



Design of Internal Supervision Model for Educational Fund Management at the First-Level Middle School in Mamuju Regency

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

This study is a Research and Development (R&D) study developed by Borg and Gall, aiming to design a model for Internal Supervision in Educational Fund Management at the First-Level Middle School (SMP) in Mamuju Regency. The aspects discussed are the consulting aspect with indicators of socialization of School Operational Assistance (BOS) funds and community complaint services. The internal control system aspect of educational units (SPISP) with indicators of planning, process, and evaluation. The assurance aspect with indicators of review and audit. The research location is all SMPs in Mamuju Regency, consisting of 65 schools, and 30 school principals were selected as respondents. The research data was obtained by providing instruments/ questionnaires through focus group discussions (FGD) with the SMP School Committee, with emphasis on the pre-test and

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post-test processes. The data analysis technique used is descriptive quantitative and qualitative statistics, as well as N-Gain increase analysis, which shows that the effectiveness of this model design is quite effective with a value of 0.7.

Keywords: Internal supervision; educational fund management.

1. INTRODUCTION

1.1 Background

The Government Regulation (PP) Number 12 of 2019 concerning regional financial management was established to implement the provisions of Article 293 and Article 330 of Law Number 23 of 2014 concerning Regional Government (Government Regulation Number 12 of 2019 concerning Regional Financial Management, 2019). Furthermore, the Minister of Home Affairs Regulation (Permendagri) was created as an operational guide, namely Permendagri Number 77 of 2020 concerning technical guidelines for regional financial management.

To maximize the effectiveness and efficiency of government administration, internal and external supervision is required, starting from the planning stage to the accountability and reporting stage. External supervision is carried out by Law Enforcement Agencies (APH) such as the Corruption Eradication Commission (KPK), the Supreme Audit Agency (BPK), the Attorney General's Office, and the Police. Internal supervision is carried out by the Government Internal Supervisory Apparatus (APIP). According to Government Regulation Number 12 of 2017, Article 16 (1), the supervision of regional government administration carried out by APIP must be based on the competencies possessed, related to the implementation of government administration supervision, which is the authority of the region, in accordance with its functions and authorities, and in accordance with the provisions of laws and regulations.

In the management of School Operational Assistance (BOS) funds, many schools have not effectively implemented the financial management system according to the applicable principles. According to [1], it was concluded that the planning of BOS fund usage has not fully complied with the technical guidelines (Juknis) of BOS funds, resulting in many activities that cannot run maximally. Other problems include delays in the process of disbursing BOS funds, tax payments, many official trips that do not comply with the Juknis, the use of daily

meal allowances from BOS funds, and the slow or non-existent internet network in certain schools.

The existence of the Annual Supervision Work Plan (PKPT) of the Inspectorate of Mamuju Regency, signed by the Regent and issued every year, is an effort to improve the efficiency and effectiveness of supervision implementation in supporting the achievement of the Inspectorate's performance and as a basis for evaluating the performance of APIP in carrying out supervision activities. One of the contents of the PKPT Inspectorate is the annual examination of educational funds, which still finds findings such as overpricing (not in accordance with the standard cost), excessive payment of honorarium for activities, and official travel expenses that do not comply with the Juknis of BOS funds.

2. PROBLEM FORMULATION

Based on the background above, the author can formulate the problem as follows: "How effective is the design of the internal supervision model in managing educational funds at the first-level middle school (SMP) in Mamuju Regency?"

2.1 Theoretical Description

Educational Funds in Indonesia:

Technically, the government's policy can be seen in the issuance of Government Regulation [2] and Government Regulation Number 57 of 2021 concerning National Education Standards (SNP), which explains that the cost of education consists of investment costs and operational costs. The government and local governments are responsible for providing education funding based on the principles of justice, sufficiency, accessibility, and sustainability [3].

Education funding is the provision of financial resources needed for the implementation and management of education [4]. The financial resources referred to include education costs. Education costs include: (a) unit costs of education; (b) costs of implementing and/or managing education; and (c) personal costs of students.

Supervision is an instrument of government that aims to determine whether the implementation is in accordance with the planned or not, and to identify the difficulties faced by implementers so that corrective actions can be taken [5]. With supervision, the task of management can be lightened because implementers cannot see the possibilities of errors they make. Supervision is not to find errors but to correct errors or mistakes, whether administrative or financial.

