

## THE EFFECT OF STUDENT OPERATIONAL ASSISTANCE FUNDS (BOS) PERFORMANCE ON TEACHER TRAINING PROGRAMS AND LEARNING QUALITY IN ELEMENTARY SCHOOLS

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### ABSTRACT

The Outstanding Student Operational Assistance (BOS) fund is a form of government support to improve the quality of education, particularly through strengthening teacher competency and improving the quality of learning. The objectives of this study were 1) to determine the effect of BOS funds on teacher training programs and improving the quality of learning, and 2) to determine the relationship between teacher training programs and improving the quality of learning within the BOS program. The research used a quantitative survey method. The study population was 14 schools receiving BOS Outstanding students in Cilongok Regency, with a sample of three schools: SDN 1 Pernasidi, SDN 2 Rancamaya, and SDN 2 Sokawera. The number of respondents was 29, consisting of principals and teachers. Data collection was conducted using a questionnaire, while data analysis was conducted using SPSS version 25, which included normality tests, homogeneity tests, t-tests, and Pearson correlation tests. The results of the study showed that the data were normally distributed and homogeneous, with a significance value of 0.120 and 0.250 ( $> 0.05$ ) for the normality test, respectively, and 0.416 ( $> 0.05$ ) for the homogeneity test. The t-test results obtained a significance value of 0.001 and 0.002 ( $< 0.05$ ) for teacher training and learning quality. The results of the Pearson correlation test showed a significance value of 0.000 ( $< 0.05$ ) with a correlation coefficient of 0.804 which is included in the strong category. This proves that BOS funds have a positive influence on teacher competency training and improving the quality of learning and teacher training programs have a positive and significant relationship with improving the quality of learning. The results of this study provide a scientific contribution in supporting the optimization of the use of BOS Performance Funds as an effort to improve teacher competency and the quality of learning in elementary schools.

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## INTRODUCTION

Teachers as professionals are always required to be able to adapt to changing times and curriculum. In the current era of the Independent Curriculum with an in-depth learning approach that is being echoed by the government, teachers must be able to improve their competence. The four basic competencies that teachers must have are pedagogic competence, professional competence, personality competence, and social competence (Nur & Fatonah, 2022; Hawari, 2020; Zulkipli et al., 2022). Many teachers still show low pedagogic competence, limited mastery of learning technology, and lack of ability to implement the curriculum creatively and adaptively (Wulandari and Akbarjoni, 2025). One way to improve teacher competence is through training activities. As reported from the research of Wati and Nurhasannah (2024), strengthening teacher competencies requires continuous training, technology integration, learning community development, and collaboration with external parties as part of the quality improvement ecosystem. Nearly 90% of teachers who have participated in training or workshops related to educational technology in the last two years, show teachers' awareness and desire to continue to improve their skills in the face of technological advances. In research Pratama et al. (2020) and Pratama and Lestari (2020), it was shown that the training that teachers have participated in so far has an effect on teachers' pedagogic competence in terms of skills. This condition proves that teacher training can improve teacher competence. However, at the elementary school level, training for teachers organized by each school/Education Unit is still very rare. This happens due to limited funds available so that schools do not have the budget to invite expert resource persons from outside the school.

School operational funds in the form of Regular BOSP (Operational Assistance for Education Units) do not reach schools to carry out independent training in their respective schools. The existence of Performance School Operational Assistance (BOS Kinerja) is the answer for recipient schools to be able to organize training for teachers and education personnel (Rubiyati & Ismanto, 2020; Hamirul & Apriana, 2019). It is hoped that with the existence of BOS Performance, the recipient schools can organize training in their respective schools without being hindered by cost limitations. Research revealed by Khairunnisa et al. (2024) that training activities should not be based on whether or not the company's budget is still there, nor is it based on whether other companies have provided certain programs. Training activities or implementations in companies or organizations are designed based on needs so that they can become a medium for the realization of superior and competitive human resources.

