



# Developing an Artificial Intelligence (AI)-Guided Financial Management Toolkit: The Role of School Heads' Leadership Styles and Practices

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## ABSTRACT

This study examined the leadership styles and financial management practices of public elementary school heads as basis for developing an AI-guided financial management toolkit. Using an explanatory sequential mixed methods design, data were gathered from 18 school heads through a questionnaire, follow-up interviews with 6 participants, and toolkit feedback from eight evaluators. Stewardship and collaborative leadership were most practiced, while authoritative leadership was least practiced. Budgeting was the strongest financial management domain, whereas reporting was lowest. Collaborative and rational leadership were significantly related to all financial management domains. Qualitative findings highlighted integrity, collaboration, evidence use, documentation, compliance, and school conditions. The toolkit was strongly affirmed for relevance, clarity, usability, and user-friendliness.

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## **1. INTRODUCTION**

Financial management in public elementary schools is not merely a clerical or accounting function. It is a leadership responsibility because school heads decide how limited resources are planned, allocated, utilized, documented, and reported to support school priorities and learner needs. In practice, financial management requires school heads to connect available funds with instructional requirements, operational demands, stakeholder expectations, and documentary accountability. Previous studies on school financial management have emphasized that effective financial practices depend on planning, budgeting, procurement, utilization, reporting, transparency, and compliance with institutional expectations [1-3]. Thus, school financial management should be understood not only as a technical process but also as an important dimension of educational leadership.

School heads perform this responsibility under complex and changing conditions. Learner needs are urgent, resources are often limited, and school activities may shift within the year. A school may identify classroom materials, minor repairs, learning recovery activities, or learner support services as priorities, but the school head must still align these needs with approved school plans, available budget, procurement procedures, utilization schedules, and reporting requirements. These tasks require judgment, coordination, evidence, and the ability to explain why a financial decision is relevant, allowable, and defensible. For this reason, the leadership style of the school head may influence how financial management practices are carried out.

Leadership styles provide a useful lens for understanding differences in school financial management. School heads may involve teachers and stakeholders in identifying needs, consult others before making decisions, distribute tasks to committees or focal persons, collaborate in addressing implementation concerns, rely on data and criteria, or emphasize stewardship in the use of public funds. Participative leadership may be seen when stakeholders help identify school priorities. Consultative leadership may appear when advice is sought before finalizing budget or procurement decisions. Decentralized leadership may be reflected in the delegation of financial tasks, while collaborative leadership emphasizes joint planning and shared problem-solving. Rational leadership highlights evidence-based decision-making, and stewardship leadership emphasizes responsibility, transparency, and proper use of resources.

These leadership orientations are visible in the daily financial decisions of school heads. They influence who is invited to planning meetings, how needs are prioritized, how budget decisions are justified, how procurement requirements are checked, how utilization issues are addressed, how documents are organized, and how reports are communicated. Stewardship theory emphasizes responsibility, trust, and service to collective goals rather than self-interest [4]. This perspective is relevant to school financial management because school heads handle resources that must be used responsibly for the benefit of learners and the school community. When financial management is guided by stewardship, decisions are expected to be transparent, documented, and aligned with legitimate school needs.

Technology and artificial intelligence can support administrative and supervisory work in education. AI tools may assist users in organizing information, summarizing evidence, preparing draft explanations, checking completeness, and improving documentation processes [5]. In school financial management, such support may help school heads manage complex information across planning, budgeting, procurement, utilization, and reporting.

However, AI should not replace the professional judgment, accountability, or decision-making authority of school heads. Its role must remain limited to guided assistance, documentation support, and decision preparation.