The definition of internal supervision or internal audit can be seen from several definitions. According to the American Accounting Association (AAA), internal audit is:

"A systematic process to objectively obtain and evaluate assertions about economic actions and events to ensure the degree of conformity between these assertions and established criteria and to communicate them to interested parties".

Meanwhile, the definition of internal audit according to [6] is:

"Internal audit is a systematic and objective evaluation conducted by internal auditors on

various operations and controls within an organization to determine whether: 1) financial and operational information is accurate and reliable; 2) risks faced by the organization have been identified and minimized; 3) external regulations and internal policies and procedures have been followed; 4) satisfactory operating criteria have been met; 5) resources have been used efficiently and economically; and 6) organizational goals have been achieved effectively, all of which are done to consult with management and help organizational members perform their duties effectively."

The definition of Internal Audit (Internal Supervision) according to the Standards of the Government Internal Supervisory Apparatus (APIP) is:

"Internal supervision is all audit, review, monitoring, evaluation, and other supervisory activities in the form of assistance, socialization, and consultation on the implementation of organizational tasks and functions to provide sufficient assurance that activities have been carried out in accordance with established standards effectively and efficiently for the benefit of leaders in achieving good governance."

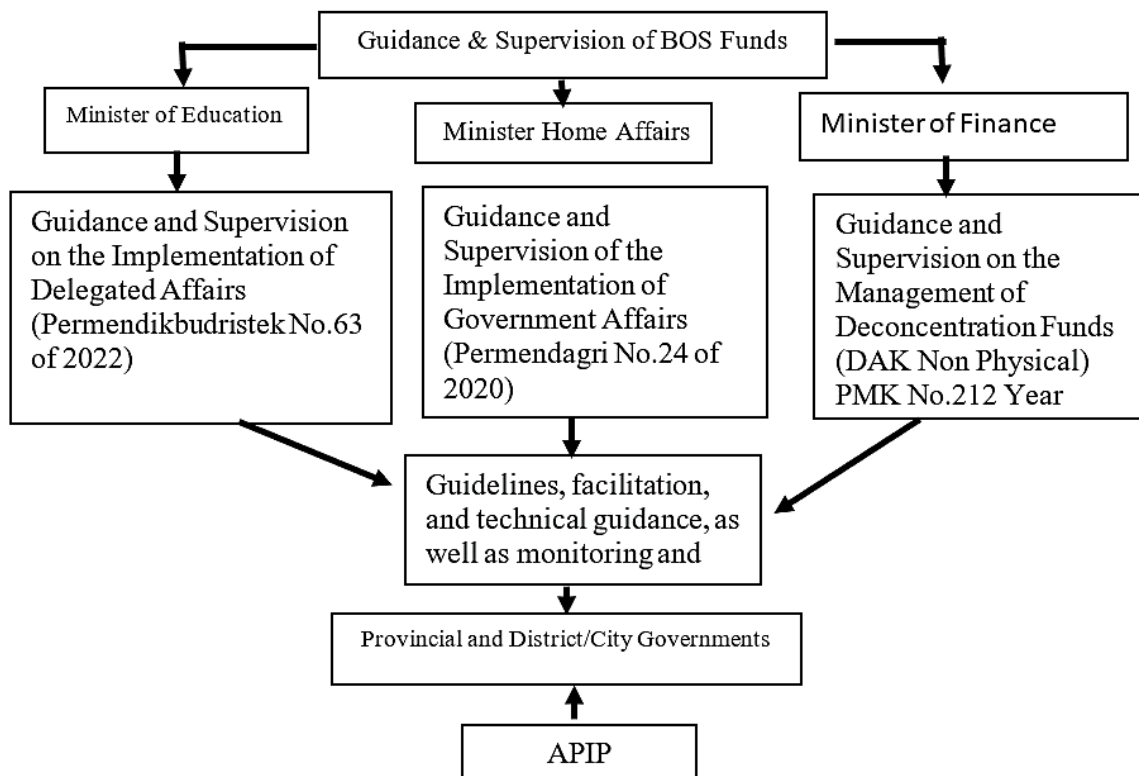


Fig. 1. Internal Supervision and Monitoring of BOS Funds

Internal supervision and monitoring of BOS funds at the district and school levels are carried out by the Education Office in the region as a representative of the government, as well as by the school committee or school board (both public and private schools). Internal supervision is also carried out by the Government Internal Supervisory Apparatus (APIP). This aims to ensure that the use of BOS funds is transparent and accountable. To ensure that the implementation of programs at the central, district/city, and school levels can run transparently, each implementer at the school, district/city, provincial, and directorate levels must implement BOS fund management in accordance with the provisions of laws and regulations.