In addition to these problems, teacher learning in the classroom also needs to be improved so that it is not monotonous and boring. Based on initial interviews with teachers, there are still many students who lack focus and are not enthusiastic about learning in the classroom because they feel bored and unwilling to learn. Joyful learning is one alternative to increase students' motivation to learn (Sufiani & Marzuki, 2021; Yasid, 2025). In addition, to support the government's priority program in realizing deep learning (Deep Learning), teachers are required to be able to create an exciting classroom for students. Teacher training activities in schools are expected to create exciting learning in the classroom. An interesting and learning quality strategy can be an alternative to eliminate boredom experienced by students while learning. In addition, it can increase students' enthusiasm and enthusiasm to pay attention to the learning material being studied. Joyful learning is learning that prioritizes a fun learning experience, involves positive emotions, and encourages students' enthusiasm so as to motivate students to be active (Handayani et al., 2025; Wiyanti et al., 2025). Joyful learning is fun learning, where the learning process in which there is strong cohesion between educators and students without any feelings of pressure or force.

The BOS Fund is known to have contributed to improving the quality of learning through the provision of educational facilities, teaching materials, and support for teacher training and professional development. However, most of the research still focuses on aspects of management, accountability, and effectiveness of fund use in general, without specifically examining the causal relationship between the performance of BOS funds, teacher training programs, and their impact on the quality of learning in elementary schools in an integrated manner (Maliki, 2020; Nugraha et al., 2023; Soro et al., 2024; Stuart & Scott, 2025; Rosmuliawati & Wasliman, 2026). In addition, several findings show that the implementation of BOS-funded teacher training has not been optimal and is rarely analyzed as a mediating variable that links the influence of funds to the quality of learning (Hikma & Abduloh, 2025; Maulida & Mulwarman, 2025). Therefore, the research gap lies in the absence of an empirical model that tests the direct and

indirect relationship between BOS fund management performance, the effectiveness of teacher training, and the quality of learning. The novelty of this research is the integrative approach of teacher training programs in the relationship between the performance of BOS funds and the quality of learning in elementary schools, so as to provide a more comprehensive understanding of the mechanism for improving the quality of education based on school financing.

Interviews with school principals receiving BOS Performance Funds revealed that BOS Performance Funds significantly assisted in the implementation of teacher training in their schools, impacting teacher competency and classroom learning. The objectives of this study were: 1) to determine the impact of BOS funds on teacher competency training programs and learning quality; and 2) to examine the relationship between teacher professionalism, particularly training activities, and learning quality in the BOS program. It is hoped that the results of this study can be considered by the government regarding the continuation of the BOS Performance program for schools with the best progress.

## METHOD

This type of research is quantitative with a survey method. The research design uses a survey method with data collection through questionnaires. The purpose of the study was to determine the influence of BOS funds on teacher competency training and learning quality as well as the relationship between teacher competency training variables and learning quality in elementary schools. The population of this study is a public elementary school in Cilongok Regency. There are 14 schools that received the Best School Achievement (BOS) in 2024 in Cilongok Regency. There are 3 schools in the sample for this study, namely SDN 1 Pernasidi, SDN 2 Rancamaya and SDN 2 Sokawera in Cilongok Regency. Sampling applies a purposive sampling technique. Sampling is based on considerations of the amount of BOS funds received, the availability of human resources, and the competency of training that has been attended previously. The number of respondents at SDN 1 Pernasidi is 11 people, SDN 2 Rancamaya is 10 respondents, and SDN 2 Sokawera is 8 respondents. The data research instrument in this study uses a questionnaire to measure the effect of BOS Performance on teacher training programs and the quality of learning provided to the Principal and teachers who participated in training at SDN 1 Pernasidi, SDN 2 Rancamaya and SDN 2 Sokawera. The questionnaire used a Likert scale of 1-4. Before the instrument was applied to the study, validation was conducted by experts in the field of learning evaluation and non-test instruments. The validation test results indicated valid categories for use in the study. Data analysis techniques included prerequisite tests, namely normality and homogeneity tests, t-tests, and Pearson correlation tests. Decision-making was based on significance values. If the significance value is less than 0.05, there is a difference in the average and there is a significant positive relationship. Data analysis was performed using SPSS Version 25.

