Designing a Competency-Based Mentoring Model for School Financial Management: Lessons from Deli Serdang, Indonesia

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Abstract. This study develops a Competency-Based Mentoring Model (CBMM) to improve the financial management competence of school fund administrators, particularly those managing School Operational Assistance (BOS) funds in junior high schools. Conducted in Deli Serdang Regency, Indonesia, the research addresses challenges of limited accounting literacy, inconsistent reporting, and weak implementation of Government Accounting Standards (SAP). Using a mixed-method design that combines surveys, interviews, and Focus Group Discussions (FGDs), the study identifies essential mentoring needs and formulates a context-specific model. The proposed model integrates CBMM, Human Resource Development (HRD) theory, and McClelland's Competency Theory across five stages: planning, organizing, implementation, controlling, and reporting. It strengthens accountability, transparency, and efficiency in financial governance by linking mentoring to measurable competency outcomes. The model offers a replicable framework for improving school financial management in similar educational contexts across developing countries.

Keywords: competency-based mentoring, school financial management, BOS funds, government accounting standards (SAP), human resource.

1 Introduction

The School Operational Assistance (BOS) program is a major government initiative aimed at ensuring equitable education funding. According to Ministry of Education and Culture Regulation No. 8/2020, BOS funds must be managed with transparency, accountability, and efficiency. However, discrepancies remain, with schools facing persistent challenges in reporting and managerial competence [1][2].

Studies reveal that limited training in accounting standards and weak monitoring hinder effective fund management [3][4]. Competency-based mentoring provides a structured approach to improving professional capacity in school financial administration. This study designs a Competency-Based Mentoring Model (CBMM) that integrates Human Resource

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Development (HRD) and McClelland's Competency Theory to strengthen financial governance among junior high schools in Deli Serdang, Indonesia.

2 Literature Review

Competency-Based Mentoring (CBMM) emphasizes measurable competence development through structured mentoring processes [5]. While Spencer and Spencer conceptualize competence as underlying characteristics that predict superior performance, prior applications in educational management show that mentoring cycles-planning, observation, feedback, and evaluation—are effective for translating competence constructs into practice [6]. However, the effectiveness of CBMM depends on whether mentoring is embedded as a sustained developmental system rather than a one-time intervention, which aligns with Human Resource Development (HRD) perspectives emphasizing long-term capability building and institutional learning [7]. McClelland's Competency Theory further supports this view by highlighting behavioral dimensions-achievement, responsibility, and motivation-as critical drivers of managerial effectiveness, particularly in contexts requiring accountability and compliance [8].

Empirical studies on school finance consistently indicate that mentoring and supervision improve transparency and reporting quality, especially when supported by digital systems and standardized procedures [9-10]. Nevertheless, most existing models tend to be generic and focus primarily on administrative compliance, offering limited guidance on how mentoring should be adapted to schools' varying capacities, digital readiness, and regulatory demands. In contrast, evidence from accounting standards-based assistance in Deli Serdang demonstrates that mentoring anchored in Government Accounting Standards (SAP) can strengthen BOS fund governance by directly targeting reporting competence, internal controls, and practical implementation constraints at the school level [11]. This comparative synthesis suggests that a localized CBMM framework-integrating HRD mechanisms, behavioral competence reinforcement, and SAP-based technical assistance is necessary to improve both individual competence and governance outcomes in decentralized school financial management.