3. RESEARCH METHODS

The type of research used is Research and Development (R&D) design research. According to [7], design research is a process or steps to develop a new product or improve an existing one. [8] also states that design research is a research used to produce a product and test its effectiveness. The product can be in the form of hardware, software, training, guidance, learning, and focus group discussion (FGD). The research design used is a model development design that refers to the R&D research model developed by [9].

Effectiveness Test of the Model: The effectiveness test of the model is used to determine whether the Internal Supervision in the management of educational funds at the SMP level is effective. This test uses an experimental design, specifically the equivalent time series design. According to [10], the time series design is a good experimental approach that only requires one group for the research over time. In this equivalent time series design, the research only uses an experimental group that measures the pre-test and post-test values of the school principals over time to see the effectiveness of the model in increasing Internal Supervision.

Based on Creswell's opinion above, the following is a description of the effectiveness test design to be used in this research:

Table 1. Research Design for Effectiveness Test

O1	X	O2	X	O3
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Description:

- O1 – O3: Measurement of pre-test and post-test values of Internal Supervision over 2 times using an observation guide sheet
- X: Treatment (intervention) for two times using a project-based stimulation model.

The stages taken are: (a) conducting pre-test activities to determine the initial ability of school principals regarding Internal Supervision in managing educational funds at the SMP level in Mamuju Regency. The researcher explains the purpose of the pre-test and briefly describes the characteristics of the instrument used. Formation of control and treatment groups, Conducting FGD sharing with school principals regarding the preparation of intervention competencies as a treatment group, observing and recording; (b) conducting post-test for control and treatment groups, as well as observation and interview to determine the effectiveness of the model in improving and strengthening Internal Supervision.

Criteria for Evaluation: According to [11], the criteria for evaluation are as follows Table 2:

Data Analysis Technique: This research uses descriptive quantitative data analysis as the main analysis. Descriptive statistical analysis is used to describe the variables in the research, namely the internal supervision model in managing educational funds, and to describe each indicator of the research, such as: 1) socialization of BOS funds, 2) community complaint services, 3) planning, 4) process, 5) evaluation, 6) review, and 7) audit.

Table 2. Criteria for Interpretation of Scores

Score (Quantitative)	Letter (Qualitative)	Description
86 – 100	A	Very good/very effective
71 – 85.99	B	Good/effective
56 – 70.99	C	Fairly good/fairly effective
< 56	D	Less effective

Analysis for Model Effectiveness: The effectiveness of the model can be calculated using the normalized gain formula (g) according to [12] as follows:

$$g = \frac{\text{Score post - test} - \text{score pretest}}{\text{Score possible maximum} - \text{score pretest}}$$

Here is the table of N gain categories:

Table 3. The Classification of N Gain Values

N-Gain Value	Category
$G > 0.7$	High
$0.3 \leq G \leq 0.7$	Moderate
$G < 0.3$	Low
$G \leq 0$	Failed

This Table 3 shows the classification of N gain values. If the N gain value is greater than 0.7, it is considered high. If the N gain value is between 0.3 and 0.7, it is considered moderate. If the N gain value is less than 0.3, it is considered low. If the N gain value is less than or equal to 0, it is considered failed.

4. RESULTS AND DISCUSSION

4.1 Results

The effectiveness measurement was obtained based on the effectiveness test through the response of school principals regarding the development of an internal supervision model in managing educational funds at the SMP level in Mamuju Regency. The effectiveness test consisted of 5 aspects of evaluation, namely: 1) Model Steps; (a) consulting, (b) internal control system of education units, (c) assurance, 2) Social System, 3) Reaction Principle, 4) Support System and 5) Instructional Impact and Side Effects, with 25 sub-aspects of evaluation (indicators).

At the beginning of the study, a pre-test was conducted by distributing a questionnaire/instrument to measure the response of school principals regarding the application of the development of an internal supervision model in managing educational funds at the SMP level in Mamuju Regency. Based on the results of the pre-test, the scores obtained were: aspect of model steps = 354, aspect of social system = 159, aspect of reaction principle = 318, aspect of support system = 98, and aspect of instructional impact and side effects = 284.

