



## How to Improve the Performance of Public Elementary Schools? Empirical Evidence from Indonesia

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**Abstract:** This study aims to assess the construct validity of public elementary school performance from the proposed performance theory so that the observed variables can form a latent variable. This study used a quantitative approach with a measurement model in the form of First Order Confirmatory Factor Analysis. The sample in this study amounted to 233 principals of public elementary schools. Meanwhile, the location in this study is Brebes Regency, Central Java Province, Indonesia. Then, the data analysis in this research starts with developing the theoretical model, making a causality relationship path diagram, selecting the input matrix and obtaining the model estimate, assessing the identification of the structural model, and assessing the criteria of Goodness of Fit. This study reveals variables for measuring school performance, such as content standards, process standards, graduate competency standards, educator and education staff standards, facilities and infrastructure standards, management standards, financing standards, and education assessment standards, indicating that three observational variables are not significant and invalid in forming school performance latent variables, namely standards of educators and educational staff, standards of facilities and infrastructure, and standards of financing. In this regard, this research makes a practical contribution, namely that there is a need to change the orientation of fulfilling national education standards, which leads to school assessment based on performance appraisal based on curriculum development and implementation, teacher professional development, and optimizing the responsibility of stakeholders to improve educational quality so that schools able to provide optimal performance in providing services to the community.

**Keywords:** improve performance, school performance, public elementary school

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### Introduction

Performance is the actualization of something that is done both at the individual and organizational levels. Performance can be seen based on processes (Mbore & Cheruiyot, 2017) and work results (Garengo et al., 2021) to achieve organizational goals. According to Bernardin & Russel (2003), performance is a record of the results of a job done in a certain period. School performance is an illustration of the achievement in quality (Bernal et al., 2016) and quantity (Howie & Pate, 2012; Lamas, 2015) of the activities carried out by the school. This school's performance becomes a reference for stakeholders in assessing the quality of school education. The importance of assessing school performance makes schools race in fulfilling the expectations of education stakeholders. The Standard for achieving school performance can be seen from the fulfillment of the government's National Education Standards. In response to this, schools are not only expected to be able to meet the Standard of National Education but can also exceed it. This National Education Standard is a reference for schools in carrying out their operational activities to achieve a minimum standard of eligibility for educational services provided by schools. In this regard, Bramley (1995) suggests that school performance is a schoolwork process to produce academic and social competence for students.

In terms of primary school performance, primary school performance has unequal performance results (Valdés, 2022). These criteria are based on the achievement of eligibility and performance results

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compared to the National Education Standards through School Accreditation. Each elementary school is run with the same system pattern and is the responsibility of the Regency/city. School performance is not evenly distributed in achieving the National Education Standards with the same management system but producing different performances.

Several studies have shown that the performance of public elementary schools requires efforts to improve performance Anggita & Asrida (2014) revealed that out of 261 elementary schools in Pekanbaru City, 85 elementary schools were accredited A, 100 elementary schools were accredited B, 48 were accredited C, and 28 were not accredited. In line with this, Setyaningsih (2017) shows that of the 35 State Elementary Schools in Batu City studied, 16 schools with A accreditation status, 17 with B accreditation status, and 2 with C accreditation status. Meanwhile, Hasbullah et al. (2011) stated that most public elementary school facilities need to be improved; around 90% of education spending is allocated to pay salaries, especially teacher salaries, and funds earmarked for school operations are limited, namely between 2% and 7%. There are still schools accredited by C and have yet to be accredited, and inadequate facilities indicate that the performance of Public Elementary Schools requires efforts to improve performance.

In this regard, elementary schools are divided into public elementary schools managed by the government and private elementary schools managed by the community through foundations (Siddiqui & Gorard, 2017; Faisal & Martin, 2019). In this case, the performance of State Elementary Schools managed by the government should produce a good performance because all financing related to learning facilities, facilities, infrastructure, and honorariums is the government's responsibility, in this case, the Regency/city government.

School is a system consisting of input, process, and output components. In measuring school performance, it can be seen from the system components run by the school. According to Hoy & Miskel (2001), the performance of this input component is related to the potential and initial capacity of the school, including school policies, school standards, funding sources, facilities and infrastructure, student readiness, teacher competence, and technology readiness. At the same time, the performance of the process component is related to the performance of the internal structure in converting inputs into outputs, including organizational culture, academic climate, teacher and student motivation, principal leadership, supervision, use of technology, and evaluation. Then the performance of this output is related to the quality and quantity of the process provided by the school to students, educators, and other parties. The performance of this output is related to the quality produced by the school.

