

Utilization of Maintenance and Other Operating Expenses and School-Based Management Practices in General Nakar District II: Basis for a Proposed Strengthening Transparency, Resource Innovation, and Value in Education Planning Review

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ABSTRACT

This study examined Maintenance and Other Operating Expenses (MOOE) utilization and School-Based Management (SBM) practices in General Nakar, District II, Quezon, and developed a proposed intervention for school planning. A descriptive-correlational survey design was applied to 210 respondents from 14 public schools, comprising 14 school heads, 14 property custodians, 28 inspectorate team members, and 154 School Governing Council officers, included through total enumeration. A researcher-developed, expert-reviewed questionnaire measured four MOOE dimensions, four SBM domains, implementation challenges, and intervention acceptability. Weighted means, one-way analysis of variance, Spearman correlation, and multiple regression were used. The source reports highly evident MOOE utilization (composite

mean = 4.51) and highly practiced SBM (4.46). Perceptions of MOOE differed significantly among respondent groups across all four dimensions ($F = 16.20\text{--}263.87$). The reported SBM-to-MOOE regression explained 87.39% of variation ($R^2 = .8739$), with curriculum and learning a significant predictor ($p = .0217$). Moderate challenges remained in financial administration (3.78) and SBM (3.58). The proposed Project STRIVE intervention was rated highly acceptable (4.64). Findings suggest that effective school planning depends on coordinated financial management, instructional priorities, transparency, and stakeholder participation. Source-reported model statistics, especially an additional perfect-fit regression, require verification against the underlying data before submission.

Keywords: *Maintenance and Other Operating Expenses, school-based management, school financial governance, stakeholder participation, Project STRIVE, General Nakar*

INTRODUCTION

The decentralization of Philippine basic education has increased schools' responsibility for matching operational resources with learner needs. Republic Act No. 9155 situates schools at the center of education governance, while Department of Education policies regulate the release, use, documentation, and reporting of Maintenance and Other Operating Expenses (MOOE). In this setting, the School Improvement Plan (SIP) and Annual Implementation Plan (AIP) are intended to connect expenditure decisions to local educational priorities (Republic of the Philippines, 2001; Department of Education, 2016, 2019).

School-Based Management (SBM) complements financial decentralization by giving school leaders and community representatives a role in decisions about teaching, accountability, and resources. Yet administrative autonomy does not automatically produce responsive management: capacity, coordination, and meaningful stakeholder participation are necessary (Boex et al., 2021; Freeman et al., 2020; Cheng, 2023).

In General Nakar, District II, schools serve coastal and upland communities and face constraints associated with delayed fund releases, restrictive allocations, procurement processes, and documentation requirements. Prior work on financial planning and administrative workload identifies related pressures in school settings (Almazan, 2023; Mañale & Trinidad, 2024). What remains insufficiently documented in this district is how different school stakeholder groups assess both fund utilization and SBM implementation and how their assessments relate to one another.

The study therefore assessed MOOE utilization across planning and budgeting, disbursement and implementation, monitoring and reporting, and accountability and transparency; examined SBM in leadership and governance, curriculum and learning, accountability and continuous improvement, and resource management; tested group differences and statistical relationships; identified challenges; and evaluated the proposed Project STRIVE intervention for strengthening school planning. The findings provide district-specific planning evidence rather than an official financial audit or SBM accreditation evaluation.

Literature Review

Decentralized school governance and stakeholder participation

Decentralization Theory maintains that decisions made closer to service users may be better aligned with local needs, provided appropriate accountability mechanisms exist. Faguet (2021) emphasizes that governance outcomes depend on context; Shrestha and Hankla (2025) similarly link fiscal decentralization with public-service efficiency. In public schools, local spending authority therefore requires capacity for procurement, budgeting, monitoring, and reporting rather than autonomy in isolation.

Stakeholder Theory clarifies why school heads, personnel, parents, and community representatives should be included in financial and academic planning (Freeman et al., 2020). Research on SBM links shared decision-making to more responsive organizational practices while also identifying variation in leadership capacity and resource availability (Saputra & Hartati, 2024; Caluag et al., 2025). This perspective underpins the study's comparison of distinct stakeholder groups.

MOOE planning, disbursement, monitoring, and transparency

MOOE supports daily school operations through supplies, utilities, maintenance, and other allowable expenses. Financial planning is most useful when aligned with the SIP and AIP, actual learner needs, and prior expenditures. Almazan (2023) and Macalos (2025) underscore the role of competent, evidence-informed budgeting; Vicente et al. (2023) emphasize coordinated financial strategies for implementing school activities.

Disbursement compliance must be complemented by accurate records and timely reporting. Mañale and Trinidad (2024) identify administrative workload as an impediment, whereas Pandulo et al. (2023) link openness in financial information with stakeholder trust. Bantugan et al. (2023) frame documentation and responsible fiscal management as elements of broader school financial governance. These studies support assessing financial practice as a multidimensional process rather than by expenditure totals alone.