3 Methodology

3.1 Research Design

This study employed a mixed-methods design with an explanatory sequential approach, where quantitative findings informed qualitative exploration and model development [12]. The quantitative phase assessed competency levels and mentoring needs, while the qualitative phase (interviews and FGDs) explored contextual barriers and feasible mentoring strategies. Based on the integrated findings, a prototype mentoring model was developed and then subjected to expert validation to ensure relevance, clarity, and feasibility. The expert review used structured rating criteria, and the model was refined according to experts' recommendations prior to finalization [13]. As presented in Fig. 1, the research procedure followed ten adapted stages of Borg and Gall's R&D model [14]. The first stage, research and information collecting, involved literature review, regulatory analysis, and preliminary field observation related to BOS fund management, Government Accounting Standards, and school financial reporting practices. The second stage, planning, focused on preparing research instruments, determining participants, and formulating the initial framework of the mentoring model. The third stage, developing the preliminary form of the product, involved designing the initial CBMM prototype. The next stages focused on model testing and refinement. Preliminary field testing was conducted to obtain initial feedback from relevant stakeholders regarding the clarity, relevance, and feasibility of the model. The results were used for main product revision. Subsequently, main field testing was carried out to examine the applicability of the revised model in a broader school financial management context. Feedback from this stage informed the operational product revision, particularly in improving the mentoring stages, competency indicators, and implementation procedures. The revised model was then examined through operational field testing to ensure that the model could be implemented consistently and adaptively across different school conditions. The final stages consisted of final product revision and dissemination and implementation. In the final revision stage, the model was refined based on empirical findings, expert judgment, and stakeholder feedback. The dissemination and implementation stage was directed toward presenting the final CBMM as a practical framework that can be adopted by schools, education offices, and related stakeholders to strengthen accountability, transparency, and reporting quality in BOS fund management.

Therefore, Fig. 1 summarizes the overall research design. This systematic procedure ensures that the proposed CBMM is not only conceptually relevant, but also evidence-based, context-sensitive, and feasible for improving school financial governance.

Fig. 1. Research and Development Procedure Adapted from Borg and Gall

3.2 Participants

The quantitative phase involved 62 respondents (school principals and treasurers) from 10 sub-districts in Deli Serdang Regency. Qualitative participants consisted of key education stakeholders (e.g., school leaders, supervisors, and education office representatives) engaged through semi-structured interviews and FGDs. For the validation stage, a panel of experts in educational management, public sector accounting/financial reporting, and school financial governance evaluated the proposed model components and implementation stages. This can be seen in Fig. 2.

Subdistrict	Count of Previous School
Namo Rambe	3
Pagar Merbau	2
Pancur Batu	4
Pantai Labu	5
Patumbak	1
Percut Sei Tuan	2
STM Hilir	4
STM Hulu	4
Sunggal	17
Tanjung Morawa	20
Sum of Previuos School	**62**

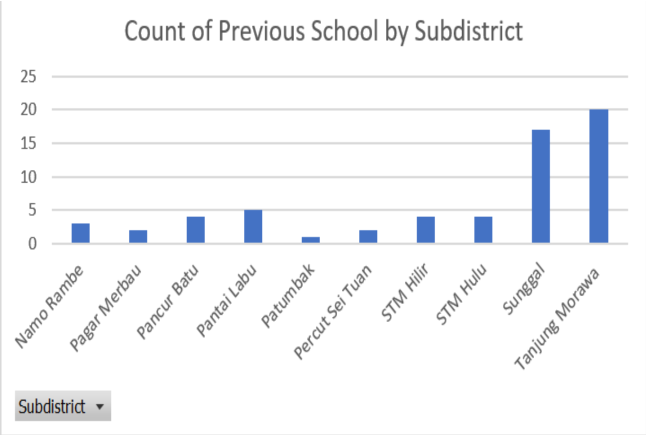

Fig. 2. Distribution of School by Subdistrict in Deli Serdang Regency

3.3 Data Analysis

Quantitative data were analyzed using descriptive statistics, including frequencies and percentages for item responses and means (M) (optionally with standard deviations) to summarize competence indicators. To enhance interpretability, a Competency Index (CI) was computed by converting aggregated scores into a standardized 4-20 scale, where higher values indicate stronger competence and lower values indicate priority mentoring needs. Qualitative data were analyzed using thematic analysis (coding, categorization, and theme development). Triangulation across quantitative and qualitative results was applied to strengthen validity.