The school's quality is evident through the outcomes of its accreditation process conducted by the National Education Standards Agency. This process encompasses an evaluation of various aspects, such as content standards, process standards, graduate competency standards, standards for educators and education personnel, facilities and infrastructure standards, management standards, financing standards, and educational assessment standards (Government Regulation of the Republic of Indonesia Number 13 of 2015 Jo Government Regulation of the Republic of Indonesia Number 57 of 2021 Jo Government Regulation of the Republic of Indonesia Number 4 of 2022). Accreditation is an assessment process related to the feasibility and performance of schools that are compared with predetermined standards and are comprehensive in describing the actual condition of the school.

School performance generates user satisfaction (Yanova, 2015; Jacobsen et al., 2015). Therefore, the indicators that measure school performance need to be confirmed to produce a fit school performance construct so that the steps that must be taken in the context of satisfaction for users of educational services can be carried out validly. This study aims to assess the construct validity of the theory related to school performance so that the observation variables can form a latent variable. This research is expected to provide a practical contribution to evaluating the implementation of school quality assurance policies based on eight national education standards.

## **Methods**

Confirmatory Factor Analysis (CFA) is a statistical technique applied within the Structural Equation Modeling (SEM) framework to assess the extent to which the observable variables align with a latent variable. The research employed the Analysis of Moment Structures as the chosen analytical tool.

The population in this study was 738 principals of public elementary schools. Sampling-based on Random Cluster Sampling. Samples were taken based on the ISAAC and MICHAEL tables with an error rate of 5%. The number of samples obtained is 233. The location in this study is Brebes Regency, Central Java, Indonesia.

Data collection techniques in this study were in the form of a questionnaire. The questionnaire was based on a rating scale. This graded scale was a statement followed by a choice of answers that indicate the levels achieved by the performance of elementary schools. In this regard, a sample of 233 principals of public elementary schools in Brebes Regency was asked to assess the factors that affect the school's performance through a questionnaire prepared by the researcher.

The data analysis in this study started with developing a theoretical model, making a causal relationship path diagram, selecting an input matrix, and obtaining a model estimate, and evaluating the process of identifying structural models and the criteria used to assess the Goodness of Fit in academic research.

### Results and Discussion

#### Results

Measuring the construct of school performance through eight indicators, namely content standards (Y1), process standards (Y2), graduate competency standards (Y3), educator and education staff standards (Y4), facilities and infrastructure standards (Y5), management standards (Y6), financing standards (Y7), and educational assessment standards (Y8) following Government Regulation of the Republic of Indonesia Number 13 of 2015 concerning National Education Standards which indicates that content requirements are interconnected with the breadth of subject matter covered and the degree of proficiency required to get graduate-level proficiency. At the same time, the process standard is a learning process carried out by schools to achieve graduate competency standards. Then, graduate competency standards relate to graduate competency qualifications related to attitude (affective), knowledge (cognitive), and skills (psychomotor) competencies. Furthermore, educators' and staff's standards about education and pre-service education include physical and mental feasibility.

In this regard, the standard of facilities and infrastructure relates to the completeness of facilities and information and communication technology needed to support the learning process. Meanwhile, management standards relate to the governance of planning, implementing, and supervising educational activities in schools so that the implementation of education with effective and efficient. Then, the financing standard relates to the components and the amount of school operational costs in one year. Moreover, the criteria for educational assessment pertain to the techniques, procedures, and instruments employed in evaluating student learning outcomes. The results of the school performance construct confirmatory factor analysis test are in Figure 1 below.

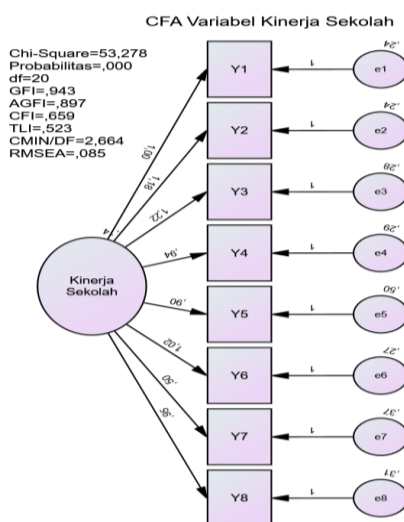


Figure 1. CFA Testing of School Performance Variables

Value Chi-Square = 53.728 with df = 16, and probability = 0.000. This Chi-Square exceeds the Cut of Value of 34.267, and the probability value is still below the Cut of Value of 0.05; this indicates that the model does not fit. The criteria for the fit model are that the GFI value = 0.943 is already above the Cut of Value of 0.90. To improve the fit model based on the significant value of the Standardized Loading Factor parameter, namely the indicator with a probability value > 0.05 dropped from the analysis and the Convergent Validity, the indicator having a Loading Factor < 0.50 is declared invalid in measuring school performance constructs so that the indicator drops from the analysis. Output Regression Weight, the significance value of the estimated Standardized Loading Factor parameter, is presented in Table 1.