SBM implementation, instructional priorities, and continuous improvement

SBM research emphasizes school heads' governance capacity, effective instructional alignment, and participation. Pepugal et al. (2022) and Villanueva et al. (2022) associate leadership competencies with improved organizational processes; Baylon et al. (2025) describe the importance of relating allocations to academic needs. Thus, funding decisions and curriculum implementation should reinforce one another.

Other work highlights gaps between formal SBM compliance and continuous improvement. Bustamante (2022) describes uneven SBM practice levels, and Osea (2023) addresses evidence and documentation challenges. Longaquit (2024) positions strategic resource management as part of sustainable school operations, while Rint and Astillero (2024) warn that reporting demands can divert personnel from instructional responsibilities. Their combined insights support interventions that simplify monitoring without weakening accountability.

Capacity-building responses and conceptual integration

The literature identifies a practical need for joined-up planning and implementation support. School management interventions require more than a written protocol; they benefit from incentives, monitoring, and sustained implementation (Anand et al., 2023). Hendri et al. (2024) argue for deliberate improvement in SBM implementation, suggesting that school-level reform should address leadership skills, data processes, and stakeholder communication together.

Taken together, decentralization, stakeholder participation, fiscal accountability, and school improvement theory explain the study's input–process–output (IPO) framework. Inputs comprise legal and research guidance and stakeholder assessments; processes comprise instrument administration, assessment of MOOE/SBM dimensions, statistical analysis, and examination of challenges; and outputs comprise an evidence-informed school planning review and Project STRIVE. A feedback loop allows monitoring results to refine planning and resource governance (Department of Education, 2024).

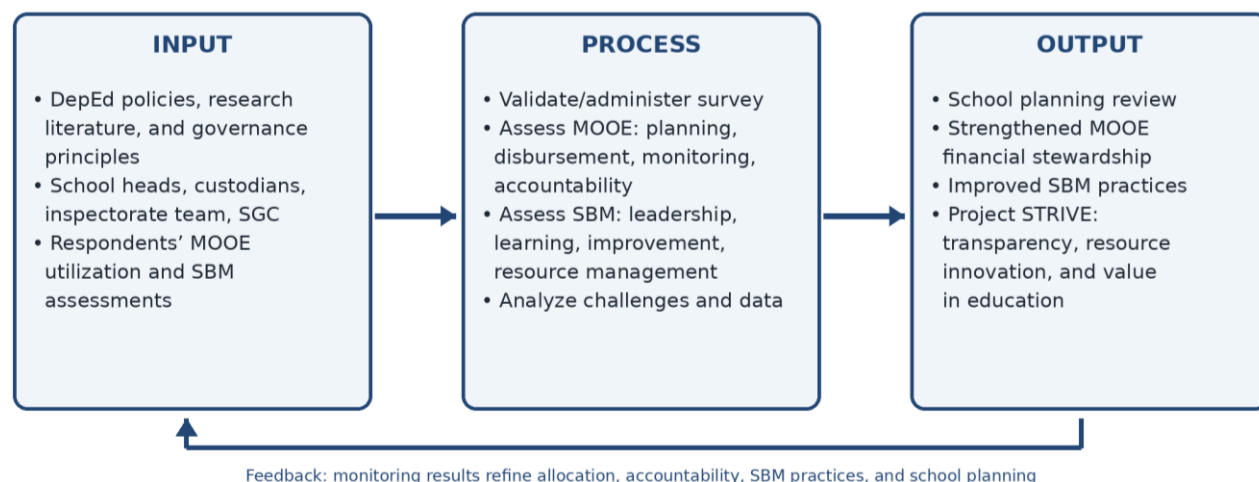


Figure 1. *The Research Paradigm of the Study*

METHODS

Research Design

The study employed a descriptive survey design with comparative and correlational analyses. It assessed existing MOOE utilization, SBM practices, and challenges without manipulating school conditions. The original methods chapter describes the approach as descriptive, while the abstract characterizes the statistical design as descriptive-correlational; both descriptions are represented here through the actual procedures used (Creswell & Creswell, 2022).

Research Locale

The research was conducted in 14 public elementary, integrated, and secondary schools in General Nakar, District II, Quezon Province, Philippines. The schools serve coastal and upland communities. The thesis situates the research process between October 2025 and May 2026 and refers to practices during the previous two years.

Participants and Sampling Technique

Total enumeration included the 210 identified participants: 14 school heads, 14 property custodians, 28 inspectorate team members, and 154 School Governing Council officers. Each of the 14 schools contributed one school head, one custodian, two inspectorate members, and 11 SGC officers. These groups represented complementary roles in budgeting, procurement, compliance, and participatory governance.