## RESULT AND DISCUSION

### RESULT

This section presents the results of statistical testing to determine the relationship between teacher training variables and learning quality. Before the hypothesis test, an analysis prerequisite test is first carried out which includes a normality test. This prerequisite test aims to ensure that the data obtained meets the assumptions required in parametric statistical analysis. The normality test is carried out to find out whether the data is normally distributed or not. The normality test in this study uses the Shapiro-Wilk test. The results of the normality test are presented in Table 1 below.

**Table 1.** Shapiro Wilk Normality Test Results

Variables	Statistic	df	Sig.
Value Learning quality	.841	29	.120

Variables	Statistic	df	Sig.
Teacher training programs	.889	29	.250

Source: SPSS Output, 2026

Based on Table 1, the significance value for the teacher training variable was 0.120 and for the learning quality variable of 0.250. All of these significance values were above 0.05, so it can be concluded that the data on both variables were normally distributed. Furthermore, a homogeneity test was carried out to determine the similarity of data variance between groups.

**Table 2.** Homogeneity Test Results

	Levene Statistic	df1	df2	Sig.
Based on Mean	.671	1	56	.416
Based on Median	.641	1	56	.427
Based on Median and with adjusted df	.641	1	52.796	.427
Based on trimmed mean	.663	1	56	.419

Source: SPSS Output, 2026

Based on Table 2, the significance value of the homogeneity test was 0.416 (based on mean), while based on the median was 0.427, and based on the trimmed mean of 0.419. All of these significance values showed a number greater than 0.05. Thus, it can be concluded that the data has a homogeneous variance. Because the data has met the assumptions of normality and homogeneity, the analysis can be continued on the hypothesis test using the correlation test and independent sample t test. The correlation test was conducted to determine the relationship between the variables of teacher training and learning quality. The results of the correlation test are presented in the following table. Uji t untuk mengetahui pengaruh dana BOS terhadap pelatihan kompetensi guru dan kualitas pembelajaran.

**Table 3.** Results of the Person Correlation Test

	t	Learning quality	Teacher training programs
Learning quality	Pearson Correlation	1	.804**
	Sig. (2-tailed)		.000
	N	29	29
Teacher training programs	Pearson Correlation	.804**	1
	Sig. (2-tailed)	.000	
	N	29	29

Source: SPSS Output, 2026

Based on the correlation test results table 3, it was obtained that the Pearson correlation significance value was 0.000, meaning that the significance value was less than 0.05 so that it can be concluded that teacher training programs with learning quality have a positive and significant correlation. The correlation coefficient value of 0.804 shows that the relationship between the two variables is in the strong category. The results of this study show that the better the teacher training program is implemented, the more the quality of learning quality will increase. Teachers who have

good competence and skills through training will be better able to create an interactive, interesting, and fun learning atmosphere, so that it has a positive impact on the learning experience of students. Tabel 4 menjelaskan hasil uji statistika independent sample t tets.

**Table 4.** Independent Sample T Test Results

Value	Aspects	t	Sig.(2-tailed)
Learning quality	Equal variances assumed	5.132	0.002
	Equal variances not assumed	5.021	0.000
Teacher training programs	Equal variances assumed	5.135	0.001
	Equal variances not assumed	5.812	0.000

Source: SPSS Output, 2026

Based on table 4, it is explained that the significance value for the learning quality variable is 0.002 in the aspect of equal variances assumed. These results prove that the significance value of 0.002 is less than 0.05. The same results were also obtained by the teacher training variable with a significance value of 0.001 which means less than 0.05. Thus, it can be concluded that there are differences before and after getting the BOS funding program. Teacher training programs and learning quality have improved significantly after obtaining BOS performance funds. The BOS Fund has a positive influence in its development on teacher professionalism training programs and the quality of learning in elementary schools.