**Table 1.** Regression Weight of School Performance Variable

			Estimate	S.E.	C.R.	P	Label
Y1	<---	School_Performance	1.000				
Y2	<---	School_Performance	1.176	.157	7.474	***	par_1
Y3	<---	School_Performance	1.216	.200	6.085	***	par_2
Y4	<---	School_Performance	.939	.268	3.510	***	par_3
Y5	<---	School_Performance	.902	.289	3.121	.002	par_4
Y6	<---	School_Performance	1.020	.174	5.873	***	par_5
Y7	<---	School_Performance	.503	.153	3.279	.001	par_6
Y8	<---	School_Performance	.950	.151	6.306	***	par_7

Based on Table 1, all constructs of the latent variable of school performance have a probability value of less than 0.05, so all observation variables are declared significant. Whereas based on the estimated value of the Standardized Loading Estimate, confirmatory analysis test of school performance constructs, in general, all Loading Factors are statistically significant, and the Loading Factor is above 0.50, there are only two manifests of school performance constructs that have a value below 0.50, namely Y18 with a loading factor of 0.432 and Y20 with a loading factor 0.294. The CFA factor loading value for school performance is presented in Table 2.

**Table 2.** Value of Loading Factor CFA Variable School Performance

			Estimate
Y1	<---	School_Performance	.609
Y2	<---	School_Performance	.666
Y3	<---	School_Performance	.653
Y4	<---	School_Performance	.548
Y5	<---	School_Performance	.432
Y6	<---	School_Performance	.595
Y7	<---	School_Performance	.294
Y8	<---	School_Performance	.537

In this regard, the conclusion is that two indicators of school performance construct variables are declared invalid, namely facilities and infrastructure standards (Y5) and financing standards (Y7). Because the Loading Factor value is below 0.50 for the following analysis, it dropped from the study. CFA re-estimation results of school performance variables are in Figure 2 below.

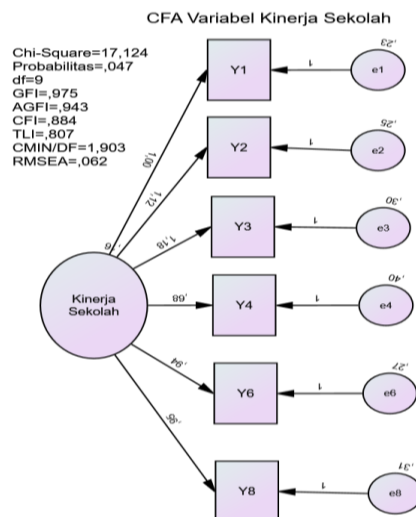


Figure 2. Re-estimation Testing of CFA School Performance Variables

The results of the re-estimated CFA analysis of school performance variables Chi-Square value = 17.124 with  $df = 9$  and probability = 0.047. The Chi-Square result is smaller than the cut of value 23.589. However, the P-value is smaller than 0.05, indicating that the model does not fit. However, the results of the CFA analysis test showed that the GFI value = 0.975, which was above the Cut of Value 0.90, the AGFI value = 0.943, which was above the Cut of Value 0.90, the CMIN/DF value = 1.903, which was below the Cut of Value 2.0, and the RMSEA value = 0.062 below the Cut of Value 0.08.

Based on the Regression Weight, all observation variables are significant because they have a probability value of less than 0.05. However, one observation variable with a Loading Factor of less than 0.5 is the Standard of Educators and Education Personnel (Y4). A loading Factor observation variable Y4 must be dropped from the analysis because it is invalid. The results of the re-estimation of the two CFA school performance variables can be seen in Figure 3.

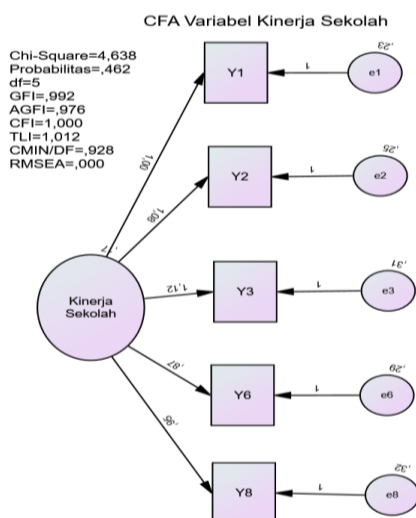


Figure 3. Testing the Second Re-estimation of CFA's School Performance Variables

The results of re-estimating the second CFA of school performance variables Chi-Square value = 4.638 with  $df = 5$  and probability = 0.462. The Chi-Square is smaller than the Cut of Value 16.750, and the P-value is greater than 0.05, indicating that the model is fit. The results of the CFA analysis test obtained that the GFI value = 0.992 was above the Cut of Value 0.90, the AGFI value = 0.976 was above the Cut of Value 0.90, the CFI value = 1,000 was above the Cut of Value 0.90, the TLI value = 1.012 is above the Cut of Value 0.90, the CMIN/DF value = 0.928 is already below the Cut of Value 2.0, and also the RMSEA value = 0.000 below the Cut of Value 0.08. So, the overall school performance

construct is acceptable and has met the fit criteria. Hence, the null hypothesis is accepted, which states the model is the same as the empirical data.

