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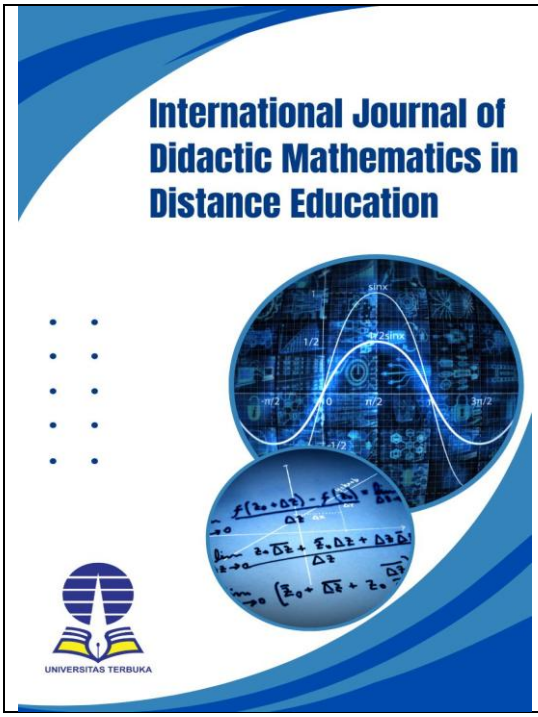

Evaluating the impact of Kampus Mengajar Program: a comparative study of student literacy and numeracy skills outcomes

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Evaluating the impact of Kampus Mengajar Program: a comparative study of student literacy and numeracy skills outcomes

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Abstract
Indonesia's literacy and numeracy competencies remain critically low despite marginal improvements in PISA scores from 2018 to 2022, which paradoxically declined overall. To address this educational crisis, the Indonesian government launched the Kampus Mengajar program, deploying university students to enhance primary school literacy and numeracy outcomes. This study evaluates the effectiveness of the Kampus Mengajar program by analyzing changes in students' Minimum Competency Assessment (MCA) performance. A pre-experimental design was employed with 30 fifth-grade students from SDN 13 East Jakarta, selected through purposive sampling. Data collection occurred over four months using pre-test-post-test instruments, supplemented by classroom observations. Statistical analysis was conducted using SPSS, including descriptive statistics, Shapiro-Wilk normality tests, and paired t-tests. The findings reveal significant improvements in both literacy and numeracy MCA scores following the Kampus Mengajar intervention. Statistical analysis confirmed meaningful differences between pre-test and post-test performance, demonstrating the program's positive impact on student competencies. The research identified that enhanced teaching methodologies and additional academic support contributed to measurable learning gains. This study contributes empirical evidence supporting the effectiveness of collaborative university-school partnerships in addressing Indonesia's literacy and numeracy challenges. The results suggest that the Kampus Mengajar model represents a viable strategy for educational improvement. However, successful implementation requires adequate school infrastructure and resources. Future research should investigate the long-term sustainability of these improvements and explore optimal teaching methodologies within the Kampus Mengajar framework to maximize elementary students' MCA outcomes.

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1. Introduction

In the current era of globalization, students' literacy and numeracy competencies have become increasingly critical for educational success. Literacy encompasses the competence to understand, evaluate, use, and describe various written texts to improve individual quality and productive societal participation, while numeracy involves the ability to think, analyze facts and procedures, understand

concepts, and solve real-world problems across diverse contexts (Rakhmawati & Mustadi, 2022). These competencies serve as equal and supporting partners in helping students cope with the quantitative demands of modern society, with research emphasizing that experiences around mathematics and numeracy should be exciting to build trust and approach students easily (Luu-Thi et al., 2023).

Despite the importance of these skills, Indonesia continues to perform below international standards in literacy and numeracy assessments. The 2018 PISA Report revealed that Indonesia ranked 74th out of 79 participating countries, with average scores in reading, mathematics, and science falling significantly below international benchmarks (Kusmaryono & Kusumaningsih, 2023). Although the 2022 PISA results showed improvement with Indonesia advancing 5-6 positions compared to 2018, performance remains in the low category. This modest improvement was attributed to enhanced online access through quota assistance, online teacher training platforms, diverse learning materials including 'learning from home' modules, diagnostic assessments, literacy and numeracy learning modules, and emergency curriculum implementation focusing on foundational skills development (Chen et al., 2024).