Previous studies have examined school financial management practices and related administrative concerns. Existing studies have examined financial management practices among elementary school heads, particularly in relation to planning, budgeting, procurement, utilization, and reporting [1]. Similar concerns have also been studied in non-fiscally autonomous secondary schools, where financial management was linked to school operations and accountability [2]. Other work on public secondary school heads has emphasized best practices in financial management, including transparency, compliance, and proper resource use [3]. However, most existing discussions focus on financial management practices rather than on how specific leadership styles relate to each financial management domain. These studies show the continuing importance of transparency, planning, compliance, and accountability in school finance. However, there remains a need to examine how specific leadership styles are associated with particular financial management domains and how the findings can be translated into a practical tool for school heads. This gap is important because tools that are not grounded in actual school realities may become additional paperwork rather than useful decision support.

Here, we addressed this gap by examining the extent of practice of seven leadership styles and the level of financial management practices in planning, budgeting, procurement, utilization, and reporting among public elementary school heads in Matnog I District, Sorsogon, Philippines. It also determined the relationships between leadership styles and financial management practices, described the lived explanations of selected school heads, developed an AI-guided financial management decision and implementation toolkit, and gathered school heads' feedback on the toolkit. The study was designed to move from measurement to explanation and practical output development. This progression was necessary because the intended output was not only a theoretical framework but also a usable toolkit that reflects the actual work of school heads.

The novelty of this study lies in linking three elements in one inquiry: leadership styles, school financial management practices, and AI-guided decision support. Rather than treating financial management only as compliance work, the study frames it as a leadership process involving participation, consultation, collaboration, rational evidence use, and stewardship. Rather than treating AI as a general technology, the study translates it into guided prompts, checklists, templates, and workflow guides that may help school heads prepare more complete and defensible documentation. The study therefore contributes to educational leadership, school finance, and applied decision support by showing how empirical findings can inform a practical AI-guided toolkit.

## **2. METHODS**

This study employed an explanatory sequential mixed methods design. The quantitative phase was conducted first to measure the extent of leadership style practice and the level of financial management practice among public elementary school heads. The qualitative phase followed to explain and elaborate selected quantitative results through semi-structured interviews. This design was appropriate because the study required both numerical patterns and contextual explanations. Mixed methods research allows quantitative and qualitative evidence to be combined. Thus, statistical results can be interpreted with deeper contextual

meaning [6, 7]. The integrated findings were then used as the empirical basis for developing and evaluating the AI-guided financial management decision and implementation toolkit.

The study was conducted in Matnog I District, Schools Division of Sorsogon, Philippines. The quantitative respondents were all 18 public elementary school heads in the district; therefore, total enumeration was used. This approach was appropriate because the target population was small, accessible, and directly aligned with the objectives of the study. For the qualitative phase, six school heads were selected from the same group through purposive sampling. They were chosen as information-rich participants whose quantitative profiles could help explain notable patterns, including strong, weak, scale-specific, or contrasting results. Purposeful sampling is suitable in mixed methods studies when participants are selected because they can provide detailed explanations of the phenomenon being examined [8]. For the toolkit evaluation phase, eight school heads from the original group participated as evaluators based on their willingness to review the output and provide feedback.

Three instruments were used in the study. The first was a researcher-made questionnaire on leadership styles and financial management practices. It contained 48 Likert-type items and used a four-point response scale from 1 = Never to 4 = Always. The leadership style scale covered participative, consultative, authoritative, decentralized, collaborative, rational, and stewardship leadership. The financial management practice scale covered planning, budgeting, procurement, utilization, and reporting. Composite means were interpreted using the following ranges: 1.00-1.75 = Never or Very Low, 1.76-2.50 = Seldom or Low, 2.51-3.25 = Often or High, and 3.26-4.00 = Always or Very High.

The second instrument was a semi-structured interview guide. It was developed after the initial quantitative analysis. Thus, the interview questions could explain observed patterns in the survey results. Semi-structured interviews were appropriate because they provided common guide questions while allowing participants to elaborate on actual experiences, examples, and explanations [9]. The guide focused on how school heads practiced leadership styles in financial management, how they handled planning, budgeting, procurement, utilization, and reporting, and how they experienced constraints or decision points in actual school work.