Based on the Regression Weight, all observation variables are significant because they have a probability value of less than 0.05, and all observation variables are valid. After all, the Loading Factor is greater than 0.5. Meanwhile, based on the estimated value of the Standardized Loading Estimate, the confirmatory analysis test of latent variable constructs, in general, is that all Loading Factors are statistically significant, and the Loading Factor is above 0.50. The Loading Factor CFA value of school performance can be seen in Table 3 below.

**Table 3.** Value of Loading Factor Re-estimation of Second CFA School Performance Variable Discussion

			Estimate
Y1	<---	School_Performance	.647
Y2	<---	School_Performance	.659
Y3	<---	School_Performance	.637
Y6	<---	School_Performance	.552
Y8	<---	School_Performance	.569

### Discussion

The latent variables related to school performance are measured using a set of eight observation variables. These variables encompass content standards, process standards, graduate competency standards, educators and education staff, standards for facilities and infrastructure, management standards, financing standards, and educational assessment standards. The confirmatory factor analysis test shows that the school's performance meets the fit criteria. The construct of the school performance latent variable shows a good model. The above outcome is derived from the suitability evaluation, wherein the estimated model's squared residual values are compared with the actual data. Then, the school performance latent variable shows a good model because it is based on the results of the correction of the residual squared value of the estimated model compared to the actual data, which has been adjusted for the ratio of degrees of freedom.

Besides that, the latent variable of school performance shows a good model because it is based on the results of the conformity index, which compares the tested model with the model that has no effect (null model). Then, the latent variable of school performance also shows a good model because it is based on the comparison results of a tested model (default model) with a baseline model consisting saturated model and an independent model. Furthermore, the latent variable of school performance shows a good model because the number of estimated coefficients has reached a good level of agreement with the model. In addition, the latent variable of school performance shows a good model because it is based on the results of the Chi-Square in a study with large sample size.

The construct of the latent variable of school performance shows that three observational variables are not meaningful and invalid in forming the latent variable of school performance. The three observation variables are the standard observation variable for educators and education personnel, the standard of facilities and infrastructure, and the standard of financing. The standards of educators and education personnel influence the efficacy of the school's learning process. A quality learning process depends on the quality of educators and education personnel, resulting in the effectiveness and efficiency of the learning process (Girvan et al., 2016; Kubat, 2018; Munna & Kalam, 2021).

The quality of school resources related to educators and education personnel is influenced by educational background (Graham et al., 2020), recruitment process (Muda & Rafiki, 2014; Abraham et al., 2015), professional development (Carter et al., 2021), as well as school management support (Alharthy & Marni, 2020). The suitability of educational background determines the roles and functions of educators and education personnel. The efficacy of the learning process is influenced by the qualifications or educational credentials of teachers, so this becomes a reference for assessing the quality or not of the role and function of educators in learning activities. Educators with appropriate educational backgrounds not only impact the effectiveness of the learning process but also impact the effectiveness of discussions and dissemination present in the development of school programs because educators have relatively the same understanding regarding the competencies possessed by educators.

The transparent and accountable recruitment process for educators and education personnel influences the school's stringent selection of educators and education personnel. The performance of educators and education personnel at the individual level must support school performance at the organizational level so that the qualitative performance of educators and education personnel at the individual level influences school performance at the organizational level. The caliber of school performance is directly proportional to the effectiveness of the recruitment process (Klassen & Kim, 2019).

Professional development is a systematic and ongoing process that necessitates educators and education personnel to enhance their abilities to cultivate professionalism in their roles (Niemi, 2015; Razinkina et al., 2021; Sulthon et al., 2021; Hermanto, 2022; Wahjusaputri et al., 2023). This professional development includes further education, training, and taking an active role in professional forums, seminars, and training. The development of the current era requires educators and education staff to update their abilities so that educators and education staff remain optimal in providing services for users of educational services. Then, school management support is the support given by school management to encourage educators and education staff to participate proactively in every professional development program, whether held by the relevant education office, educational institution, or forum.

The lack of significance and validity in the standards upheld by educators and education professionals can be attributed to their suboptimal implementation of professional development initiatives, which has an impact on increasing the capacity and competence of educators and education staff. Educators and education staff are too comfortable in the current conditions, so this impacts the lack of interest or motivation present in educators and education staff to increase capacity through professional development programs. School management support through school principals as school leaders is very influential in encouraging the professional development of educators and education staff (Hilton et al., 2015; Bellibaş et al., 2020; Andriani et al., 2022); this can also be done through clear assignments to educators and education personnel to participate in professional development programs. The program results that educators and education staff have followed can be disseminated to other colleagues so that professional development programs can have a systemic impact. This study's findings align with prior studies by Bonney et al. (2015), indicating that teacher academic qualifications do not affect student achievement. In line with this, research by Blazar & Kraft (2017) shows that teaching practices carried out by teachers still need to be effective in improving student attitudes and behavior.

