for solving problems, and the low category has an average inability of 46.11% at the mathematizing stage. There is a disconnect between the value of reading and numeracy abilities and the current environment; a solution that can raise students' literacy and numeracy skills is required.

In 2020 the government launched the pioneer teaching campus program. Furthermore, in 2021 until now the program is continued under the name teaching campus 1, teaching campus 2, and in 2023 the implementation of teaching campus 5. The pioneer teaching campus and teaching campus programs are a form of implementation of the Merdeka Belajar Kampus Merdeka (MBKM) policy (Safitri et al., 2021). This teaching campus program gives students chances to learn directly in the community, namely helping school operational activities in the form of learning, technology adaptation and administration (Setiawan & Sukamto, 2021) Before entering the community, students are equipped with various materials. One of the materials provided is literacy and numeracy learning. The presence of students in schools is expected to be able to provide many benefits, both for students and schools.

According to the specifications given, the aim of this research is to describe the execution of a teaching campus program to enhance elementary school students' abilities in reading, writing, and mathematics. This research is not the first time it has been conducted. Previously, there has been research related to the implementation of teaching campuses. The ability of primary school pupils has grown from an average of 6 to 8,16, according to research by (Hendrowati & Sunanto, 2021), who trained them in the pioneer teaching campus program. During learning, teachers use numeracy literacy modules that have been previously prepared.

Training to Improve Literacy and Numerical Skills of Primary School Students, Campus Education Program Batch 3 Implementation, provides the following campus education program implementation (Silitonga & Simanjuntak, 2022). At the end of the activity, 10 students were selected to perform a reading and writing test using the AKM application, accessible via Android or laptop. The outcomes revealed that the children who took part in the program had increased

literacy and response skills.

Implementation results of educational campus programs conducted by (Panjaitan et al., 2022) is that both college students and schools get a lot of benefits. Students gain a lot of experience both during learning and when compiling programs with teams. The presence of students is of great help to schools in the area of educational programs, helps in adapting to technology, and also helps school administrators and teachers.

## 2. Method

In this research, a descriptive approach with a qualitative approach was employed. The research subjects consisted of students and civil service teachers involved in the campus teaching program at Budi Yakin Elementary School (SD) Surabaya and one student who served at SD Negeri Langkap Madura. Data is collected by questionnaire, interview, and documentation methods. The supporting instruments used are interview guidelines and questionnaires which before use have been validated by several experts. While interviews are conducted over the phone and over WhatsApp medium, questionnaires are distributed through Google Forms. Some of the given to respondents include: what programs are carried out in campus teaching? Is the program beneficial for teachers, students, and schools? Does your program support the development of students' literacy and numeracy skills? Explain the type of program and state the goals and benefits! Interactive analysis techniques developed by Miles and Huberman (Laja, 2022) Data reduction, presentation, and analysis techniques, as well as conclusions, were employed to analyze the data. Utilizing triangulation approaches, data validity tests were conducted by contrasting questionnaire and interview results, as well as information from students and civil servant teachers. To make predictions and decisions, analyze data. Figure 1 below shows a general representation of data analysis methods.

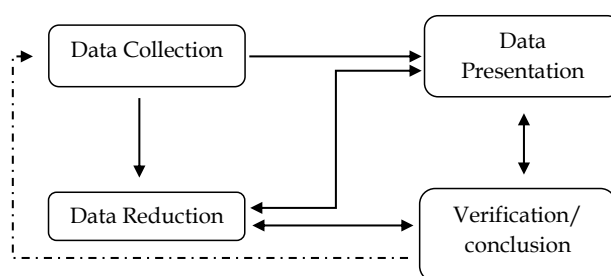


Figure 1. Data Analysis Techniques

Han's recommended indicators serve as the foundation for data analysis of pupils' numeracy and literacy abilities (Salvia et al, 2022) is presented in Table 1.

Table 1. Numeracy Literacy Ability Indicator

No	Numeracy Literacy Ability Indicator
1	Solving issues in numerous situations of daily life by utilizing a variety of numbers and symbols connected to basic mathematics
2	Analyzing data presented in a variety of formats (graphs, tables, sections, diagrams, etc.)
3	Using the analysis's findings to create predictions and decisions.

### 3. Results and Discussion

The research began since the implementation of the campus teaching program 1. Researchers serve as field assistant lecturers. During the implementation of teaching campus 1, researchers periodically carry out sharing sessions attended by students, teachers, civil servants, and school principals. Sharing sessions are used to find out the problems faced by students and together find the best solution. Researchers can obtain information from principals and civil servant teachers about the development of programs created by students and the impact they have. In addition to sharing sessions, researchers also visited schools to observe and ensure the results of the implementation of teaching campus 1. Researchers studied various documents on the results of teaching campus 1 in schools. The programs created by students are presented in Table 2.