The third instrument was the feedback questionnaire for the developed toolkit. It used a four-point agreement scale from 1 = Strongly Disagree to 4 = Strongly Agree. It assessed the toolkit in terms of relevance, clarity and organization, usability, and user-friendliness. It also included open-ended questions that allowed evaluators to identify useful parts of the toolkit, unclear sections, suggested revisions, anticipated implementation challenges, and comments on the AI guidance component. The scale means were interpreted using the following ranges: 1.00-1.75 = Strongly Disagree, 1.76-2.50 = Disagree, 2.51-3.25 = Agree, and 3.26-4.00 = Strongly Agree.

The instruments were validated by experts who reviewed their alignment with the objectives, content coverage, wording, suitability for school heads, ethical appropriateness, and logical organization. Pilot reliability testing was conducted with 30 elementary school heads outside the main respondents. The reliability analysis produced a Cronbach's alpha of 0.884 for the 48-item questionnaire and 0.916 for standardized items, indicating good to excellent internal consistency. These results supported the use of the instrument in the main study because alpha values of 0.70 and above are commonly considered acceptable for multi-item measures [10].

Data collection proceeded in four stages. First, the validated questionnaire was administered to the 18 school heads through Google Forms after the necessary permission and consent were secured. The responses were downloaded and prepared for statistical analysis. Second, the quantitative results were examined to identify participants for the qualitative follow-up. The six selected school heads were interviewed individually from 7-January 13, 2026. With permission, the interviews were recorded and transcribed verbatim. Third, the integrated findings from the quantitative and qualitative phases were used to develop the AI-guided financial management decision and implementation toolkit. Fourth, eight school heads reviewed the toolkit and answered the feedback questionnaire.

Ethical safeguards were observed throughout the study. Participation was voluntary, informed consent was obtained, and participants were informed about the purpose, procedures, risks, benefits, and use of data. Names of participants and schools were not reported. Codes were used in presenting interview responses, and identifying details were removed from the manuscript. Electronic files were stored in password-protected folders accessible only to the researcher. In developing the toolkit, examples were anonymized, and no real financial transaction data were entered into any AI tool. The toolkit was presented as a decision-support aid rather than a replacement for professional judgment, official policy, or legal accountability.

Quantitative data were analyzed using descriptive statistics and Spearman rank-order correlation. Frequency and percentage were used for respondent-related summaries, while means and standard deviations were used to describe leadership styles, financial management domains, and toolkit feedback. Before correlation analysis, the Shapiro-Wilk test was used to examine the normality of composite scores because the number of respondents was small. Since most variables were not normally distributed and the data came from four-point Likert-type scales, Spearman rho was used to test the relationships between leadership styles and financial management practices at the 0.05 level of significance.

Qualitative data were analyzed using thematic analysis. The transcripts were read repeatedly, meaningful units were coded, related codes were grouped, and themes were developed to explain the quantitative findings. Thematic analysis was appropriate because the study sought to identify patterns of meaning in participants' accounts [11, 12]. The qualitative results were then integrated with the quantitative findings through explanatory interpretation. Integration focused on convergence, complementarity, and explanation. The final mixed methods interpretation was translated into toolkit components, including a whole-cycle workflow, domain-specific guides, documentation checklists, annexes, and guided AI prompts.

### 3. RESULTS AND DISCUSSION

**Table 1** presents the extent to which the seven leadership styles were practiced by public elementary school heads in Matnog I District, Philippines. Stewardship and collaborative leadership obtained the highest means, both interpreted as Always. Rational, participative, and consultative leadership were also interpreted as Always, while decentralized leadership was interpreted as Often. Authoritative leadership obtained the lowest mean and was interpreted as Seldom.