X1	Understanding of Government Accounting Standards
X2	Technical Competence in Financial Statement Preparation
X3	Technology Utilization in Financial Management
X4	Need for Financial Management Training and Mentoring
X5	Governance and Monitoring of BOS Fund Management
X6	Stakeholder Support for School Financial Management

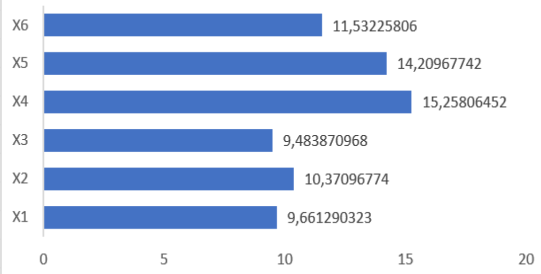

Fig. 3. Mean Scores of Key Indicators in School Financial Management Needs Analysis

Fig. 3. illustrates the average scores of six dimensions in the needs analysis of school financial management. Among these indicators, the need for financial management training and mentoring (X4) received the highest mean score (15.26), showing that respondents perceived capacity building and sustained assistance as the most pressing priority. This was followed by governance and monitoring of BOS fund management (X5) with a mean of 14.21, reflecting the importance of stronger control and oversight mechanisms. Stakeholder support for school financial management (X6) also showed a relatively high score (11.53), indicating that effective financial management requires broader institutional involvement. In contrast, technical competence in financial statement preparation (X2) scored 10.37, while understanding of government accounting standards (X1) and technology utilization in financial management (X3) recorded lower mean values of 9.66 and 9.48, respectively. These results suggest that improving school financial management should prioritize mentoring support, governance strengthening, and stakeholder collaboration.

4 Results and Discussion

4.1 Results

The findings indicate that junior high schools in Deli Serdang still require continuous mentoring in school financial management, particularly in accounting standards-based reporting, the use of digital financial systems such as ARKAS, and managerial decision-making by principals and treasurers. These results suggest that the main challenges are not limited to procedural compliance, but also involve competency gaps in planning, organizing, implementing, controlling, and reporting BOS fund management.

As shown in Fig. 4, the developed Competency-Based Mentoring Model (CBMM) integrates Competency-Based Mentoring, Human Resource Development (HRD), and McClelland's Competency Theory into a unified conceptual framework for school financial management. The figure presents the model as a structured mentoring system that links identified competency needs with a coherent intervention framework and expected governance outcomes. In this model, mentoring is positioned as a systematic strategy to strengthen both technical and managerial competence in managing public education funds.

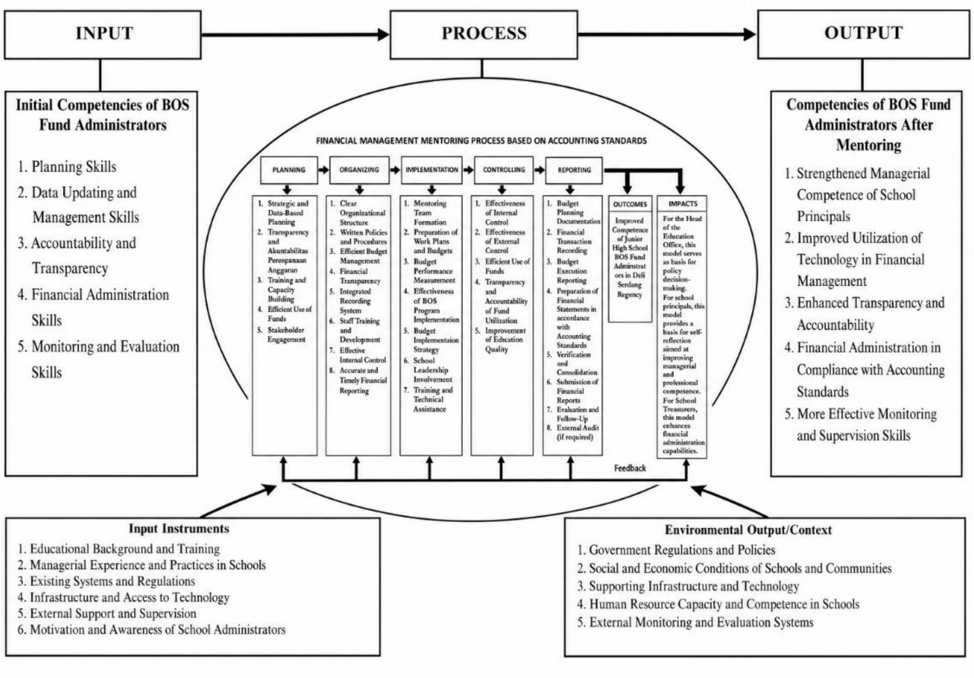

Fig 4. Competency-Based Mentoring Model for School Financial Management

Fig. 5 is a process representation of Fig. 4, detailing how the conceptual mentoring model is carried out in practice. As illustrated in Fig. 5, the operational process of the model consists of five interrelated stages: planning, organizing, implementation, controlling, and reporting. Each stage contains mentoring activities designed to assist school personnel in preparing work plans, managing budgets, improving internal control, and producing accountable financial reports. The figure also shows a feedback loop, indicating that the process is cyclical, with reporting outcomes serving as input for further planning and improvement.