Research Instrument

A researcher-developed questionnaire gathered demographic information and assessed the four MOOE and four SBM domains using five-point response scales. Additional items addressed management challenges and the acceptability of a proposed intervention. Questionnaire construction drew on relevant DepEd guidance and related financial-management and SBM literature. School administrators and research specialists reviewed the instrument for clarity, relevance, and alignment with the study objectives; the thesis does not provide a numeric reliability coefficient.

Data Gathering Procedure

The researcher requested permission through the Schools Division Superintendent of Quezon and Public Schools District Supervisor. The manuscript describes administration through Google Forms and also notes printed questionnaires with researcher assistance when necessary. Completed responses were collated, tallied, and forwarded for statistical processing; results were interpreted for the district planning review.

Data Analysis

Frequencies and percentages summarized participant characteristics; weighted means described MOOE utilization, SBM implementation, challenges, and acceptability. One-way analysis of variance examined between-group differences in MOOE assessments, with post-hoc comparisons. Spearman rho correlation and multiple regression were reported to examine relationships and predictive associations. Statistical processing used SPSS, and reported significance decisions were made at $\alpha = .05$. The original coefficients are reproduced as reported; raw data were not available for independent recomputation.

Ethical Consideration

The reported procedures included obtaining institutional permission before distributing questionnaires and using responses to support school planning. As the thesis does not specify an ethics-review approval number or a detailed individual confidentiality protocol, neither is asserted here. The assessment is self-reported and is not a formal audit of actual MOOE transactions or an official validation of SBM accreditation levels.

RESULTS AND DISCUSSION

Assessment of MOOE utilization

MOOE practices were assessed as highly evident overall (composite weighted mean = 4.51). Planning and budgeting ranked highest (4.62), followed by disbursement and implementation (4.51), accountability and transparency (4.48), and monitoring and reporting (4.44). The comparatively lower monitoring mean identifies room for improving the timeliness and usefulness of reports even where respondents perceive broad procedural

compliance. These findings relate to the emphasis on planning capacity and transparent reporting in Almazan (2023), Macalos (2025), and Pandulo et al. (2023).

Table 1. Reported MOOE utilization by domain and stakeholder group

Domain	School heads	Custodians	Inspectorate	SGC	Composite
Planning and budgeting	4.83	4.89	4.36	4.40	4.62
Disbursement and implementation	4.71	4.94	4.09	4.30	4.51
Monitoring and reporting	4.61	4.90	3.98	4.27	4.44
Accountability and transparency	4.74	4.91	4.01	4.25	4.48
Overall	4.72	4.91	4.11	4.31	4.51

Note. Means transcribed from thesis Table 11. HE = highly evident; inspectorate overall was interpreted as evident.

Differences in MOOE assessments

The reported analysis of variance rejected the null hypothesis for all MOOE dimensions: planning and budgeting ($F = 16.20$), disbursement and implementation ($F = 84.30$), monitoring and reporting ($F = 263.87$), and accountability and transparency ($F = 164.75$). The differences correspond to visibly lower assessments among inspectorate members and, in several domains, SGC officers than among school heads and custodians. The source provides a critical-value decision rather than exact p-values; therefore, p-values are not invented. The result underscores the value of shared reporting mechanisms and stakeholder dialogue (Caluag et al., 2025).

Table 2. Thesis-reported group comparisons of MOOE utilization

MOOE dimension	Reported F	Source decision
Planning and budgeting	16.20	Significant
Disbursement and implementation	84.30	Significant
Monitoring and reporting	263.87	Significant
Accountability and transparency	164.75	Significant

Extent of school-based management practices

SBM was reported as highly practiced overall (composite mean = 4.46) over the previous two years. Resource management had the strongest composite mean (4.54), followed by leadership and governance (4.45), curriculum and learning (4.44), and accountability and continuous improvement (4.42). The results are consistent with research connecting governance capacity, strategic resources, and instructional priorities to school performance (Pepugal et al., 2022; Baylon et al., 2025; Longaquit, 2024).

Table 3. Extent of SBM practices by domain and respondent group

SBM domain	School heads	Custodians	Inspectorate	SGC	Composite
Leadership and governance	4.74	4.84	3.93	4.28	4.45
Curriculum and learning	4.66	4.80	4.01	4.30	4.44
Accountability and continuous improvement	4.49	4.81	4.10	4.28	4.42
Resource management	4.79	4.84	4.24	4.29	4.54
Overall	4.67	4.82	4.07	4.23	4.46

Relationships between SBM and MOOE utilization

The thesis reports a strong regression association when SBM domains were used to explain variation in MOOE utilization ($R^2 = .8739$; adjusted $R^2 = .8648$; $F = 96.5179$). Of the reported main-effect coefficients, curriculum and learning was statistically significant (estimate = 0.8285, $p = .0217$); leadership and governance ($p = .0601$), accountability and continuous improvement ($p = .2870$), and resource management ($p = .8205$) did not meet the stated .05 threshold. This pattern supports instructional alignment as a correlate of perceived financial stewardship, but the cross-sectional, self-report design does not establish causality (Anand et al., 2023).