Facilities and infrastructure standards are related to the completeness of facilities and information and communication technology needed to support the learning process. The standard of facilities and infrastructure as part of the school's input component is closely related to school funding. Fulfilling facilities and infrastructure standards for one school with another shows a visible disparity (Cuyvers et al., 2011; Gosal, 2018). The budget owned by the school is very dependent on the number of students in the school based on the calculation of the school operational assistance fund (BOS) obtained by the students. The ability of the principal to collect funds other than those sourced from the school operational assistance funds plays an essential role in meeting the eligibility standards for facilities and infrastructure owned by the school. It obtained by schools can only be used for standard maintenance of facilities and infrastructure.

The principal's network determines the principal's success in raising funds (Iqbal & Wardana, 2019). The more comprehensive the network the principal owns, the wider the potential for obtaining funds for schools outside the school operational assistance funds. Receiving funds for schools other than BOS funds is primarily determined by the capacity of the school principal as a school manager. As a school manager, the principal plays a role in collaborating, coordinating, and collaborating to strive to achieve school facilities and infrastructure standards. The cooperation that schools can carry out includes collaboration with various state institutions, educational forums, and academic observer institutions. Meanwhile, schools can coordinate with school committees and the community in general (Noviana, 2018; Hermanto & Pamungkas, 2023). Then, schools may engage in collaborations such as coordination with other schools and the local government via the education office.

The meaninglessness and invalidity of the standard of facilities and infrastructure are because the principal has not been optimal in establishing a network that can support his role as principal in collecting funds other than funds sourced from the school operational assistance funds. The role of school principals in raising funds through their network has an impact on accelerating the fulfillment of facilities and infrastructure standards to optimize school performance. The limited allocation of funds

to meet the standard of facilities and infrastructure sourced from special allocation funds sourced from the relevant education offices will only be able to meet some of the needs of schools with a relatively large number of schools. This condition affects the extent of the line to meet legal requirements for school infrastructure and facilities. As a result, as a school administrator, the principal plays an active role in expanding his network to expedite the fulfillment of the need for standard facilities and infrastructure. The findings of this investigation are consistent with those of Yangambi (2023), indicating that sustainable school infrastructure improvements should be considered and recommended for all schools to optimize student achievement and teacher delivery. In support of this, Setia & Nasrudin (2020) on their research demonstrates that the strategy for developing learning facilities and infrastructure has not yet been successful. When managing learning facilities and infrastructure, the school principal must pay close attention to the planning, implementation, and supervision phases. Besides that, Hong & Zimmer's (2016) research shows that capital spending on infrastructure can positively affect student proficiency levels.

Furthermore, the financing standard relates to the components and the amount of school operational costs within one year. Funding standards play an essential role in supporting the success of school operations in carrying out every activity at school (Sakamoto, 2022). The school activity plan and budget are a reference for schools related to fulfilling priority activities requiring funding. The source of funds obtained by schools comes entirely from school operational assistance funds. Meanwhile, the allocation of the use of funds or school expenditures is intended for the development of graduate competencies, including the implementation of school exams, the performance of daily tests, the implementation of the mid-semester exams, and the implementation of the final semester exams; the development of content standards requires the preparation of teacher assignments and lesson schedules, annual programs, semester programs, syllabi, lesson plans, and curricula.

The next allocation for the use of funds or school expenditures is the development of process standards covering the implementation of new student registration, financing for library development, financing for learning and extracurricular activities, as well as financing for the administration of school activities; The story of educators and education personnel includes funding for the professional development of teachers and education personnel, teacher working group activities, subject teacher deliberations, principal working group activities, and principal working deliberations. Development of school facilities and infrastructure includes maintenance of electrical installations, purchase of school equipment/equipment, financing of maintenance of school facilities and infrastructure, as well as provision of multi-media learning tools.

The next allocation for the use of school funds or expenditures is the development of management standards, including the implementation of school principal work meetings, preparation of the school's mid-term work plan, lesson plan, preparation of annual work plans, preparation of income budget plans and school expenditures, preparation of work plan programs and school budgets. The development of financing standards includes the administration of school activities, financing for power subscriptions or services, as well as financing for the payment of honoraria; The development and implementation of the assessment system include the performance of the mid-semester examination assessment, the implementation of the final semester examination assessment, as well as the implementation of the grade promotion examination assessment.