School heads generally favored leadership approaches that were shared, accountable, and evidence-oriented. The high rating for stewardship leadership suggests that school heads

viewed financial management as a responsibility involving public trust, proper documentation, and careful use of resources, which is consistent with stewardship theory that emphasizes responsibility, trust, and service to collective goals [4]. In this context, stewardship was not only a personal value but also a practical orientation in handling school funds. It required school heads to ensure that financial decisions were lawful, transparent, and aligned with school needs.

**Table 1.** Summary of leadership style practices.

LEADERSHIP STYLE	MEAN	SD	VERBAL INTERPRETATION
Participative	3.67	0.48	Always
Consultative	3.50	0.57	Always
Authoritative	2.28	0.85	Seldom
Decentralized	2.96	0.61	Often
Collaborative	3.86	0.26	Always
Rational	3.72	0.33	Always
Stewardship	3.86	0.25	Always

Collaborative leadership also emerged as one of the most practiced styles. School heads commonly involved teachers, coordinators, committees, and stakeholders in identifying needs and addressing financial concerns. Collaboration is important in school financial management because school heads do not work with financial information alone. They depend on teachers for classroom needs, coordinators for program requirements, and other personnel for documentation and implementation details. Through collaboration, financial decisions become more responsive to actual school conditions.

Rational leadership was likewise highly practiced, indicating that school heads often used data, criteria, comparisons, and evidence in making decisions. This is important because financial decisions must be justified. School heads must be able to explain why a particular activity is prioritized, why a budget allocation is needed, why a procurement action is appropriate, and why a report is defensible. Evidence-based leadership therefore supports accountability and reduces arbitrary decision-making.

On the other hand, authoritative leadership received the lowest rating. This does not mean that school heads lacked authority. Rather, financial management was not mainly carried out through unilateral command or personal judgment. Although school heads remained accountable for final decisions, they did not strongly rely on top-down decision-making. This pattern is consistent with the nature of school financial management, which requires consultation, documentation, compliance, and coordination.

Decentralized leadership was practiced Often, but its mean was lower than those of collaborative, stewardship, rational, participative, and consultative leadership. School heads delegated some financial tasks to committees or focal persons, but such delegation remained limited. This is understandable because financial accountability cannot be fully transferred. School heads may assign documentation, monitoring, or coordination tasks to others, but they remain responsible for ensuring that decisions and records are correct, compliant, and defensible.

**Table 2** shows the level of financial management practices of school heads: planning, budgeting, procurement, utilization, and reporting. All domains were interpreted as Always, indicating that school heads consistently practiced the core components of school financial

management, particularly planning, budgeting, procurement, utilization, and reporting. This has also been emphasized in previous studies on school financial practices [1-3].

**Table 2.** Summary of financial management practices.

DOMAIN	MEAN	SD	VERBAL INTERPRETATION
Planning	3.83	0.34	Always
Budgeting	3.89	0.26	Always
Procurement	3.82	0.37	Always
Utilization	3.82	0.35	Always
Reporting	3.76	0.29	Always

Budgeting obtained the highest mean. School heads were most consistent in preparing budgets based on approved plans, aligning allocations with school priorities, documenting adjustments, and orienting stakeholders about budget decisions. Budgeting is a central part of school financial management because it converts priorities into actual resource allocations, a process also identified in previous school finance studies as essential to effective resource management [1-3]. A strong budgeting practice also indicates that school heads understood the importance of connecting school plans with available funds.

Planning also received a high mean. School heads regularly identified priorities, considered learner and teacher needs, prepared expenditure plans, and matched proposed activities with available resources. Planning is important because it provides the basis for later financial actions. When planning is clear, budgeting becomes more focused, procurement becomes better organized, utilization becomes easier to monitor, and reporting becomes more defensible.

Procurement and utilization obtained the same mean. School heads consistently followed required procedures, prepared procurement documents, obtained necessary quotations or canvasses when required, and monitored procurement schedules. Procurement is a critical domain because it transforms school needs into goods and services. However, it also carries compliance risks, making documentation and procedural accuracy essential.