A separate regression presented in the thesis reports $R^2 = 1.000$, adjusted $R^2 = 1.000$, zero residual error, and an effectively infinite overall F statistic when MOOE domains were used to reproduce their aggregate. These values are included as source-reported results but cannot be interpreted as independent evidence of a deterministic effect. They are consistent with possible mathematical redundancy between a composite measure and its constituent indicators. The original analytic dataset and specifications would be needed to verify the model before submission.

Table 4. *Regression findings retained from the thesis*

Reported model	Main result	Interpretation / verification
SBM dimensions → MOOE utilization	$R^2 = .8739$; adjusted $R^2 = .8648$; $F = 96.5179$	Curriculum/learning: $\beta = 0.8285$; $p = .0217$
MOOE dimensions → aggregate outcome	$R^2 = 1.000$; adjusted $R^2 = 1.000$; zero error	Perfect-fit estimate requires source-data review

Challenges and acceptability of Project STRIVE

Respondents reported a moderate level of difficulties in MOOE utilization (mean = 3.78) and SBM practices (3.58), including delayed releases, limited allocations, procurement and liquidation complexity, monitoring burdens, and uneven participation. These issues echo findings on financial administration and SBM documentation workload (Mañale & Trinidad, 2024; Rint & Astillero, 2024; Osea, 2023). The proposed intervention was highly acceptable overall (4.64), with school-head, custodian, inspectorate, and SGC ratings of 4.61, 4.52, 4.57, and 4.84, respectively. Acceptability represents stakeholder perception, not demonstrated program effectiveness.

Table 5. *Reported challenges and acceptability*

Indicator	Composite mean	Source interpretation
Challenges in MOOE utilization	3.78	Evident
Challenges in SBM practices	3.58	Evident
Project STRIVE acceptability	4.64	Highly acceptable

Proposed Project STRIVE intervention

Project STRIVE (Strengthening Transparency, Resource Innovation, and Value in Education) was formulated as a school planning intervention based on the identified gaps. Its priorities comprise instruction-focused allocation, standardized finance procedures, digital records and monitoring, participatory planning, professional development, and routine feedback for school improvement. The thesis frames the program for implementation in School Year 2027–2028, with implementation and evaluation subject to school and division authorization. These elements align with the combined governance and capacity-building emphasis of Saputra and Hartati (2024) and Hendri et al. (2024).

Table 6. *Condensed Project STRIVE implementation priorities*

Strategic component	Proposed activity	Intended planning contribution
Financial stewardship	MOOE planning, documentation, reporting training	Consistent SIP/AIP alignment and compliance
Transparent governance	Stakeholder financial consultations and disclosure	Stronger shared accountability
Resource innovation	Digital monitoring and tracking tools	Timelier documentation and issue detection
Instructional alignment	Link allocations to curriculum and learner needs	Clearer educational value of expenditures
Continuous improvement	Monitoring, evaluation, coaching, feedback	Revision of practices based on evidence

CONCLUSION

Schools in General Nakar, District II were perceived by 210 district stakeholders to have highly evident MOOE utilization and highly practiced SBM implementation. The strongest MOOE dimension was planning and budgeting, while resource management ranked highest in SBM. Respondent groups nevertheless differed markedly in financial-management assessments, and moderate operational and governance challenges remained. The source reports a strong statistical association between SBM and perceived MOOE utilization, with curriculum and learning a significant predictor in one regression model. These findings support more integrated, instruction-sensitive budgeting, transparent stakeholder communication, and sustained administrative capacity-building. They do not establish causality or independently audit expenditure compliance. Project STRIVE offers a locally grounded planning response, with its reported high acceptability requiring subsequent implementation and outcome evaluation.

Recommendation

School heads and Schools Division Office personnel should consider piloting Project STRIVE with a documented implementation and monitoring plan, while maintaining compliance with DepEd spending and procurement rules. School heads, property custodians, and inspectorate teams should receive targeted coaching on SIP/AIP-based budgeting, procurement documentation, timely reporting, and digital tracking. School Governing Councils, teachers, and parents should participate meaningfully in budget consultations, information disclosure, and periodic review. Instructional needs should be prioritized explicitly when allocating funds, and monitoring findings should feed into revised school plans. The division should evaluate the intervention against practical indicators of documentation timeliness, stakeholder understanding, and instructional resource availability before expansion. Future researchers should replicate the analysis in other districts, include actual financial records where authorized, and independently check the regression specification and perfect-fit estimates.

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