Local research conducted at SDN 06 Rantau Bertuah exemplifies these challenges, revealing that students' numeracy competence remains relatively low, with only 37% achieving the minimum completeness criteria of 75% (Septiana & Afnizar, 2023). Contributing factors include uncomfortable classroom environments, students' physical readiness, minimal participation during lessons, and lack of confidence in problem-solving activities, with many authors focusing on researching factors that affect numeracy including early learning and home environment, mathematical activities in the home and parental beliefs about mathematics (Luu-Thi et al., 2023). The situation was further exacerbated by the COVID-19 pandemic, which forced a transition to online learning systems in 2020, creating adaptation difficulties for teachers and students, deteriorating educational conditions, and causing significant learning loss due to the reduced effectiveness of remote instruction compared to traditional face-to-face learning (Oliveira et al., 2021; Manca et al., 2021).

To address these educational challenges, the Ministry of Education introduced the *Kampus Mengajar* program as part of the *Merdeka Belajar Kampus Merdeka* initiative. This program deploys university students as teaching assistants to create meaningful learning experiences in various schools, particularly those in remote areas, while fostering positive impacts on schools, teachers, students, and parents through contextual learning approaches. Research demonstrates that such student-centered, peer-mediated programs can significantly impact both students and educators, with teachers experiencing identity shifts as they transition into non-traditional teaching roles (Keiler et al., 2018). The seventh batch of the *Kampus Mengajar* program specifically focuses on improving educational quality by facilitating collaboration between university students and teachers to create interactive, impactful learning experiences across elementary to vocational schools, with particular emphasis on enhancing students' literacy and numeracy through structured activities and practice (Sunbanu et al., 2022).

The effectiveness of educational interventions is measured through the Minimum Competency Assessment (MCA), which evaluates students' cognitive competencies in literacy and numeracy to improve education systems, learning quality, and overall student outcomes. The MCA framework encompasses three essential components: content (including numbers, algebra, geometry, and measurements for numeracy), context (personal, socio-cultural, and scientific situations), and cognitive processes (reasoning, understanding, and application) (Gal & Tout, 2014). According to Iman et al. (2020), MCA specifically assesses literacy competence through text reasoning and numeracy competence through mathematical reasoning, where literacy involves understanding, accessing, and implementing reading, listening, speaking, and writing activities, while numeracy encompasses analyzing, accessing, using, communicating mathematical information, and managing mathematics in various daily life situations.

The *Kampus Mengajar* program implements comprehensive work programs focusing on three core activities: literacy enhancement, numeracy development, and technology adaptation (Fatonah et al., 2023). Literacy improvement initiatives include reading aloud activities, 15-minute daily literacy sessions, wall magazines, literacy festivals, and online library creation to strengthen students' text analysis and comprehension skills (Hamzah et al., 2023). Research shows that digital competencies,

learning videos, and games are effectively improving literacy and numeracy skills, though not all learners have strong reading and numeracy abilities (Rakhmawati et al., 2023). Research at SDN 3 Nagri Kaler demonstrated that consistent implementation of literacy activities such as reading corners and structured reading time significantly influences students' MCA literacy scores, with increased exposure leading to improved performance (Ilmi et al., 2021). Numeracy-focused activities encompass outdoor mathematics classes, educational math games, numeracy festivals, and systematic MCA problem-solving practice to enhance mathematical understanding and interest. Studies by Marsidi & August (2024) showed that integrating game-based learning, such as mathematical snakes and ladders, effectively encourages mathematical, reading, and writing skills while providing vocabulary enrichment and fun learning experiences. Similarly, Hanima & Hasan (2024) found that digital math games applications like Math Playground significantly improve students' numeracy competencies. Technology adaptation activities familiarize students with digital learning tools through MCA application simulations and educational video integration, promoting collaborative learning, active participation, and independent problem-solving confidence, with research showing that educational technologies have transformative roles in enhancing student engagement and collaboration in online and hybrid learning environments (Wang et al., 2025).