Meaninglessness and invalidity of financing standards This is because schools have not been optimal in allocating funds proportionally. Budget funds used by schools are primarily used for financing, including financing for the development of process standards, financing for maintenance of standard facilities and infrastructure, and developing financing standards. This condition shows that the use of funds is more focused on financing the operational feasibility of schools (Granado et al., 2007; Kharisma et al., 2021), so there is still a quality imbalance that should be present in school management based on school self-evaluation, which has an impact on not being optimal school performance. This inequality includes the need for more optimal development of graduate competencies, content standards development, educators and education staff development, and implementation and assessment systems. The results of this study follow research conducted by Hagood (2019), which shows that performance funding consistently benefits institutions with high resources and places a financial burden on institutions with low resources. In line with this, research by Flink & Molina (2021) shows that changes in instructional spending affect student performance.



This study demonstrates that school performance is supported by national standards consisting of content standards, process standards, graduate competency standards, management standards, and educational assessment standards that are founded on work processes. This research completes the scientific synthesis related to school performance which comes from the grand theory of Stewardship Theory (Donaldson & Davis, 1991). Stewardship theory suggests that management aims to achieve optimal results for the organization, not individual goals. Therefore, optimizing school performance that focuses on work process-based standards impacts organizational success so that it can provide satisfaction to stakeholders and the community.

### Conclusion

The latent variables of school performance were measured through eight observation variables: content standards, process standards, graduate competency standards, educators and education personnel standards, facilities, and infrastructure standards, management standards, financing standards, and educational assessment standards. Meaningless and invalid in forming the latent variable of school performance. The three observation variables are the standard observation variable for educators and education staff, the standard of facilities and infrastructure, and the standard of financing. Educators and staff must be more efficient in carrying out professional development, enhancing their capacity and competency. Besides that, school principals need to be more optimal in establishing networks supporting their role as school principals in collecting funds other than funds sourced from the school operational assistance funds. In addition, schools need to be more optimal in allocating funds proportionally according to the priority scale based on school self-evaluations. This research shows that there needs to be a change in the orientation of meeting national education standards that leads to school assessments based on performance assessments based on curriculum development and implementation, teacher professional development, and optimizing the role of stakeholders to improve the quality of education.

### References

- Abraham, M., Kaliannan, M., Mohan, A. V., & Thomas, S. (2015). A review of SMEs recruitment and selection dilemma: Finding a “fit.” *The Journal of Developing Areas*, 49(5), 335–342. <https://doi.org/10.1353/jda.2015.0058>
- Alharthy, A. A. H., & Marni, N. Bin. (2020). Training impact on the human resources performance. *Journal of Southwest Jiaotong University*, 55(3), 1–6. <https://doi.org/10.35741/issn.0258-2724.55.3.12>
- Andriani, D. E., Dania, R., Suyud, S., Raharja, S., & Kristyningsih, D. M. (2022). The profile of principals’ instructional leadership in primary schools with high, moderate, and low achievement. *Jurnal Prima Edukasia*, 10(2), 159–170. <https://doi.org/10.21831/jpe.v10i2.48302>
- Anggita, N., & Asrida, W. (2014). The efforts of the Pekanbaru city education office in increasing the accreditation value of elementary schools in the city of Pekanbaru in 2012. *Jurnal Online Mahasiswa (JOM) Bidang Ilmu Sosial dan Ilmu Politik*, 1(1), 1–14. <https://jom.unri.ac.id/index.php/JOMFSIP/article/view/2182>
- Bellibaş, M. Ş., Gümüş, S., & Kılınç, A. Ç. (2020). Principals supporting teacher leadership: the effects of learning-centered leadership on teacher leadership practices with the mediating role of teacher agency. *European Journal of Education*, 55(2), 200–216. <https://doi.org/10.1111/ejed.12387>
- Bernal, P., Mittag, N., & Qureshi, J. A. (2016). Estimating effects of school quality using multiple proxies. *Labour Economics*, 39, 1–10. <https://doi.org/10.1016/j.labeco.2016.01.005>
- Bernardin, H. J., & Russel, J. E. A. (2003). *Human Resources Management*. Mc Graw-Hill.
- Blazar, D., & Kraft, M. A. (2017). Teacher and teaching effects on students’ attitudes and behaviors. *Educational Evaluation and Policy Analysis*, 39(1), 146–170. <https://doi.org/10.3102/0162373716670260>
- Bonney, E. A., Amoah, D. F., Micah, S. A., Ahiameny, C., & Lemaire, M. B. (2015). The relationship between the quality of teachers and pupils academic performance in the STMA junior high schools of the western region of Ghana. *Journal of Education and Practice*, 6(24), 139-150. <https://doi.org/10.7176/JEP>