Next, a tabulation of the pretest results is constructed to determine the quantitative and qualitative categories. Like the following tabulation Table 4:

From the Table 4, it can be described that the pretest results of the effectiveness test with 1) category (D) poor/ineffective with a score of less than 56 are 22 people with a percentage of 73.33%. 2) category (C) fairly good/fairly effective with a score of 56 – 70.99 are 5 people with a percentage of 16.67%. 3) category (B) good/effective with a score of 71 – 85.99 are 3 people with a percentage of 10%. 4) category (A) very good/very effective with a score of 86 – 100 are 0 people with a percentage of 0%.

From the Table 5, it can be described that the posttest results of the effectiveness test with 1) category (D) poor/ineffective with a score of less than 56 are 0 people with a percentage of 0%. 2) category (C) fairly good/fairly effective with a score of 56 – 70.99 are 6 people with a percentage of 20%. 3) category (B) good/effective with a score of 71 – 85.99 are 20 people with a percentage of 66.67%. 4) category (A) very good/very effective with a score of 86 – 100 are 4 people with a percentage of 13.33%.

The effectiveness of the development of the internal supervision model in managing education funds for SMP level in Mamuju Regency was obtained through the gain test with a sample of 30 school principals and five aspects of evaluation, namely: 1) model steps, 2) social system, 3) reaction principle, 4) support system, and 5) instructional impact and side effects, with a total of 25 evaluation indicators. The gain test results showed that the indicators of 1) model steps have a gain value of 0.63 (moderate), 2) social system have a gain value of 0.66 (moderate), 3) reaction principle have a gain value of 0.65 (moderate), 4) support system have a gain value of 0.65 (moderate), and 5) instructional impact and side effects have a gain value of 0.92 (moderate). The overall gain test results for the pretest and posttest are 0.7, and based on Hake's criteria, which consists of four categories (high, moderate, low, and failed), the development of the internal supervision model in managing education funds for SMP level in Mamuju Regency falls into the moderate category. Therefore, it can be concluded that the design of the internal supervision model in managing education funds for SMP level in Mamuju Regency is quite effective.

Table 4. Tabulation of Pretest Results

Category		Frequency	Percentage
Quantitative	Qualitative		
86 – 100	A	0	0
71 – 85,99	B	3	10
56 – 70,99	C	5	16,67
< 56	D	22	73,33
Total		30	100

Source: Year 2023 Survey

Explanation:

A = Very good/very effective

B = Good/effective

C = Fairly good/fairly effective

D = Poor/ineffective

Table 5. Tabulation of posttest results

Category		Frequency	Percentage
Quantitative	Quantitative		
86 – 100	A	4	13,33
71 – 85,99	B	20	66,67
56 – 70,99	C	6	20
< 56	D	0	0
Total		30	100

Source: Year 2023 Survey

Explanation:

A = Very good/very effective

B = Good/effective

C = Fairly good/fairly effective

D = Poor/ineffective

4.2 Discussion

The components of effectiveness in the development of the internal supervision model in managing education funds for SMP level in Mamuju Regency refer to the concept developed [12], which includes: (a) model design syntax, (b) social system, (c) reaction principle, (d) support system, and (e) instructional impact and side effects. The relationship between the components/aspects with the evaluation indicators can be seen in the following Fig. 2.

The social system component of the internal supervision model provides guidance to school principals to promote a democratic approach to internal supervision. This democratic approach ensures that decisions in budgeting still consider input from teachers and school staff. Interaction in financial management (school principals, financial officers, and teachers) builds communication that can create a conducive and transparent atmosphere. The school principal strengthens the understanding of internal supervision by internalizing it, indicating that the most ideal supervision is empowering the potential of the school, such as involving

teachers in internal supervision and control through a system that has been prepared together, and the principal remains responsible. The principal is committed and focused on financial management, showing seriousness and focus when completing planning documents, programs/activities, and timely financial reports.

The reaction principle component makes the school principal the controller in internal supervision, meaning that the full potential of the school can be realized, but the principal remains responsible. The principal, as a manager, is required to manage the school autonomously. The principal builds harmonious relationships, dialogues, and applies the principles of family and mutual cooperation in achieving school goals. The principal gives rewards when targets are achieved/improved aspects are observed. The reward system implemented by the principal can be in the form of material or verbal praise, such as specifically for the financial management team and generally for teachers who meet high expectations in their work, as well as punishment if there are violations of school rules or indiscipline during school hours.