School heads consistently used school funds according to intended purposes, planned timelines, and priority programs. Utilization reflects the implementation side of financial management. Even when planning and budgeting are strong, utilization can still be affected by fund availability, activity schedules, supplier issues, weather conditions, and other school realities. For this reason, utilization requires monitoring and documentation whenever adjustments occur.

Reporting obtained the lowest mean among the five domains, although it remained within the Always range. Reporting was still consistently practiced but was relatively more demanding than the other domains. Reporting requires the consolidation of documents from planning, budgeting, procurement, and utilization, and previous studies have similarly linked reporting with transparency, accountability, and proper documentation in school financial management [1-3]. It also requires timely submission, complete attachments, clear explanations, and communication with stakeholders. The lower mean therefore does not

indicate weak commitment; rather, it reflects the difficulty of completing and organizing documentary evidence.

**Table 3** presents the significant and non-significant relationships between leadership styles and the five financial management domains. Collaborative and rational leadership were significantly related to all five domains. Participative, consultative, decentralized, and stewardship leadership showed domain-specific relationships, while authoritative leadership was not significantly related to any financial management domain.

**Table 3.** Summary of significant relationships between leadership styles and financial management domains.

LEADERSHIP STYLE	PLANNING	BUDGETING	PROCUREMENT	UTILIZATION	REPORTING
Participative	Not sig. ( $r = 0.427$ )	Sig. ( $r = 0.603$ )	Sig. ( $r = 0.600$ )	Not sig. ( $r = 0.163$ )	Sig. ( $r = 0.580$ )
Consultative	Not sig. ( $r = 0.410$ )	Sig. ( $r = 0.529$ )	Sig. ( $r = 0.786$ )	Sig. ( $r = 0.546$ )	Sig. ( $r = 0.591$ )
Authoritative	Not sig. ( $r = -0.100$ )	Not sig. ( $r = -0.051$ )	Not sig. ( $r = -0.061$ )	Not sig. ( $r = 0.006$ )	Not sig. ( $r = 0.100$ )
Decentralized	Not sig. ( $r = 0.102$ )	Not sig. ( $r = 0.124$ )	Not sig. ( $r = 0.292$ )	Not sig. ( $r = 0.012$ )	Sig. ( $r = 0.578$ )
Collaborative	Sig. ( $r = 0.562$ )	Sig. ( $r = 0.631$ )	Sig. ( $r = 0.785$ )	Sig. ( $r = 0.492$ )	Sig. ( $r = 0.650$ )
Rational	Sig. ( $r = 0.479$ )	Sig. ( $r = 0.643$ )	Sig. ( $r = 0.721$ )	Sig. ( $r = 0.550$ )	Sig. ( $r = 0.794$ )
Stewardship	Not sig. ( $r = 0.350$ )	Sig. ( $r = 0.685$ )	Sig. ( $r = 0.687$ )	Not sig. ( $r = 0.306$ )	Sig. ( $r = 0.510$ )

The broad significance of collaborative leadership suggests that school financial management was strengthened when school heads worked with others across the whole financial cycle. Planning requires shared identification of needs, budgeting requires agreement on priorities, procurement requires coordinated specifications, utilization requires monitoring, and reporting requires collective documentation. School finance is not an isolated administrative task but a shared leadership process, especially because financial management practices require coordination, accountability, and documentation across several school functions [1-3].

Rational leadership was also significantly related to all financial management domains. Evidence-based decision-making supported the whole financial management cycle. The strongest relationship was found between rational leadership and reporting, suggesting that reporting becomes more defensible when school heads use data, criteria, records, and supporting documents. Rational leadership also supported procurement and budgeting because these domains require comparison of needs, justification of allocations, and verification of documents. This result is important for the proposed AI-guided toolkit because AI support is most useful when it helps organize evidence, compare options, summarize decisions, and check documentation completeness, which is consistent with the administrative support potential of AI tools in education [5].