- Bramley, G. (1995). *School performance indicators and school effectiveness: The conceptions and the critiques*. University of Wolverhampton.
- Carter, E., Onwuegbuzie, A., Singal, N., & van der Velde, L. (2021). Perceptions of teaching quality in rwandan secondary schools: A contextual analysis. *International Journal of Educational Research*, 109. <https://doi.org/10.1016/j.ijer.2021.101843>
- Cuyvers, K., De Weerd, G., Dupont, S., Mols, S., & Nuytten, C. (2011). Well-being at school: Does infrastructure matter? *CELE Exchange*, 2011(10), 1–6. <https://doi.org/10.1787/5kg0lkzc81vc-en>
- Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management*, 16(1), 49–64. <https://doi.org/10.1177/031289629101600103>
- Faisal, & Martin, S. N. (2019). Science education in Indonesia: Past, present, and future. *Asia-Pacific Science Education*, 5(1), 1–29. <https://doi.org/10.1186/s41029-019-0032-0>
- Flink, C., & Molina, A. L. (2021). Improving the performance of public organizations: Financial resources and the conditioning effect of clientele context. *Public Administration*, 99(2), 387–404. <https://doi.org/10.1111/padm.12690>
- Garengo, P., Sardi, A., & Nudurupati, S. S. (2021). Human resource management (HRM) in the performance measurement and management (PMM) domain: A bibliometric review. *International Journal of Productivity and Performance Management*. <https://doi.org/10.1108/IJPPM-04-2020-0177>
- Girvan, C., Conneely, C., & Tangney, B. (2016). Extending experiential learning in teacher professional development. *Teaching and Teacher Education*, 58, 129–139. <https://doi.org/10.1016/j.tate.2016.04.009>
- Gosal, R. (2018). Public perception of facilities and infrastructure quality at school as one facilities on Sindue district, Donggala regency. *Asian Journal of Environment, History and Heritage*, 2(2), 217–222. <https://spaj.ukm.my/ajehh/index.php/ajehh/article/view/88>
- Government Regulation of the Republic of Indonesia Number 13 of 2015*. (2015). Jakarta.
- Government Regulation of the Republic of Indonesia Number 4 of 2022*. (2022). Jakarta.
- Government Regulation of the Republic of Indonesia Number 57 of 2021*. (2021). Jakarta.
- Graham, L. J., White, S. L. J., Cologon, K., & Pianta, R. C. (2020). Do teachers' years of experience make a difference in the quality of teaching? *Teaching and Teacher Education*, 96, 1–10. <https://doi.org/10.1016/j.tate.2020.103190>
- Granado, J. A. del, Fengler, W., Ragatz, A., & Yavuz, E. (2007). Investing in Indonesia's education: Allocation, equity, and efficiency of public expenditures. *Munich Personal RePEc Archive*, 4372, 1–43. <https://doi.org/10.5897/JAERD12.088>
- Hagood, L. P. (2019). The financial benefits and burdens of performance funding in higher education. *Educational Evaluation and Policy Analysis*, 41(2), 189–213. <https://doi.org/10.3102/0162373719837318>
- Hasbullah, A., Zahari, W., Yusoff, W., Maziah, I., & Prima, V. (2011). A framework study of school facilities performance in public primary school of Batubara district in Indonesia. *Procedia Social and Behavioral Sciences*, 15, 3708–3712. <https://doi.org/10.1016/j.sbspro.2011.04.360>
- Hermanto, H. (2022). The teacher performance evaluation in learning management in inclusive settings. *Jurnal Prima Edukasia*, 10(1), 28–36. <https://doi.org/10.21831/jpe.v10i1.37511>
- Hermanto, H., & Pamungkas, B. (2023). School and parents collaboration in home learning service for students with sensory impairments. *Jurnal Prima Edukasia*, 11(1), 9–15. <https://doi.org/http://dx.doi.org/10.21831/jpe.v11i1.51614>
- Hilton, A., Hilton, G., Dole, S., & Goos, M. (2015). School leaders as participants in teachers' professional development: The impact on teachers' and school leaders' professional growth. *Australian Journal of Teacher Education*, 40(12), 103–125. <https://doi.org/10.14221/ajte.2015v40n12.8>
- Hong, K., & Zimmer, R. (2016). Does investing in school capital infrastructure improve student achievement? *Economics of Education Review*, 53, 143–158. <https://doi.org/https://doi.org/10.1016/j.econedurev.2016.05.007>
- Howie, E. K., & Pate, R. R. (2012). Physical activity and academic achievement in children: a historical perspective. *Journal of Sport and Health Science*, 1(3), 160–169. <https://doi.org/10.1016/j.jshs.2012.09.003>