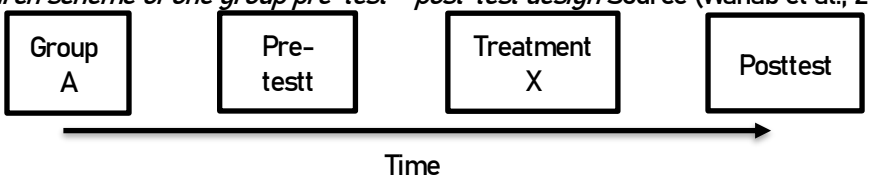
Multiple empirical studies have validated the effectiveness of well-structured educational programs in enhancing student literacy and numeracy competencies. International research demonstrates that literacy and numeracy competences are essential for participation in society and the workplace, with methodological advancements helping measure these competencies at lower proficiency scales (Grek et al., 2020). Research conducted Yen et al (2018), demonstrated positive social and educational impacts through improved online and offline learning facilitation and technology adaptation for teachers and students. Similarly, studies at SDN Pasirangin 01 concluded that MCA guidance activities successfully familiarized students with numeracy literacy problem-solving and technology adaptation, with appropriate program implementation and goal achievement (Noerbella, 2022). Research at SDN 18 Anduring Padang further confirmed that *Kampus Mengajar* programs play crucial roles in literacy, numeracy, and technology adaptation improvement through collaborative efforts with schools, teachers, and students, supported by comprehensive learning assistance, administrative support, and incidental school activities (Waldi et al., 2022).

Building upon these successful implementations, this research aims to analyze the differences in Student Minimum Competency Assessment results between before and after the *Kampus Mengajar-7* program implementation among fifth-grade students at SDN 13 East Jakarta. This study represents the first quantitative analysis of MCA outcome differences following *Kampus Mengajar* intervention, distinguishing it from previous community service studies, qualitative descriptive research, and program evaluation studies that focused on broader impacts, program alignment models, or digital adaptation aspects. Research on international student exchange and teaching programs demonstrates that such initiatives can significantly enhance participants' professional development, teaching skills, and access to new knowledge (Le et al., 2023). The research addresses two primary questions: How do the MCA literacy outcomes of grade 5 students at SDN 13 East Jakarta differ before and after the program implementation, and how do the MCA numeracy outcomes of these students change following the intervention?

2. Method

This type of research is quantitative with one group pre-test – post-test as the research design, because it is only carried out on one group of students by giving a test at the beginning (pre-test) before treatment and a test at the end (post-test) after treatment. One group pre-test post-test design is also used to measure differences before and after treatment, using only one group so that research can focus more on the effects of the program without comparing with other groups. The following is the research flow of the type of one group pre-test – post-test design.

Figure 1
Research scheme of one group pre-test – post-test design Source (Wahab et al., 2021)



Pre-test is used to find out students' literacy and numeracy competencies, find students' difficulties and weak points in this regard. After conducting the pre-testt, the treatment given to students will be divided into 3 types. Namely: literacy focus, numeracy focus, and technology adaptation. This aims to improve student's numeracy literacy competencies through *Kampus Mengajar*. After the treatment, namely the implementation of the *Kampus Mengajar's* work program, students will carry out post-test to collect data and then analyze. This study also used a pre-experimental design because it did not have a control group, but only one group (class) became an experimental group because it was treated by its independent variable, namely the *Kampus Mengajar* program to see how it had an effect on the dependent variable, namely the results of the student MCA test.

This research was carried out from February 26 to June 13, 2024 (almost 4 months) at SDN 13 which is located in Makassar District, East Jakarta City, DKI Jakarta. The sample in this study is 30 students of SDN 13 East Jakarta grade 5 (n = 30). Sampling was carried out based on the purposive sampling method where respondents were selected according to certain considerations and based on research needs (Linda et al., 2021). The considerations are: (1) registered in a Dapodik with a valid NISN, (2) actively studying as a student during the implementation of MCA, (3) not having language or reading barriers, (4) a maximum of 30 students at the elementary school level in grade V according to the recommendations of the Ministry of Education and Culture during the debriefing of the *Kampus Mengajar*.

This research instrument is in the form of tests, namely pre-test and post-test MCA which are divided into literacy competency assessment and numeracy competency assessment. The MCA questions used are in accordance with the elementary level – level 3, where the pre-test and post-test questions are accessed directly through the MCA application according to the procedures described during the briefing period.

