



## The Relationship between Principals' Competencies in Budgeting and Performance of Financial Management Roles in Public Secondary Schools in Kenya

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### Abstract

The study investigated the relationship between the principals' budgeting competencies and the performance of selected financial management roles in public secondary schools in Kajiado County, Kenya. It combined Scientific Management Theory (SMT) and systems theory to form a strong theoretical framework. It adopted a quantitative methodology using a correlational research design and a qualitative methodology using a case study design. Data from principals and bursars was collected through questionnaires, while semi-structured interviews were used for school auditors. The study used a multistage sampling technique to select a sample of 115 public secondary school principals and 111 school bursars, while three school auditors were selected purposively. The findings indicate that there was a positive and statistically significant relationship between the principals' budgeting competencies and their performance of financial management roles ( $p=0.703^{**}$ ;  $p<0.05$ ); They also indicate that some principals did not have the necessary budgeting competencies to prepare budgets on time, interpret the budgets regularly, guide the heads of departments in budget making, link school development plans to their budgets and prepare comprehensive budgets. The study recommends that principals be trained, mentored and coached in comprehensive budget preparation and interpretation, and school development plans should be linked to budgets. They should also be trained, mentored and coached in monitoring budget implementation and aligning budgets with vote heads to address the competency and skills gaps.

**Keywords:** *Budgeting, budgeting competencies, financial management competencies, budgeting roles*

### Introduction

Management of financial resources is a critical management and governance issue in public secondary schools (County Education Board [CEB], 2019, 2022). It creates a financially stable school environment that ensures provision and improvement of quality education services. Financial management supports school stewardship and financial accountability to school stakeholders. In Kenya, the Basic Education Act of 2013 sets out a legal framework for the financial management of basic education schools (Republic of Kenya, 2013). Sadly, some Kenyan public secondary school principals' performance of financial management roles is ineffective (MoE, 2017; Republic of Kenya, 2017). Consequently, many stakeholders in Kenya are dissatisfied with some principals' performance of financial management functions. Similarly, in Abia State, Nigeria, Okeze et al. (2018) reported that some secondary school principals did not follow the prescribed procurement regulations and processes in acquiring required teaching and learning resources.

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In Kenya, principals apply various provisions of financial management laws, regulations, manuals and circulars when performing their financial management roles. These include the Public Finance Management (PFM) Act, 2012 (Republic of Kenya, 2012a), which provides for a review of governance systems to achieve accountability and transparency in managing finances and assets of public entities and the Public Audit Act, 2015 that provides a roadmap for prudent financial management in basic education. Other legal provisions include Teachers Service Commission (TSC) Act, 2012; Public Procurement and Asset Disposal Act (PPADA), 2015 and its regulations the Public Procurement and Asset Disposal Regulations (PPADR), 2020; the Public Officer Ethics Act, 2003; the Anti-Corruption and Economic Crimes Act, 2003, a handbook on financial management for schools and colleges; and ministerial circulars on financial management issued to public secondary school principals from time to time.

#### Problem Statement

There have been numerous complaints about the principals' management of school finances in Kenya, resulting in student violence, student unrest, parents' demonstrations and criminal prosecution of some principals (CEB, 2022). Most principals cannot follow public financial accounting guidelines (Ministry of Education [MoE], 2017). Some education stakeholders have raised concerns that despite the government's allocation of Ksh22,244 per learner in public secondary schools for operations and tuition vote head per year, there are still inadequate instructional resources (Kosgei et al., 2018). Additionally, public secondary school principals have often been accused of misappropriating finances allocated to provide instructional materials (Kenya Institute of Curriculum Development [KICD], 2018). Thus, the ineffectiveness of principals in Kajiado County in performing budgeting roles could cause the affected schools to suffer from financial loss, leading to inefficiency in financial management. This research sought to find out whether the problem of principals' ineffectiveness in executing financial management roles is related to their competencies in budgeting and make recommendations and suggestions to resolve this problem. Specifically, this study sought to answer this research question: What is the relationship between the principals' fiscal competencies in budgeting and the effective performance of financial management roles in public secondary schools in Kajiado County, Kenya?