## DISCUSSION

The results of the study show that there is a strong and significant relationship between teacher training programs and learning quality. This is evidenced by the significance value on the Pearson correlation test of 0.000 which is smaller than 0.05 with a correlation coefficient of 0.804 which is in the strong category. These findings indicate that the better the quality of the teacher training program implemented, the higher the teacher's ability to create learning quality. Teacher training provides knowledge, pedagogic skills, and innovative insights that enable teachers to design more varied, interactive, and student-centered learning. This is in line with research by McChesney and Aldridge (2021) which states that teacher professional development affects the quality of learning, and is supported by Nugroho (2021) who emphasizes that effective teacher training can improve learning practices and student learning outcomes. Uplifting learning is an approach that emphasizes students' emotional and cognitive involvement through a fun learning experience. Teachers who have participated in training tend to have better abilities in choosing strategies, methods, and learning media that suit students' characteristics. This allows teachers to create a conducive, communicative, and participatory learning environment. These findings are in line with the research of Munna and Kalam (2021) which states that student involvement is influenced by the learning strategies implemented by teachers, and reinforced by Hsbollah and Hassan (2022). which explains that students' interest in learning can increase through fun and meaningful learning experiences.

In addition, the strong relationship between the two variables shows that teacher training has a strategic role in improving the quality of education. Teachers who have good professional and pedagogic competence will be better able to manage the classroom effectively, build positive interactions, and foster student learning motivation. Learning quality not only has an impact on improving learning outcomes, but also on students' affective aspects, such as interest, confidence, and comfort in learning. This is supported by research by Chew and Cerbin (2021) who stated that effective learning must pay attention to cognitive and affective aspects in a balanced manner, and by Ozcan (2021) who emphasized that teacher quality is the main factor that affects student learning success.

The results of this study also show that there is a significant difference between the conditions before and after the implementation of the BOS performance fund, which is shown by the significance values of learning quality (0.002) and teacher training (0.001), both of which are smaller than 0.05. This emphasizes that intervention through school operational financing is able to have a positive impact on improving teacher competence and the quality of the learning process. These findings are consistent with various studies that state that school-based funding allocated for teacher professional development and provision of learning resources plays an important role in improving the quality of education, particularly in developing countries (Lugaz & Grauwe, 2016; James & Joynes, 2018). Furthermore, continuous training for teachers is recognized as a crucial factor in improving learning practices because it has a direct impact on improving pedagogic competence in the classroom (Atuhumuze, 2019). Thus, the BOS performance fund can be seen as a strategic instrument that not only supports school operations, but also strengthens the capacity of teachers and improves the quality of learning in a sustainable manner at the elementary school level.

The implications of this study's findings show that teacher training programs need to be designed in a sustainable manner and relevant to the needs of 21st century learning. Strengthening teacher competence through quality training can be an effective strategy in creating learning quality. Therefore, educational institutions and policy makers need to pay more attention to teacher professional development, so that the learning process in the classroom can take place optimally, innovatively, and be able to improve the quality of students' learning experience as a whole. This is in line with the research of Isa et al. (2024) which emphasizes the importance of teacher professional development in improving the quality of education, and is supported by Muzaffar et al. (2024) who states that continuous teacher training contributes to improving learning practices in the classroom.

## CONCLUSION

The study concluded that teacher training programs play a crucial role in improving learning quality. This is evidenced by statistical tests showing a positive and significant relationship between teacher training and learning quality, with a significance value of 0.000 ( $<0.05$ ) and a correlation coefficient of 0.804, considered strong. Furthermore, the BOS performance funds positively impacted teacher competency training programs and the quality of learning in elementary schools. This suggests that the better the quality of training teachers receive, the greater their ability to design and implement interactive, engaging, and enjoyable learning. Therefore, teacher training is a crucial factor in improving the quality of the learning process and providing optimal learning experiences for students.