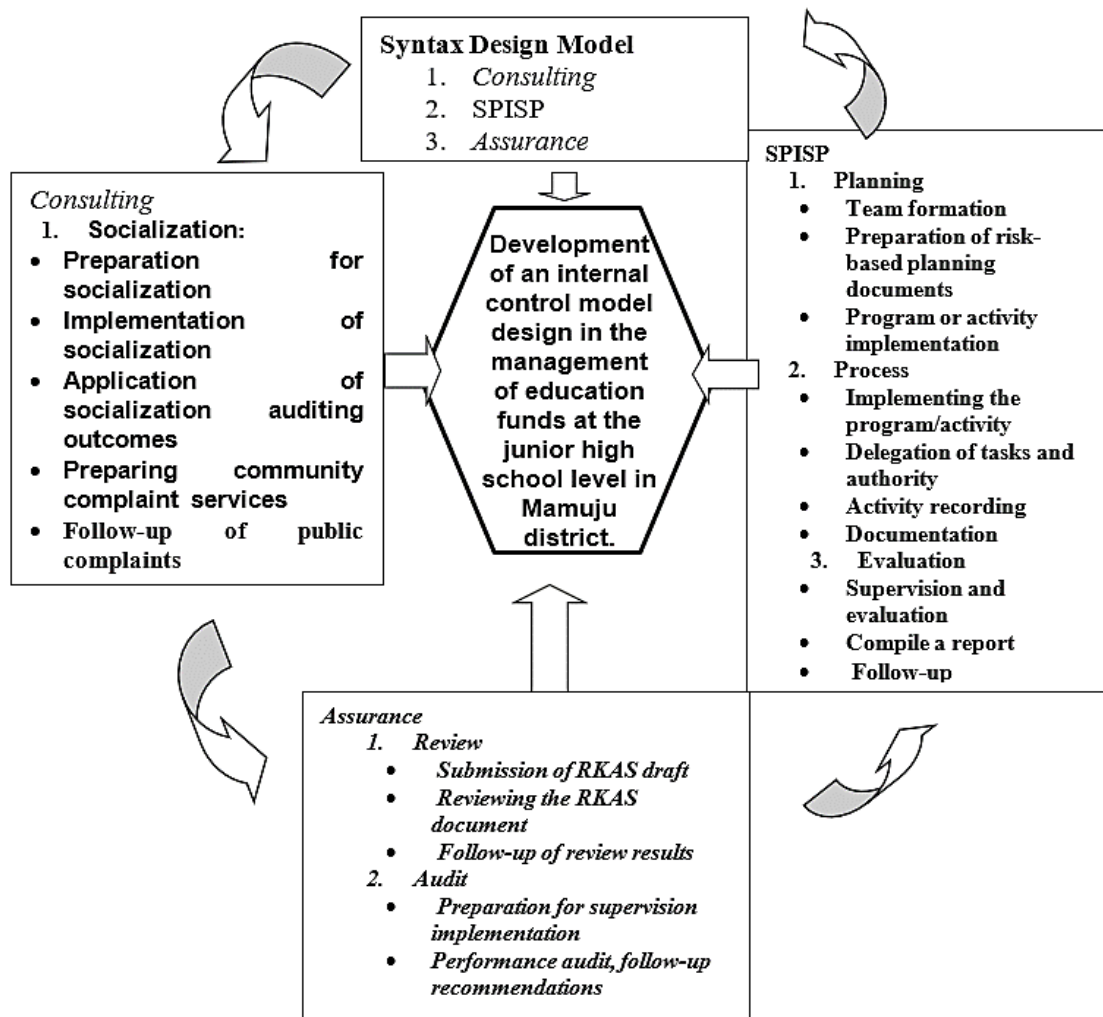


Fig. 2. Relationship between the components

The reaction principle also makes the financial officer more comfortable in performing their duties. Other units, such as operators, also always feel they have a role in their respective tasks without feeling prioritized in the organization or school. The principal motivates every decrease in achievement, and the principal's main task is to manage education funds free from fraud. This shows that the principal cannot work alone or that financial management in the school is not centered on the principal. The chosen medium can be used to achieve the goal of internal supervision, such as slogans or written statements on banners, displaying budget posters on bulletin boards.