In the MCA literacy test, it consists of 20 questions, of which there are 4 multiple-choice questions; 8 complex multiple-choice questions; 7 true/false questions; and 1 matching question. There are 3 aspects of literacy in MCA questions, namely: (1) finding information, selecting information, identifying, and describing text information consisting of 11 types of questions. (2) understanding the text literally, finding inferences, summarizing, grouping, and interpreting the text consisting of 5 types of questions, (3) evaluating and reflecting the text, connecting the reading text to personal experience, and so on which consists of 4 types of questions.

The numeracy MCA test also consists of 20 questions, of which there are 9 multiple-choice questions; 6 complex multiple-choice questions; 2 true/false questions; and 3 matching questions. Similar to literacy, there are 3 aspects of numeracy in MCA questions, namely (1) knowing, identifying mathematically, counting numbers, remembering, obtaining information from tables, graphs, charts, and measuring geometric shapes consisting of 13 types of questions. (2) applying strategies, determining operations, presenting data in tables or graphs, and providing interpretations for problem solving consisting of 3 types of questions. (3) reasoning, connecting elements, connecting representations, assessing problem-solving strategies, making valid conclusions, and providing mathematical arguments to support claims consisting of 4 types of questions. The MCA questions are done without any time limit as long as the application is still running. So that students are given the opportunity to think and analyze each question without any pressure or time constraints. MCA questions are prepared directly by the Ministry of Education and Culture with the *Kampus Mengajar*, so that students only help and guide students when running the test.

The MCA test or Minimum Competency Assessment in this study was used to collect data. The researcher will provide pre-test and post-test MCA instruments consisting of two types of tests, namely literacy MCA and numeracy MCA. The researcher will then collect the results of the pre-test and post-test by inputting all student answers into the Merdeka Mengajar platform for automatic assessment. The values collected are quantitative data which will then be analyzed using statistical tests. In addition to the test technique, data was also collected by observation method which was carried out simultaneously during the assignment period. The goal is to support the results of research in the form of factors that have an impact on student literacy and numeracy. The aspects of observation carried out are: (1) students' readiness to receive the subject matter, (2) student participation during group discussion activities, (3) student collaboration during learning, (4) students' ability to complete practice questions, (5) teacher collaboration and support for students, (6) quality of school facilities, (7) parents' economic background, and (8) implementation of the school curriculum.

The data of this research is collected through test techniques as well as observation, then it will be presented and analyzed descriptively and inferentially. This descriptive analysis is used to present information about data centralization, data distribution, and data distribution forms. Such as average value, middle value, mode, range, variance and standard deviation. Meanwhile, inferential analysis is used to prove conjectures and make conclusions from sample data collected by involving statistical tests. In inferential analysis, to determine whether the data is normally distributed or not, a normality test is used. To test the normality of the data, the Shapiro-Wilk test was carried out because the number of samples was 30 people. With the provision: if the significance value is > from 0,05, the research data is distributed normally. On the other hand, if the significance value < is 0. 05, the research data is not normally distributed. Furthermore, to test the hypothesis of paired data from one population, a paired t-test can be used. After determining the hypothesis, the researcher will draw conclusions based on the test rules using SPSS. In the output of the paired sample test: if the value of Sig. (2-tailed) is > 0,05, then there is no significant difference between the results of the MCA in the pre-test and the post-test. On the other hand, if the value of sig. (2-tailed) < 0.05, then there is a significant difference between the MCA results in the pre-test and the post-test.

3. Results and Discussion

3.1 Respondent Profile

The respondents to this study were 30 students from elementary schools in Jakarta, namely SDN 13 East Jakarta. The respondents were one class group tested in grade 5. The data on the results of the pre-test and post-test MCA came from the same group with the same number of respondents, namely (n = 30). The respondents consisted of 14 female students and 16 male students from the same class as presented in the following table:

Table 1

Respondent Profile

Tests – Experiments	Gender	
	Woman	Man
Pre-test	14 students (46.67%)	16 students (53.33%)
Post-test	14 students (46.67%)	16 students (53.33%)

Based on the Respondent Profile Table 1, it can be seen that the number of participants in the experimental tests, both in the pre-test and post-test stages, consisted of 30 students, with the same gender composition across both stages. Of the total participants, 14 students (46.67%) were female and 16 students (53.33%) were male. This indicates that there was no change in either the number or proportion of respondents between the pre-test and post-test, showing that the gender distribution of participants remained consistent throughout the study.