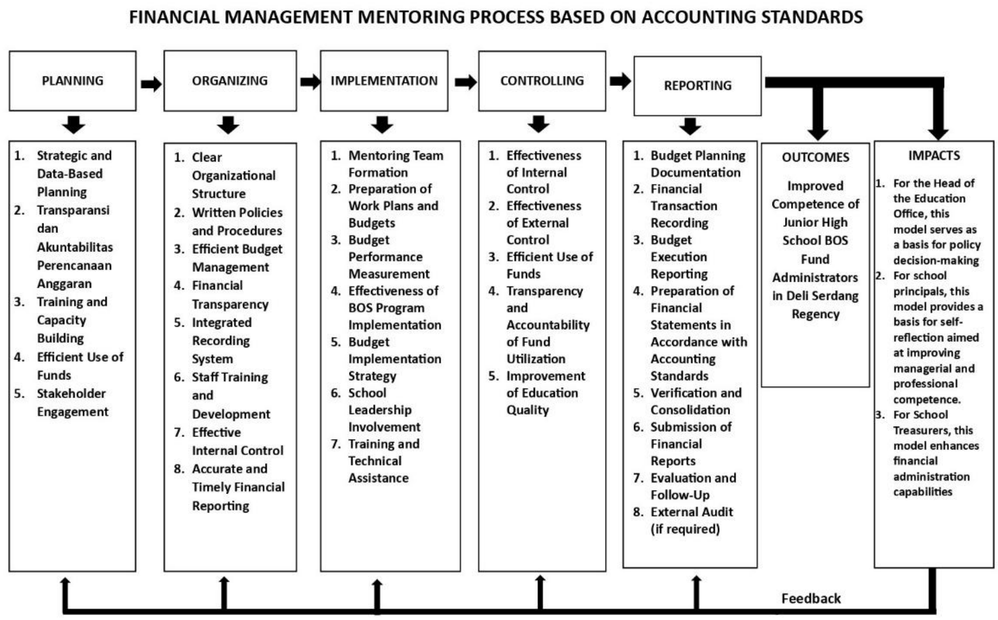

Fig 5. Financial Management Mentoring Process Based on Accounting Standards

The findings further show that the implementation of the model varied across schools. Institutions with stronger leadership commitment and better digital readiness responded more positively to mentoring activities, while schools with limited infrastructure required more intensive and adaptive support [15][16][17].

4.2 Discussion

The results demonstrate that the proposed model contributes both conceptually and practically to improving school financial governance. Conceptually, Fig. 4 confirms that school financial mentoring should not be treated as a one-time technical intervention. Instead, it should be understood as a competency development process grounded in HRD principles and behavioral competence theory. The integration of CBMM, HRD, and McClelland's Competency Theory strengthens the argument that effective financial management depends not only on technical knowledge, but also on responsibility, consistency, and performance-oriented behavior.

From a practical perspective, Fig. 5 shows that the five-stage structure makes the model applicable because it reflects the actual cycle of school financial management. This is an important contribution, since previous mentoring practices often focused only on administrative compliance and short-term guidance. By organizing mentoring into planning, organizing, implementation, controlling, and reporting, the model provides a clearer and more sustainable pathway for strengthening accountability, transparency, and managerial discipline. The feedback loop is particularly important because it positions mentoring as a continuous improvement cycle rather than a temporary intervention.

The variation in school responsiveness also implies that mentoring effectiveness is influenced by contextual factors, especially leadership readiness, digital capacity, and institutional support. Therefore, the model should be interpreted as an adaptive framework rather than a rigid procedure. Its flexibility is one of its main strengths, because it enables implementation across different school conditions while preserving the same core mentoring structure. In this sense, the CBMM offers a relevant solution for strengthening the governance of BOS funds in a more transparent, accountable, and sustainable manner.