Participative leadership was significantly related to budgeting, procurement, and reporting, but not to planning and utilization. Stakeholder participation was most useful in domains where shared understanding, inputs, and documentation directly supported

decisions. Budgeting requires agreement on priorities, procurement requires clear identification of needs and specifications, and reporting requires communication with stakeholders. However, planning may already be guided by existing school documents, while utilization may be affected by actual implementation conditions beyond participation alone.

Consultative leadership was significantly related to budgeting, procurement, utilization, and reporting, but not to planning. The strongest relationship was with procurement. Consultation is especially important when school heads need technical advice, policy clarification, or verification of requirements. Procurement involves procedures, specifications, quotations, and documentary compliance; therefore, seeking advice from knowledgeable personnel can reduce errors and improve decision quality.

Decentralized leadership was significantly related only to reporting. Task distribution became most visible when records, supporting documents, and reports had to be prepared and consolidated. Reporting often requires the help of teachers, coordinators, property custodians, committee members, and administrative personnel. Although other domains may also involve shared work, final authority over planning, budgeting, procurement, and utilization remains with the school head. Reporting, however, allows clearer assignment of documentary tasks under supervision.

Stewardship leadership was significantly related to budgeting, procurement, and reporting, but not to planning and utilization. Stewardship became most visible in domains where financial decisions had to be documented and defended. Budgeting requires proper allocation of public resources, procurement requires compliance with procedures, and reporting requires transparency and completeness. Planning and utilization also require stewardship, but their relationships may have been moderated by routine school processes and changing implementation conditions.

Authoritative leadership was not significantly related to any of the five financial management domains. This finding supports the earlier result that financial management in the district was not mainly strengthened by top-down or unilateral decision-making. Authority remains necessary because the school head is accountable for financial decisions, but authority alone did not explain better planning, budgeting, procurement, utilization, or reporting. Effective school financial management depends more on collaboration, consultation, evidence, accountability, and documentation.

**Table 4** presents the qualitative themes developed from the interviews with the selected school heads. These themes explain why particular leadership styles were strongly practiced and why some were more closely related to financial management domains than others.

The first theme, stewarding resources with integrity, explains why stewardship leadership was among the most practiced leadership styles. School heads viewed school funds as public resources that must be used lawfully, documented properly, and directed toward learner and school needs. This finding shows that stewardship was not only an ethical idea but also a practical guide for financial work, reflecting the view that responsible leadership is directed toward collective goals and accountable use of entrusted resources [4]. It was reflected in careful checking of documents, attention to allowable expenses, and concern for audit readiness.

**Table 4.** Qualitative themes explaining leadership styles and financial management practices.

THEME	DESCRIPTION	ILLUSTRATIVE RESPONSE
Stewarding resources with integrity	Commitment to lawful, documented, learner-centered, and ethical use of school funds.	"We treat school funds as public money, so every expense must be legal and properly documented." (SH1)
Collaborative financial planning	Participation of teachers, coordinators, and stakeholders in identifying needs and priorities.	"Teachers and coordinators are consulted during planning so the budget will reflect actual classroom needs." (SH1)
Procurement under contextual constraints	Compliance with procedures despite supplier limits, delayed releases, and urgent school needs.	"Even if the school needs the materials already, we still follow procurement rules and complete the documents." (SH4)
Utilization shaped by actual conditions	Adjustments in spending caused by activity schedules, fund availability, and implementation realities.	"Some planned expenses are adjusted because activities are moved or funds are not yet available." (SH1)
Transparent and shared reporting practices	Complete records, timely submission, shared documentation, and communication of reports.	"Reporting becomes easier when records are complete and everyone helps in documentation." (SH6)

The second theme, collaborative financial planning, explains why collaborative leadership was significantly related to all financial management domains. Participants described financial management as a shared process involving teachers, coordinators, committees, and stakeholders. Their participation helped school heads identify real classroom needs, prioritize activities, and prepare more responsive budgets. This theme also explains why participative and consultative leadership were related to budgeting, procurement, and reporting.