3.2 MCA Pre-test Average

Before designing a work program to carry out the assignment, grade 5 students were given an MCA test, namely a pre-test. The MCA test is in the form of a literacy pre-test and a numeracy pre-test.

The goal is to measure students' literacy and numeracy skills before they are given treatment, namely the *Kampus Mengajar*'s work program. The following are the average results of the 5th grade literacy and numeracy MCA pre-test at SDN 13 East Jakarta.

Table 2

Average results of literacy and numeracy pre-test

Average Literacy Stats	36.17
Instalment Pre-testt Numerasi	30.67
N	30

Based on the results of the pre-test in the table above, it shows that the literacy and numeracy skills of students at SDN 13 East Jakarta are still relatively low. After observing the aspects that need to be observed, the researcher found several factors that affect the lack of literacy and numeracy competence of them.

The findings of this study indicate that the improvement of students' literacy and numeracy competence is influenced by several interrelated factors. First, students' readiness to learn plays a crucial role. The limited variety of learning methods employed in the classroom has led to a lack of enthusiasm and readiness among students. Interviews revealed that students expressed a need for more engaging approaches, such as outdoor learning activities or game-based methods. Kusumaningrini and Sudibjo (2021) emphasise that students' readiness to learn significantly affects their learning motivation, thereby exerting a strong influence on literacy and numeracy outcomes. Second, the quality of teachers, in terms of both pedagogical skills and professionalism, remains limited. The monotonous use of instructional strategies has reduced students' classroom motivation, while issues such as teacher tardiness and low teacher–student collaboration further hinder the learning process. This condition ultimately impacts the achievement of the desired MCA results. When teachers are able to motivate students and collaborate effectively, the outcomes of educational programs are considerably improved. As noted by Nento and Abdullah (2022), teacher quality is a critical determinant of educational quality in a country, and inadequate teacher competence directly hampers student learning outcomes.

Third, the quality and availability of school facilities have a substantial impact on student learning. The absence of adequate library facilities, outdated or limited book collections, underutilised technological resources such as computers, and uncomfortable classroom environments due to poor ventilation all affect students' engagement in learning. According to Muflihatun and Suryani (2020), school facilities greatly influence students' learning satisfaction, as adequate infrastructure directly supports the learning process and contributes to improved academic achievement. Fourth, the uneven implementation of the curriculum creates additional challenges. As highlighted by Panginan and Susianti (2022), different curricula produce varied impacts. While the 2013 curriculum continues to pose difficulties for teachers and students in terms of understanding and implementation, the *Merdeka Belajar* (Independent Learning) curriculum allows schools greater flexibility according to their readiness, thereby showing more positive outcomes for learning.

Finally, students' socio-economic background also exerts a significant influence on their academic motivation and achievement. Students who have access to private tutoring or adequate learning facilities at home tend to outperform peers who rely solely on school instruction. Fadlan (2022) found that family economic conditions significantly affect students' learning motivation, with stronger financial support correlating with higher levels of academic achievement.

In addition to these challenges, the study also identified several positive factors that contribute to students' motivation and engagement in literacy and numeracy learning. First, students demonstrate strong activeness in group discussions, which encourages creativity and critical thinking. Second, student collaboration during classroom learning is notably effective, with students actively participating in discussions, problem-solving, and even competing to solve tasks on the board—activities that foster confidence and motivation. Third, students show satisfactory performance when completing practice exercises; once they understand the material, they approach tasks with confidence, reinforcing their conceptual understanding and ability to tackle diverse literacy and numeracy problems. Hasanah and

Himami (2021) argue that student activeness enhances learning success by developing talents and critical thinking, while collaboration nurtures cooperative learning and provides opportunities for peer interaction and mutual support. This collaborative environment strengthens students' problem-solving skills and fosters resilience, as they gain confidence in seeking help from both peers and teachers when encountering difficulties.