The effectiveness of the internal supervision model development design is also visible in the support system design component. The model

book provides theoretical and practical knowledge to school principals regarding internal supervision in financial management. From this theoretical foundation, school principals are expected to conduct comprehensive, systematic, planned, and periodic evaluations. The developed assessment tool (assessment) can see the achievement of internal supervision. From the evaluation report, recommendations are made that need to be followed up.

The instructional and accompanying effects as triggers for the achievement of model effectiveness are that the school principal can implement internal supervision in financial management. Implementation can be marked by minimal or even zero findings by APIP and APH. The other instructional effect is the improvement of financial management processes, which can be seen graphically over time. The

accompanying effect is the ability to provide a strong framework and smooth coordination, thus creating independence in financial management. The instructional and accompanying effects also increase the culture of clean and serving bureaucracy to achieve high academic performance, and become a value for all school members, especially the financial management team in the school. More importantly, it creates the ability to cooperate, be integrative, accountable, collaborative, adaptive, and harmonious, as well as transparent.

Internal supervision in financial management in schools is quite effective with significant changes that can be seen from the pretest and posttest results and observations during the implementation of the internal supervision model handbook in financial management in schools. This model can be used by school principals to create a mental revolution with the formation of internal supervision. Building a clean service culture and making schools a fraud-free area.

5. CONCLUSION

In conclusion, the analysis of the design needs for the development of an internal supervision model in managing education funds for SMP level in Mamuju Regency still requires the consulting aspect in the socialization indicator, BOS funds, and community complaint services. The internal control system of education units (SPISP) aspect in the planning, process, and evaluation indicators, the assurance aspect in the review and audit indicators are quite necessary as a guide or reference for school financial managers to manage and allocate their funds in the school with a sense of full responsibility. The level of effectiveness of the design of the internal supervision model development in managing education funds for SMP level in Mamuju Regency is quite effective to be used as a reference or guide for school financial managers.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

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input prompts provided to the generative AI technology.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Arifah U. Public Policy in the Education Budget. *Cakrawala: Journal of Islamic Education Management and Social Studies*. 2018;2(1):17–37. Available:<https://doi.org/10.33507/cakrawala.v2i1.37>
2. Creswell JW. *Educational research: Planning, implementing, and evaluating qualitative and quantitative research*. Student Library; 2015.
3. Dwi Wahyuningsih T. Management of school operational assistance funds (BOS) at SMP Negeri 2 Gombong, Kebumen Regency for the 2015/2016 Academic Year. Yogyakarta State University; 2016
4. Fatkhul Muin. Regional autonomy in the perspective of the division of government-government affairs. *Fiat Justisia Journal of Legal Studies*. 2014;8(1):69–79.
5. Gall MD, Gall JP, Borg WR. *Educational research, an introduction (7ed.)*. Pearson Education Inc.; 2003.
6. Hamzah A. *Research & Development Methods (Research & Development) Quantitative and Qualitative Product Testing Process and Results Equipped with Examples of Qualitative and Quantitative Test Design Development Proposals*. CV Literacy Nusantara Abadi; 2021. Available:<https://books.google.co.id/books?id=67hVEAAQBAJ>.
7. Joyce B, Weil M. *Models of teaching*. New Jersey USA: Pearson Education, Inc, Publishing as Allyn & Bacon.; 2009.
8. Nurmayani N. Supervision of the Implementation of School Operational Assistance Funds at Sukarame State Madrasah Ibtidaiyah. *FIAT JUSTISIA: Journal of Legal Studies*. 2014;6(3). Available:<https://doi.org/10.25041/fiatjustisia.v6no3.82>
9. Republic of Indonesia government regulation number 48 of 2008 concerning Education Funding; 2008.

10. Richard.R Hake. Analyzing charge Gain scores. America Educational Research Association's Division, Measurement and Research Methodology; 1999.
11. Riduwan, Sunarto. Introduction to Statistics for Educational, Social, Economic, Communication and Business Research. Alfabeta; 2013.
12. Winarni EW. Theory and practice of quantitative, qualitative research, CAR, R & D. Bumi Aksara; 2021. Available: <https://books.google.co.id/books?id=Fx0mEAAAQBAJ>.

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