This research still has limitations, both in terms of the subject aspect and the variables studied. From the subject aspect, this study only involved 29 respondents so that the results of the study could not be generalized widely. In addition, the variables studied are still limited to teacher training and learning quality as external factors. Therefore, further research is recommended to involve a larger and diverse sample number, as well as examine other factors, both internal and external, such as student learning motivation, teacher creativity, and the use of innovative technology-based learning models. For example, the application of digital-based learning or joyful learning assisted by interactive media can be an alternative to improve the quality of more effective and meaningful learning in elementary schools.

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## REFERENCES

- Atuhumuze, F. (2019). In-service teacher training and professional development of primary school teachers in Uganda. *IAFOR Journal of Education*, 7(1), 19-36.
- Chew, S. L., & Cerbin, W. J. (2021). The cognitive challenges of effective teaching. *The Journal of Economic Education*, 52(1), 17-40. <https://doi.org/10.1080/00220485.2020.1845266>

- Hamirul, H., & Apriana, D. (2019). Pemanfaatan Dana Bantuan Operasional Sekolah (Bos) Dalam Memperbaiki Proses Pembelajaran. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 4(1), 55-66. <https://doi.org/10.31851/jmksp.v4i1.2475>
- Hawari, A. (2020). Kompetensi Sosial Guru Profesional: Taufik Mustofa. *HAWARI: Jurnal Pendidikan Agama dan Keagamaan Islam*, 1(1), 1-10. <https://doi.org/10.35706/hawari>
- Hikma, V. A., Abduloh, A., & Purnamaningsih, I. R. (2025). Implementasi Kebijakan Dana BOS Permendikbudristek No. 63 Tahun 2023 untuk Peningkatan Mutu Pendidikan. *Ideguru: Jurnal Karya Ilmiah Guru*, 10(3), 2171-2180.
- Hsbollah, H. M., & Hassan, H. (2022). Creating meaningful learning experiences with active, fun, and technology elements in the problem-based learning approach and its implications. *Malaysian Journal of Learning and Instruction*, 19(1), 147-181. <https://doi.org/10.32890/mjli2022.19.1.6>
- Isa, M., Neliwati, N., & Hadijaya, Y. (2024). Quality improvement management in teacher professional development. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, 5(2), 136-147. <https://doi.org/10.31538/munaddhomah.v5i2.782>
- James, Z., & Joynes, C. (2018). *The effectiveness of school grants in low-and middle-income contexts*.
- Julia, A. N., & Ahmad, M. (2025). Analisis Studi Literatur: Strategi Optimalisasi Bantuan Operasional Sekolah (Bos) Untuk Pendidikan Dasar Berkualitas. *Jurnal Manajemen Pendidikan*, 10(2), 728-739.
- Khairunnisa, A., Suparji, S., Rifai, A., & Machmud, A. (2024). Analisis pertanggungjawaban hukum pengurus yayasan dalam kasus penyalahgunaan dana: Studi kasus Yayasan Aksi Cepat Tanggap. *Binamulia Hukum*, 13(2), 407-419. <https://doi.org/10.37893/jbh.v13i2.937>
- Lugaz, C., & Grauwe, A. D. (2016). *Improving school financing: The use and usefulness of school grants. Lessons from East Asia and the Pacific*.
- Maliki, B. I. (2020). Peranan dana Bantuan Operasional Sekolah (BOS) terhadap kualitas pendidikan di Indonesia. *Jurnal Tarbawi*, 8(2), 163-176. <https://doi.org/10.36781/tarbawi.v8i2.3093>
- Maulida, R., & Mulawarman, W. G. (2025). Efektivitas Pengelolaan Dana BOS Dalam Meningkatkan Kinerja Sekolah. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 10(02), 401-407.
- McChesney, K., & Aldridge, J. M. (2021). What gets in the way? A new conceptual model for the trajectory from teacher professional development to impact. *Professional development in education*, 47(5), 834-852. <https://doi.org/10.1080/19415257.2019.1667412>
- Munna, A. S., & Kalam, M. A. (2021). Impact of active learning strategy on the student engagement. *GNOSI: an interdisciplinary journal of human theory and praxis*, 4(2), 96-114.
- Muzaffar, N., Nahid, S., & Abbas, M. (2023). Role of professional training of teachers and its relationship with teaching quality. *Global Educational Studies Review*, 8(1), 367-375. [https://doi.org/10.31703/gesr.2023\(VIII-1\).32](https://doi.org/10.31703/gesr.2023(VIII-1).32)
- Nugraha, A., Hairani, N. K., & Prisila, R. (2023). Strategi Pengelola Dana Bos Dalam Meningkatkan Mutu Sumber Daya Manusia Yang Berkualitas. *PEMA*, 3(2), 75-80. <https://doi.org/10.56832/pema.v3i2.355>
- Nugroho, P. (2024). The impact of teacher training and experience on performance: Strengthening educational quality through professional development. *Journal of Islamic Studies and Education*, 3(1), 101-106. <https://doi.org/10.63120/jise.v3i3.46>
- Nur, H. M., & Fatonah, N. (2022). Paradigma kompetensi guru. *Jurnal PGSD Uniga*, 1(1), 12-16. <https://doi.org/10.52434/jpgsd.v1i1.1561>
- Ozcan, M. (2021). Factors affecting students' academic achievement according to the teachers' opinion. *Education Reform Journal*, 6(1), 1-18. <https://doi.org/10.22596/erj2021.06.01.1.18>
- Pratama, L. D., & Lestari, W. (2020). Pengaruh pelatihan terhadap kompetensi pedagogik guru matematika. *Jurnal Cendekia*, 4(1), 278-285. <https://doi.org/10.31004/cendekia.v4i1.207>