The third theme, procurement under contextual constraints, clarifies why procurement required both compliance and decision support. School heads reported that urgent school needs, delayed fund releases, and limited suppliers could affect procurement. However, they emphasized that rules and documents still had to be followed. Procurement is not only a procedural activity but also a contextual decision-making process. School heads must balance urgency with compliance and must document the reasons behind procurement decisions.

The fourth theme, utilization shaped by actual conditions, explains why utilization was not significantly related to all leadership styles. Actual spending may change because activities are moved, funds are delayed, or school conditions differ from the plan. Thus, utilization is influenced not only by leadership but also by implementation realities. This supports the need for tools that can help school heads monitor planned versus actual spending and prepare adjustment notes when changes occur.

The fifth theme, transparent and shared reporting practices, explains why reporting was the lowest financial management domain but was significantly related to several leadership styles. Reporting requires complete records, timely consolidation, shared documentation, and clear communication. Participants noted that reporting becomes easier when documents are complete and when other school personnel help prepare the needed evidence. Reporting is where collaboration, rationality, stewardship, consultation, and decentralization converge.

**Table 5** summarizes the mixed methods explanation of the key quantitative patterns, showing how qualitative explanations helped clarify and extend the quantitative results, as commonly expected in mixed methods integration [6, 7]. It shows how the qualitative findings clarified the statistical results and how both strands informed the development of the toolkit.

**Table 5.** Mixed methods explanation of key quantitative patterns.

QUANTITATIVE PATTERN	QUALITATIVE EXPLANATION	INTEGRATED MEANING
Collaborative and rational leadership were significantly related to all domains.	School heads described financial work as joint, evidence-based, and dependent on records, options, and follow-through.	The strongest links appeared where leadership matched the actual financial workflow.
Authoritative leadership was not significantly related to any domain.	Participants described financial work as shared, checked, and compliance-oriented rather than command-based.	Top-down decision-making did not explain effective financial practice in this context.
Reporting was the lowest financial management domain but still rated Always.	Reporting required complete records, timely consolidation, and cooperation among several persons.	The lower mean reflected documentation difficulty rather than weak commitment.
Stewardship was linked to budgeting, procurement, and reporting.	School heads emphasized legality, transparency, audit readiness, and proper use of public funds.	Stewardship became most visible where decisions required documentary defense.

The leadership styles most strongly related to financial management were those that matched the actual workflow of school finance. Collaboration matched the need for shared planning, coordinated procurement, utilization monitoring, and reporting support. Rational leadership matched the need for evidence, comparison, records, and defensible decisions. Stewardship matched the need for legality, transparency, and documentary accountability. In contrast, authoritative leadership did not match the shared and procedural nature of the work. These findings became the basis for developing the AI-guided financial management decision and implementation toolkit. The toolkit was designed as a practical support resource for school heads, not as a replacement for official policies, procurement rules, accounting procedures, or professional judgment. Its purpose was to help school heads organize the financial management cycle from planning to reporting.

The toolkit followed a whole-cycle structure. In planning, it guides school heads in gathering evidence, identifying learner needs, and preparing priority notes. In budgeting, it helps connect priorities to budget lines and document the reasons for allocation decisions. In procurement, it provides checklists for specifications, quotations, and documentary completeness while reminding users to follow applicable rules. In utilization, it includes tools for comparing planned and actual spending, monitoring delays, and recording reasons for adjustments. In reporting, it supports liquidation checking, evidence consolidation, and stakeholder communication.