3.3 Descriptive Statistical Analysis

Based on data analysis, the first thing to do is to see a simple picture of the average difference from the results of the pre-test and post-test of MCA literacy and numeracy. The following will be presented descriptively in the following table:

Table 3

SPSS outputs – descriptive statistical analysis

Descriptive Statistics								
	N	Range	Min	Max	Median	Mode	Average	Std. Deviation
Literacy Pre-test	30	55	10	65	32.50	25	36.17	17.354
Literacy Post-test	30	60	15	75	55.00	30	48.67	20.466
Numeracy Pre-test	30	40	10	50	27.50	20	30.67	13.244
Numeracy Post-test	30	65	15	80	45.00	40	46.17	18.832
Valid N (listwise)	30							

The minimum pre-test results show a score of 10 which is the same in literacy and numeracy. Meanwhile, the maximum result of the literacy pre-test is superior to the numeracy pre-test. The minimum result of post-test has increased, namely 5 equal scores between literacy and numeracy. Meanwhile, the maximum result of the numeracy post-test is superior to the literacy post-test. The average literacy and numeracy pre-test scores show close to the same scale. In comparison, the average literacy pre-test is still above the average numeracy pre-test. As for the average post-test, there was an increase in both MCA tests, both literacy and numeracy. These results show that there is a difference in the average score of pre-test and post-test of MCA literacy and numeracy.

3.4 Data Normality Test

Furthermore, inferential analysis on the research data was also tested using SPSS. First, the data was tested for normality with the following results:

Table 4

SPSS output – data normality test

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistics	Df	Sig.	Statistics	Df	Sig.
Literacy Pre-test	.066	30	.200*	.984	30	.919
Literacy Post-test	.107	30	.200*	.979	30	.786
Numeracy Pre-test	.120	30	.200*	.954	30	.216
Numeracy Post-test	.131	30	.200*	.952	30	.194

Based on the table above, according to the provisions of the data normality test, if the number of respondents < 50, then the test used is shapiro-wilk. So that the results of the data normality test can be seen in the shapiro-wilk section. The value of sig. in the literacy pre-test, it was 0.919, while the score of sig. the literacy post-test is 0.786. The value of sig. the numeracy pre-test is 0.216, while the sig. post-testt numeracy is 0.194. Based on the results collected, it shows that the four significance values are greater than 0.05 (sig. > value 0.05). Based on the rules of the data normality test, if the significance value in the shapiro wilk is > than 0.05, then the data is normally distributed.

3.5 Parametric Test (Paired Sample Test)

Furthermore, if the data is normal, a parametric test will be carried out. The parametric used in this paired data (pre-test – post-test) is a paired t-test. The goal is to analyze the data of the research results in detail. This paired t-test can determine the relationship between the data and the difference between the data on the pre-test and the post-test. The results of the parametric test are presented in the following Table 5.

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3.5.1 MCA Literacy Differences

Table 5

Literacy MCA results

		Paired Differences				
		95% Confidence Interval of the Difference				
		Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Literacy Pre-test–Literacy Post-test	-17.729	-7.271	-4.889	29	.000

Based on the output of the paired sample test, with df = 29 (n-1), obtained the value of sig. (2-tailed) by 0.000. In accordance with the testing rules in the paired t-test, if the results of sig. (2-tailed) < 0.05, indicating a significant difference in the pre-test MCA score and literacy post-test after treatment.

3.5.2 MCA Numeracy Differences

Table 6

Numeracy MCA results

		Paired Differences				
		95% Confidence Interval of the Difference				
		Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Pre-test Numeracy – Post-test Numeracy	-21.650	-9.350	-5.154	29	.000

Based on the output of the paired sample test, with df = 29 (n-1), obtained the value of sig (2-tailed) by 0,000. In accordance with the testing rules in the paired t-test, if the results of sig. (2-tailed) < 0.05, indicating a significant difference in the pre-test MCA score and the numeracy post-test after the treatment. Based on descriptive analysis, it was shown that there was a difference in literacy scores from an average of 36.2 to 48.6 and a difference in numeracy scores from an average of 30.6 to 46.2 after the treatment of the *Kampus Mengajar* program.