The findings indicate that the most urgent need in school financial management is not merely technical compliance, but the availability of continuous and structured mentoring. This is reflected in the high mean score for training and mentoring needs, suggesting that school principals and treasurers perceive financial management as an area that requires ongoing support rather than one-off instruction. From a Human Resource Development (HRD) perspective, this finding confirms that competence improvement in public institutions should be approached as a developmental process that combines learning, practice, supervision, and feedback [7]. In other words, effective school financial governance cannot rely solely on regulations; it also depends on institutional mechanisms that support sustained capability building.

The relatively lower scores for understanding Government Accounting Standards (SAP), preparing financial statements, and utilizing technology indicate that the main weaknesses are concentrated in technical and applied competencies. These results can be interpreted through McClelland's Competency Theory, which emphasizes that effective performance is shaped not only by knowledge and skills, but also by underlying behavioral attributes such as responsibility, achievement orientation, and consistency [8]. In the context of BOS fund management, principals and treasurers are expected not only to understand procedures, but also to demonstrate accuracy, accountability, and commitment in financial decision-making. Therefore, mentoring becomes important because it creates repeated opportunities for guided practice, correction, and behavioral reinforcement.

The findings are also consistent with previous evidence from Deli Serdang, which showed that accounting standards-based assistance can improve financial reporting and governance practices [11]. Nevertheless, the current study goes further by organizing mentoring into a broader conceptual and operational framework consisting of planning, organizing, implementation, controlling, and reporting. This staged structure is important because it mirrors the real cycle of school financial management and enables mentoring to be embedded into routine administrative practice. As a result, mentoring is positioned not as an additional activity, but as an integral part of governance improvement.

This study also extends previous literature on school financial governance. Earlier studies have shown that accountability, transparency, and supervision are important determinants of effective BOS fund management [9][10]. However, these studies generally focus on governance principles and administrative compliance, with less attention to the developmental process through which financial competence is actually built. In contrast, the present study proposes a competency-based mentoring model that links school financial governance with a structured capacity-building framework. The model therefore contributes a more operational explanation of how schools can move from compliance-oriented practice to competence-oriented improvement.

Another important finding is that the implementation of the model varied according to leadership commitment, digital readiness, and institutional support. Schools with stronger leadership and greater familiarity with digital systems such as ARKAS were more responsive to mentoring activities, while schools with weaker infrastructure required more intensive assistance. This supports prior studies emphasizing the role of digitalization and organizational support in education financial management [13][16]. It also suggests that the CBMM should be understood as an adaptive framework, rather than a rigid intervention model. Its flexibility is one of its main strengths, as it allows implementation across schools with different resource conditions while preserving the same competency-oriented structure.

5 Conclusion

The study concludes that the Competency-Based Mentoring Model (CBMM) provides a structured and evidence-based framework to strengthen school financial governance, particularly in managing BOS funds. By integrating Human Resource Development (HRD) principles and McClelland's Competency Theory, the model clarifies how competence can be developed through observable performance improvements, not merely through one-off training. The staged design of the model enables mentoring to function as a systematic capacity-building mechanism that connects competency needs with planned interventions and measurable outcomes.

From a practical perspective, the CBMM model is designed to address key governance challenges faced by schools, including the implementation of Government Accounting Standards (SAP), consistent financial reporting, and the use of digital financial systems such as ARKAS. The model encourages continuous mentoring across the stages of planning, organizing, implementation, controlling, and reporting, thereby strengthening managerial decision-making and reinforcing accountability practices. Education authorities may adopt the model as part of continuous professional development programs for principals and treasurers, supported by structured monitoring and feedback to ensure sustainable improvements rather than temporary compliance.

Future research should evaluate the model through wider implementation across diverse school contexts to test its scalability and adaptability. Longitudinal studies are recommended to assess whether competency gains are maintained over time and to quantify the model's impact on transparency, reporting accuracy, and the effectiveness of internal and external supervision. Comparative studies across regions or governance levels may also generate insights into how competency-based mentoring influences policy execution and school leadership quality, contributing to broader international discussions on strengthening accountability in public sector financial management.

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