- Pratama, L. D., Lestari, W., & Astutik, I. (2020). Efektifitas penggunaan media edutainment di tengah pandemi Covid-19. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, 9(2), 413-423. <https://doi.org/10.24127/ajpm.v9i2.2783>
- Rosmuliawati, A. S., Wasliman, I., & Holik, A. (2026). Manajemen Dana Bantuan Operasional Sekolah (BOS) dalam Peningkatan Kinerja Sekolah Dasar. *Jurnal Pendidikan dan Pembelajaran Indonesia (JPPI)*, 6(2), 876-886. <https://doi.org/10.53299/jppi.v6i2.3994>
- Rubiyati, W. R., & Ismanto, B. (2020). Evaluasi Program Bantuan Operasional Sekolah (BOS) di Sekolah Dasar. *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran, dan Pembelajaran*, 6(2), 220-229. <https://doi.org/10.33394/jk.v6i2.2614>
- Soro, S. H., Rifandi, A., Sofayantina, Y., & Listianti, L. (2024). Analisis Penggunaan Dana Bantuan Operasional Sekolah dalam Meningkatkan Kompetensi Profesional Guru (Studi Kasus Penggunaan Anggaran di SMP Negeri 36 Kota Bandung). *EDUKASIA Jurnal Pendidikan dan Pembelajaran*, 5(1), 2441-2448.
- Sufiani, S., & Marzuki, M. (2021). Joyful Learning: Strategi Alternatif Menuju Pembelajaran Menyenangkan. *Zawiyah: Jurnal Pemikiran Islam*, 7(1), 121-141. <https://doi.org/10.31332/zjpi.v7i1.2892>
- Wati, S., & Nurhasannah, N. (2024). Penguatan kompetensi guru dalam menghadapi era digital. *Jurnal Review Pendidikan Dasar: Jurnal Kajian Pendidikan Dan Hasil Penelitian*, 10(2), 149-155. <https://doi.org/10.26740/jrpd.v10n2.p149-155>
- Yasid, A. (2025). Deep learning based on joyful learning in increasing learning motivation. *Journal of Language and Letters Education*, 1(1), 41-47.
- Zulkipli, D., Herlina, E., & Kurniawati, W. (2022). The impact of pedagogic, personality, professional, and social competence on teacher performance: A quantitative study. *International Journal of Management, Economic, Business and Accounting*, 1(3), 41-58. <https://doi.org/10.58468/ijmeba.v1i3.34>