#### Theoretical Framework and Literature Review

This research is guided by two theories: the scientific management theory (SMT) developed by Frederick Taylor in 1911 (Hair et al., 2021) and the systems theory, which was first propounded by Ludwig Von Bertalanfy in 1950 (Wang, 2014). After studying tasks and incentives, Taylor developed fixed procedures to maximise productivity and efficiency. First, management should eliminate non-specific guidelines on how to carry out tasks and replace them with precise and scientific methods for each job (Taylor, 2004). Second, management could use similar principles to properly train workers on the jobs they will hold in the organisation after recruiting them (Taylor, 2004). In this study, principals in Kenyan secondary schools must be thoroughly trained on proper budgeting processes to eliminate financial loss and inefficiency. Third, there should be cooperation among staff and management to ensure that budgeting is done according to plan and developed methods (Cohen et al, 2018). Lastly, managers should provide appropriate guidance on properly sharing responsibilities and division of labour between workers and managers (Taylor, 2004). That is, managers are responsible for planning the work and workers should follow the plan when completing the work.

The second theory, the systems approach, views organisations as open social systems that must interact with their environment (Saunders et al., 2009). Systems theory is adopted in this study to mitigate the weaknesses of SMT. The main weakness of SMT is that it can only be implemented successfully by principals through the cooperation of bursars, accounts clerks, BoM members and other stakeholders involved in financial management. By contrast, systems theory views schools as open systems that continually interact with their environment, consisting of stakeholders such as parents, local communities, the Ministry of Education, businesspeople and religious organisations. As open systems, schools interact with their external environment through information

and people. In this study, systems theory is used to analyse how financial management and actions influence activities within the school and how these improve internal processes. The application of systems theory enables financial management stakeholders to know how various departments as sub-systems work together and affect one another.

#### Defining a School Budget

A school budget is an estimation of income and expenditure to be used (Tooley, 2007). It is often compiled and evaluated termly or once each school term. School budgets are financial plans for a defined period, usually an academic year, to achieve school objectives and increase learner outcomes (Tooley, 2007). Mosala and Mofolo (2022) add that a budget is not a one-off activity or one-time plan but a dynamic document that requires proper planning and continuous monitoring to maintain control, provide feedback on its utilisation, and adjust where necessary. Schools allocate financial resources to different departments to achieve their objectives (Buchichi et al., 2018) and may adopt static or flexible budgets (Nyakanyanga, 2019). Static budgets remain fixed or unchanged during the budget life and all accounts and figures calculated initially remain the same regardless of ensuing variances (Mannes et al., 2021; Ogbonnaya, 2017). Static budgets appraise how effective the initial budgeting process was. Conversely, flexible budgets have relational value to certain variables used to derive them (Ogbonnaya, 2017). They can be changed or adjusted at short intervals based on price changes, production, volume, business activity, or prevailing organizational circumstances (Mannes et al., 2021).

#### Importance of Budget in Schools

School budgets are important for schools to operate optimally financially. Besides allocating finances, a school budget assists in setting objectives, measuring results, and contingency planning (Ogbonnaya, 2017). Budgeting reflects the school's mission in monetary terms (Mosala & Mofolo, 2022). Therefore, the school budget and mission should be harmonized to avoid dysfunctionality. School budgets are vital short- and long-term financial management tools. They are critical for the efficient and effective management of schools (Myende et al., 2020). Budgets help schools manage their monthly expenses, prepare for unforeseen events and plan to procure academic, food and non-food items without incurring debt (Myende et al., 2020). Principals use budgets to know where and how to spend funds and give them greater control over the schools' financial resources (Onesmo, 2021). A school budget gives authority to the principal to collect and expend financial resources appropriately, efficiently and effectively. School budgets ensure the economic use of financial resources and can be used to support appropriate projects identified for funding (Nyakanyanga, 2019). They enable schools to achieve societal expectations and caution principals against unrealistic optimism (Mohamad & Ibrahim, 2017).

#### Principals' Competencies in Budget Development

Principals are expected to have budget development competencies to develop flexible budgets that focus on school processes (Mosala & Mofolo, 2022; Ogbonnaya, 2017). They need competencies to prepare comprehensive budgets that cover all the funds receivable to their schools to derive value from using school resources. Principals must have competencies to accurately and realistically prepare assumptions about a budget. They should use their budgeting skills and competencies to begin the school budgeting process by establishing budget assumptions for the planned period. These are assumptions on cost trends, school revenues and prices of items to be procured. Principals should be able to establish and specify assumptions guiding their schools' expenditure levels.