**Table 2.** Teaching Campus Work Program 1 at SD Budi Yakin Surabaya

No	Activity Name	Goal	Done/Not
1.	School observations	Teachers, facilities, and pre-facilities	Done
2	Workshop on making lesson plan	Teachers and students	Done
3	Workshop on making technology-based learning media	Teachers and students	Done
4	Practicing the use of learning media	Teachers and students	Done
5	Socialization of adaptation to new habits (health protocols)	Teachers and students	Done
6	Technology adaptation (use of media and technology-based learning)	Teachers and students	Done
7	School administration and managerial	Teachers and students	Done

Based on the findings of student interviews participating in the teaching campus, studying student weekly report documents, information during sharing sessions obtained data that the learning process during the pandemic began with the class teacher giving instructions to students to do Student Worksheets on certain pages. Students begin to work as assigned. If they have difficulties, they ask students. Students are assigned to give answers with explanations of some material. This also applies to other students participating in the teaching campus. After making observations, campus participants began to implement programs as presented in Table 2.

Programs designed by students are sought to support the growth and development of numeracy literacy skills for both teachers and students. The first program implemented was to equalize the perception of a one-sheet Learning Implementation Plan. This program is important because students involved in campus teaching 1 are not all from the faculty of education. The activity was attended by all teaching campus participants, teachers, and principals. The form of activity is in the form of a workshop on making a one-sheet learning implementation plan. The results of this activity all participants of teaching campus 1 were able to make a one-sheet learning implementation plan.

The next program is to create technology-based learning media. In this

program, teachers together with students practice making and using learning videos. One of the students acts as a trainer, while another student accompanies the video making process. This exercise has several advantages, including enabling teachers to create learning movies as teaching resources. It is hoped that with the variety of teaching materials in the form of learning videos, the learning process will be more effective and grow students' numeracy literacy skills. As Winarni's research results that "Judging from the numeracy literacy ability and digital literacy ability of students, the use of learning videos in the implementation of learning in the classroom is effective" (Winarni et al., 2021). The use of technology-based media is not only for learning. Technology-based media can also be used for exercises or quizzes. Currently many applications are used for practice, for example the Quizzes application. The Quizzes application can help elementary school pupils' literacy and numeracy abilities (Saefurohman et al., 2021). Additionally, it is said that a rise in literacy affects kids' perspectives on how to deal with challenges in daily life. (Saefurohman et al., 2021).

All programs designed involve all components in the school ranging from students, teachers, and principals. The involvement of all parties in the implementation of the program aims to realize numeracy literacy skills in schools quickly. This is consistent with the findings of the Feriyanto research, which found that the government, schools, teachers, administrators, and parents can work together to implement methods to enhance reading and numeracy (Feriyanto, 2022).

The 2021 teaching campus program was implemented during the COVID-19 pandemic. Learning must be done online. However, because many students do not have a Mobile Phone, the implementation of learning is still carried out offline with schedules arranged alternately. School conditions like this affect student activities in implementing the program. As a result of discussions with teachers and principals, the presence of students to assist the learning process was imposed a picket schedule. It was agreed that every day only two students were allowed to attend with several teachers and students who had been determined. Students can meet offline only when there are workshops, socialization, and other agreed activities. Program discussion activities and preparations are mostly carried out online or outside of school.

Many obstacles arise from the implementation of learning, students lack enthusiasm for learning. When working on student worksheets given by the teacher, students do not understand the material, so they ask more students. Overcoming these problems, students try to motivate students by creating interesting learning media. Learning media created by students are presented in Table 3.

**Table 3.** Learning Media Student Outcomes in Teaching Campus Implementation 1

No.	Subject	Media
1	AP	Science material learning videos
2	ZN	Science material learning videos
3	SAS	Video learning of flat build broad material
4	AAD	Interactive power point math material Student Books
5	SS	Math interactive power point

No.	Subject	Media
6	AML	Photosynthesis process poster Props match numbers with spelling
7	PJD	English-Indonesian word card regarding color recognition for grade 1, Mind mapping energy material for grade 5

The learning process using varied media can increase student motivation and learning outcomes. This is evident from students' engagement in their coursework. Based on the results of the teacher questionnaire, several positive impacts were obtained from the implementation of teaching campus 1 for students, namely students are more enthusiastic in learning, students' understanding of the subject matter increases. The results of the collected student work are better than ever. There is an increase in students' ability to solve story problems. Before using learning media, students rely heavily on the teacher in understanding the questions given. But after learning using media, student dependence decreases. Figure 2 and Figure 3 here are examples of media used by students when accompanying learning.



Figure 2. Media determining the circumference of a rectangle.



Figure 3. Media determines the circumference of the chair.

In addition, students can retell their readings using their own sentences. This

shows that students' literacy skills are beginning to develop. One of the roles of students in growing students' literacy skills is to take advantage of library books that have not been arranged properly. In addition, to train students' literacy skills, students make media mind mapping material as presented in Figure 4.