Based on the paired sample test output Literation, with df = 29 (n-1), obtained the sig value. (2-tailed) of 0,000. In accordance with the testing rules in the paired t-test, if the sig. (2-tailed) < 0.05, then there is a significant difference in the MCA scores of the literacy pre-test and post-test after the treatment. In addition, the t count = |t count|. If the $t_{count} > t_{table}$, then there is a significant difference between the literacy MCA pre-test and post-test. Based on the SPSS results, the value of |t count| = 4.889. When compared to the t_{table} with df = 29 ($\propto$ = 0.05) is 2.045. So, it can be concluded that there is a significant difference between the MCA literacy results before and after the implementation of the *Kampus Mengajar* program.

Based on the output of the paired sample test Numeration, with df = 29 (n-1), obtained sig value. (2-tailed) of 0.000. In accordance with the testing rules in the paired t-test, if the sig. (2-tailed) < 0.05, then there is a significant difference in the numeracy pre-test and post-test MCA scores after the treatment. In addition, the calculated t count = |t count|. If the t count > t table, then there is a significant difference between the numeracy pre-test and post-test. Based on the SPSS results, the value of |t count| = 5.154. When compared to the t table with df = 29 ($\propto$ = 0.05) is 2.045. So, it can be concluded that there is a significant difference between the results of MCA numeracy before and after the implementation of the *Kampus Mengajar* program.

This proves that after the *Kampus Mengajar* program was implemented, there were significant differences in students' MCA pre-test and post-test results, both in literacy and numeracy. The *Kampus Mengajar* program can create activities that require school follow-up in improving student competencies. Like the research conducted at SDN 48 Bengkulu Tengah, the role of the *Kampus Mengajar* in developing literacy-numeracy competencies at the assignment site went well and had a real impact on students. Likewise, at SDN 13 East Jakarta, the *Kampus Mengajar* program as a teaching assistant has a positive and real impact on society, especially contributing to advancing Indonesian education.

4. Conclusion

The results of this study clearly show that the Kampus Mengajar-7 program has made a significant contribution to improving the literacy and numeracy abilities of grade 5 students at SDN 13 East Jakarta. The increase in MCA literacy and numeracy scores provides strong evidence that the program was not only effective in strengthening students' mastery of fundamental competencies but also successful in fostering a more engaging and supportive learning environment. These findings imply that structured intervention programs involving collaboration between higher education institutions and schools can become an effective model for addressing the persistent challenges of low literacy and numeracy in primary education.

From a practical perspective, the implications are twofold: first, for teachers, the program provides valuable assistance in implementing varied and student-centred teaching strategies that enhance classroom interaction and learning outcomes; second, for schools, the program encourages stronger partnerships with external stakeholders, thereby enriching resources and innovation in teaching practices. At the policy level, this study contributes by presenting empirical evidence that supports the continuation and possible expansion of the Kampus Mengajar program to a wider scale, ensuring more equitable access to quality education across different regions.

In terms of contribution, this research adds to the existing body of knowledge on the effectiveness of educational intervention programs in Indonesia, particularly in improving basic competencies that are critical for students' long-term academic development. It highlights the importance of integrating university students as facilitators of learning innovation in schools, while also emphasising the role of such initiatives in professional development for teachers. Ultimately, this study not only strengthens the theoretical understanding of intervention impacts on student achievement but also offers practical insights for policymakers, educators, and future researchers to design, replicate, and enhance similar programs aimed at achieving sustainable improvements in education quality.

Recommendation for future research

Through the research findings, recommendations that can be made for further research are: The Effectiveness of Teaching Campus Student Teaching Methods on the MCA Outcomes of Elementary Students.

Limitations

There are limitations in this study, namely the *Kampus Mengajar* program is only able to implement every activity to improve students' literacy and numeracy during the assignment period. For follow-up, it is given back to teachers so that every activity that is considered impactful, can be followed up after the *Kampus Mengajar* assignment period is over. This research is also limited to analyzing the differences in student Minumum Competency Assessment results before and after the implementation of the *Kampus Mengajar* program. So, through this research, what needs to be done for the next research is a way to improve students' literacy and numeracy skills so that Indonesia's ranking in terms of this competency can be further improved.

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Author Contribution

Author 1: Writing Mentor, Review, and Conceptualization
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Author 3: Writing, Conceptualization, Data curation, Editing
Author 4: Review and Editing

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Conflict of Interest
The authors declare no conflict of interest.

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