The AI component was designed with safeguards. The prompts require anonymized data and remind users not to upload names, personal information, bank details, supplier-sensitive information, or confidential transaction records. The prompts also remind users that AI outputs are drafts or decision aids, not official approvals. This boundary is necessary because school financial management involves public funds and accountability. AI may help organize information and improve documentation, but the school head remains responsible for reviewing, verifying, and approving all outputs because AI tools should support, not replace, professional judgment in educational administration [5].

Several parts of the toolkit directly reflect the findings of the study. Because collaborative leadership was related to all financial management domains, the toolkit includes stakeholder input templates, role assignment notes, and shared review prompts. Because rational leadership was also related to all domains, the toolkit includes evidence summaries, comparison prompts, decision rationale templates, and completeness checks. Because stewardship was related to budgeting, procurement, and reporting, the toolkit includes compliance reminders, audit-readiness notes, and documentation checklists. Because reporting had the lowest mean, the toolkit gives particular attention to record consolidation, liquidation checking, and stakeholder reporting.

**Table 6** presents the feedback of school heads on the developed toolkit. All feedback dimensions were interpreted as Strongly Agree. The highest mean was obtained by relevance. The evaluators found the toolkit directly related to the financial management responsibilities of school heads. The very high rating for clarity and organization suggests that the toolkit was logically arranged and understandable. These results support the value of developing a tool based on actual quantitative patterns, qualitative explanations, and the school financial management cycle.

**Table 6.** Summary of school heads' feedback on the developed toolkit.

FEEDBACK DIMENSION	MEAN	SD	VERBAL INTERPRETATION
Relevance	4.00	0.00	Strongly Agree
Clarity and organization	3.98	0.07	Strongly Agree
Usability	3.80	0.28	Strongly Agree
User-friendliness	3.77	0.30	Strongly Agree

Usability and user-friendliness also received Strongly Agree ratings, although their means were slightly lower than relevance and clarity. The toolkit was accepted as useful but may still require orientation, examples, and editable templates to support actual implementation. A toolkit can be relevant and well organized but still require practice before users become comfortable with it. School heads already handle many responsibilities, so the toolkit must simplify documentation rather than add another layer of paperwork.

The evaluation results suggest that the toolkit can function as a research-based, whole-cycle, human-in-the-loop decision support resource. It is research-based because it was developed from survey results, interview explanations, and evaluator feedback, reflecting the value of integrating quantitative and qualitative evidence in mixed methods studies [6, 7]. It is whole-cycle because it connects planning, budgeting, procurement, utilization, and reporting. It is human-in-the-loop because AI is used only to assist in organizing information, drafting summaries, and checking completeness. It does not replace official rules, authorized approval, or professional accountability.

School financial management is best understood as a leadership practice involving collaboration, evidence use, stewardship, documentation, and contextual judgment. The strongest relationships were found in leadership styles that supported shared work and defensible decision-making. School heads managed finances through integrity, consultation, compliance, adjustment, and shared reporting. The toolkit responds to these findings by providing a structured and guided way to support financial decisions while keeping human responsibility at the center.

## 5. CONCLUSION

Public elementary school heads in Matnog I District, Philippines practiced financial management as a leadership responsibility. Stewardship and collaborative leadership were the most practiced styles, while authoritative leadership was the least practiced. Financial management practices were consistently high across planning, budgeting, procurement, utilization, and reporting, with budgeting as the strongest domain and reporting as the lowest. Collaborative and rational leadership were significantly related to all financial management domains. Other leadership styles showed domain-specific relationships, while authoritative leadership had no significant relationship with any domain. Effective financial management was shaped by integrity, collaboration, evidence use, compliance, documentation, and actual school conditions. The AI-guided financial management toolkit was developed as a practical support tool for school heads. It may help organize evidence, document decisions, check completeness, and guide responsible use of AI without replacing human judgment, official policy, or accountability. Future studies may test the toolkit in other districts and examine its effect on documentation quality, decision-making, stakeholder communication, and audit readiness.

## 7. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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