- Hoy, W. K., & Miskel, C. G. (2001). *Educational Administration: Theory, research and practice, 8th edition*. McGraw-Hill.
- Iqbal, Y., & Wardana, A. (2019). Social capital and school principal roles in improving school quality of Muhammadiyah 3 Yogyakarta high school. *Advances in Social Science, Education and Humanities Research (ASSEHR)*, 330, 281–285. <https://doi.org/10.2991/iceri-18.2019.59>
- Jacobsen, R., Snyder, J. W., & Saultz, A. (2015). Understanding satisfaction with schools: The role of expectations. *Journal of Public Administration Research and Theory*, 25(3), 831–848. <https://doi.org/10.1093/jopart/muu026>
- Kharisma, B., Remi, S. S., & Maharani, D. A. (2021). The impact of Indonesia's school operational assistance program on the transition rate from primary to junior secondary school. *The Monitoring of Public Opinion Economic & Social Changes*, 5, 474–492. <https://doi.org/10.14515/MONITORING.2021.5.1787>
- Klassen, R., & Kim, L. (2019). Selecting teachers and prospective teachers: A meta-analysis. *Educational Research Review*, 26, 32–51. <https://doi.org/10.1016/j.edurev.2018.12.003>
- Kubat, U. (2018). Identifying the individual differences among students during learning and teaching process by science teachers. *International Journal of Research in Education and Science*, 4(1), 30–38. <https://doi.org/10.21890/ijres.369746>
- Lamas, H. E. (2015). School performance. *Propósitos Y Representaciones*, 3(1), 313–386. <http://dx.doi.org/10.20511/pyr2015.v3n1.74>
- Mbore, C., & Cheruiyot, T. (2017). Employee performance measurement and management in the African public sector. *International Journal of Science: Basic and Applied Research (IJSBAR)*, 36(1), 187–201. <https://gssrr.org/index.php/JournalOfBasicAndApplied/article/view/7964>
- Muda, I., & Rafiki, A. (2014). Human resources development and performance of government provincial employees: A study in north Sumatera, Indonesia. *Journal of Economics and Behavioral Studies*, 6(2), 152–162. <https://doi.org/10.22610/jebis.v6i2.478>
- Munna, A. S., & Kalam, M. A. (2021). Teaching and learning process to enhance teaching effectiveness: A literature review. *International Journal of Humanities and Innovation (IJHI)*, 4(1), 1–4.
- Niemi, H. (2015). Teacher professional development in Finland: Towards a more holistic approach. *Psychology, Society, and Education*, 7(3), 279–294. <https://doi.org/10.25115/psye.v7i3.519>
- Noviana, I. (2018). The relationship between the parents' parenting activities and the habit of watching educational programs with the moral values. *Jurnal Prima Edukasia*, 6(2), 136–146. <https://doi.org/10.21831/jpe.v6i2.9742>
- Razinkina, E., Kalinina, O., & Zima, E. (2021). The system of professional development and assessment of the competencies of university teaching staff to ensure quality education in the interests of sustainable development of society: A case study of Russia. *E3S Web of Conferences*, 296, 1–7. <https://doi.org/10.1051/e3sconf/202129608011>
- Sakamoto, J. (2022). Financing public schools with private funds: Efficiency– equity trade-off of multi-stakeholder school financing in Punjab, Pakistan. *Education Policy Analysis Archives*, 30(75), 1–31. <https://doi.org/10.14507/epaa.30.6828>
- Setia, R., & Nasrudin, D. (2020). School management: The optimization of learning facilities to improve the quality of vocational schools. *Jurnal Pendidikan Vokasi*, 10(2). <https://doi.org/10.21831/jpv.v10i2.29981>
- Setyaningsih, C. D. (2017). Accreditation status and school quality in public elementary schools. *Jurnal Manajemen dan Supervisi Pendidikan*, 1(2), 138–145. <https://doi.org/10.17977/um025v1i22017p138>
- Siddiqui, N., & Gorard, S. (2017). Comparing government and private schools in Pakistan: The way forward for universal education. *International Journal of Educational Research*, 82, 159–169. <https://doi.org/10.1016/j.ijer.2017.01.007>
- Sulthon, M., Pujiastuti, P., & Retnawati, H. (2021). What is the teacher's challenge on the developing of learning media to increase critical thinking ability and the character? *Jurnal Prima Edukasia*, 9(1). <https://doi.org/10.21831/jpe.v9i1.34876>
- Valdés, M. T. (2022). Unequal expectations? Testing decisional mechanisms for secondary effects of social origin. *Social Science Research*, 105, 1–17. <https://doi.org/10.1016/j.ssresearch.2021.102688>
- Wahjusaputri, S., Syarif, S., Handayani, S. P., Ernawati, E., & Nastiti, T. I. (2023). Continuous

professional development of teachers through teaching clinics at Muhammadiyah 28 islamic elementary school. *Jurnal Prima Edukasia*, 11(1), 30–37.  
<https://doi.org/http://dx.doi.org/10.21831/jpe.v11i1.52470>

Yangambi, M. (2023). Impact of school infrastructures on students learning and performance: Case of three public schools in a developing country. *Creative Education*, 14(4), 788–809.  
<https://doi.org/https://doi.org/10.4236/ce.2023.144052>

Yanova, N. (2015). Assessment of satisfaction with the quality of education: Customer satisfaction index. *Procedia - Social and Behavioral Sciences*, 182, 566–573.  
<https://doi.org/10.1016/j.sbspro.2015.04.782>