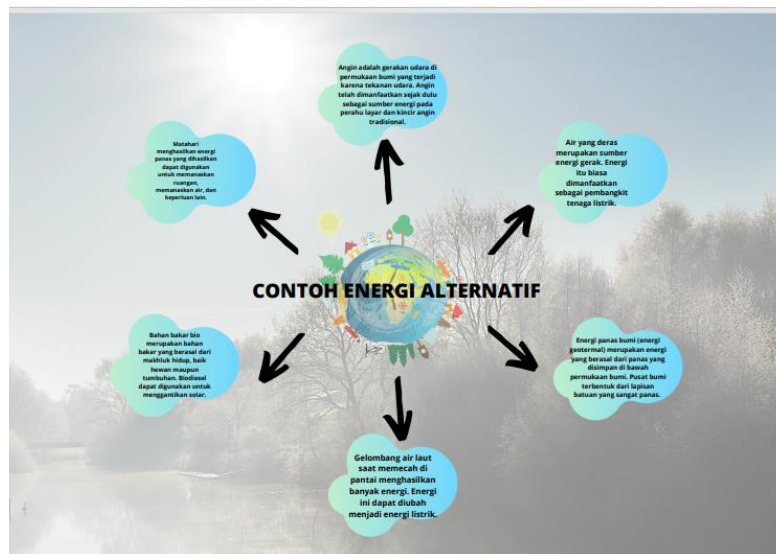


Figure 4. Media mind mapping material examples of alternative energy

Another example used by students is the video media for learning science materials with the theme of energy change in figure 6. Students can learn this material at any time and can be repeated if they do not understand. Students are very enthusiastic because the material can be learned easily and can retell what he saw.

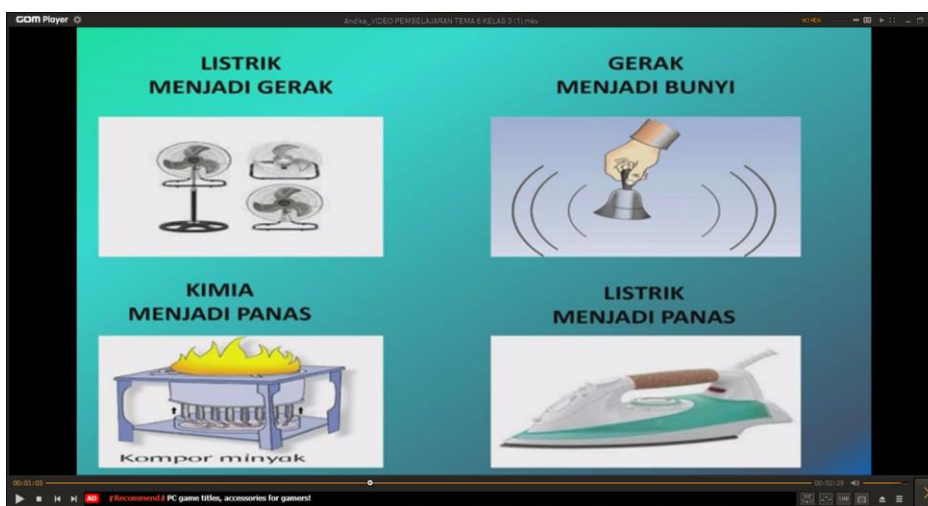


Figure 6. Video media learning science material with the theme of energy change

The use of varied and interesting learning media and containing daily problems makes students more active in learning, can do quizzes on power points correctly, and students remember the material longer, so that learning objectives are achieved and overcome learning problems. The results of this research are in line with the opinion that the benefits of learning media are more interesting, more interactive, more efficient time, improving the quality of learning outcomes,



fostering positive attitudes of students towards the material, changing the role of teachers to be more positive and productive (Karo-karo S & Rohani, 2018). In addition, Nana Sujana said that learning media plays a role in overcoming the difficulties of the learning process (Wati, 2015).

While the positive impact for teachers is that teachers can create varied learning media, motivate students, use technology-based media and teachers become accustomed to making learning media and are challenged to improve the quality of their learning media. After the end of the campus teaching program, the school felt great benefits. They hope to be reappointed as a target school for the implementation of the teaching campus.

#### **4. Conclusions**

The implementation of the teaching campus program was found to be able to develop students' numeracy and literacy skills based on the examination of the data. This is evident from the improvement in the students' comprehension of the subject matter, particularly when it comes to storytelling. The reading outcomes can be retold by students using their own language. Students attempt to learn utilizing a variety of learning tools, including interactive Power Point, educational movies, posters, mind maps, and other engaging materials. Through the use of mind mapping media, learning videos, and posters, students' literacy skills begin to grow. Students can retell their reading using their own sentences. While students' numeracy skills began to grow after using interactive Power Point media and posters. The implementation of the campus teaching program 1 at SD Budi Yakin in addition to benefiting students is also beneficial for teachers.

#### **Author Contributions**

The first author plans research ideas, research design, article writing and observation. The second author prepares a literature review, research methodology, and conducts data processing.

#### **Acknowledgment**

The author would like to express my deepest gratitude to campus 1 teaching students and to civil service teachers involved in campus teaching programs at SD Budi Yakin Surabaya and SDN Langkap Madura who have helped in completing this research. Thank you also to the Ministry of Education and Culture for organizing the teaching campus program.

#### **Declaration of Competing Interest**

The author declares that there are no conflicts of interest affecting the work reported in this article.

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