Moreover, principals should possess the skills and competencies to formulate a school budget. These include the quantification of financial resources required to achieve school objectives and action plans for the next fiscal year and satisfy the expectations of the BoM, lenders or investors (Godda, 2018). They should first develop the school revenue target to facilitate the preparation of the expense budget. They should have the competencies to develop projections of school revenue. Principals require requisite competencies to ensure that departmental budgets are consolidated into the overall or school-wide budget that contains financial statements, revenue projections, expenditures and the financing plan (Argyropoulou, 2009).

Bringham and Houston (2015) reckoned that financial managers must be skilled and competent to tie an organisation's spending to strategies, objectives and action plans for the upcoming fiscal year and align it to their strategic plan. A principal should have basic skills, competencies and capability to use appropriate ICT programmes, such as Excel and accounting software applications, especially budgeting apps such as Goodbudget, PocketGuard and Fudget (Argyropoulou, 2009). These are important basic financial skills required of all school financial managers to enable them to be comprehensive, thorough and realistic in budget preparation. Principals also need competencies to interpret their schools' budgets and financial statements and identify budget variances

between the actual numbers and the budgeted figures. This competency is vital since sometimes there is an imbalance in the balance sheet and an inconsistency between the income statement and the spending trends (Paul, 2018). These inconsistencies are described as variances against the budget (Okeze et al., 2018), and principals should be able to analyse them.

#### Performance of Budgeting Functions

Principals and BoM's efficient budgeting and performance facilitate accurate and timely accomplishment of school goals and objectives, using minimal and scarce resources. Inefficiency in financial operations may occur if there is no additional benefit or value in a financial process performed. A financial operation is deemed effective if functioning as contemplated (Wango & Gatere, 2016). Financial inefficiency and ineffectiveness in a school may cause resource unavailability and lead to unmet objectives and additional operations costs.

Principals manage schools' financial resources and implement approved budgets. They manage and administer financial management in their schools (Biro, 2017). According to Section 21 of the Basic Education Act of 2013 (Republic of Kenya, 2013), the principal is the accounting officer and is responsible to the BoM for the use and control of financial resources, and "shall cause records of income and expenditure of the school to be maintained." Principals are also expected to prepare annual school budgets and submit them to the BoM for approval. The principals must submit financial statements to the BoMs for approval within three months after each school year's end. However, the performance of these roles has not been satisfactory (CEB, 2019, 2022; Kanyanzii et al., 2019).

Mgandi et al. (2017) asserted that principals establish and execute the schools' financial priorities and activities. They advise the BoM on funds allocation and expenditure, take charge of infrastructure projects, plan all financial strategies through the budget, and ensure that budgets are implemented as scheduled. Principals approve all personnel emoluments paid to the schools' employees and ensure proper maintenance of financial records. They are required to remunerate individuals as budgeted. As Onesmo (2021) argued, principals may rationalise school personnel according to their needs and ability to pay. This information is captured in the budget during budget development.

Financial management performance involves planning, organising and controlling revenue and expenditure to achieve the school's aims (Brigham & Houston, 2019). Principals carry out budget and variance analysis (Ghorman & Amakiyi, 2016) and should prepare and present correct budget analysis and strategic proposals to have budget stability (Radzi et al., 2015). They analyse budget variance against the budget forecast in the financial management performance (OECD, 2017). Principals may use school budgets to plan and monitor the implementation of their activities (Lipham, 2016). Budgets enable them to find effective financial interventions for operational issues. Financial managers may use budgets as historical references in future planning (Nguyen & Truong, 2017). A clear budget can help principals refine schools' goals and reflect realistic resource availability. Clarity in the budget may help principals to effectively communicate school goals and objectives to stakeholders and other staff members.

Principals carry out real-time budget tracking, and Hannif et al. (2018) stress that they should not wait until the end of the month, term or year to track their spending. Reliance on retrospective school spending risks overspending and hurting the cash flow. Poor spending visibility also limits principals and finance teams from using a reactive strategy. With real-time spending tracking, principals can consistently monitor budget implementation progress throughout the fiscal period (Radzi et al., 2018). Real-time spend tracking makes it easy for management to identify financial challenges in advance and proactively adjust budgets to get their teams on track. It gives principals the flexibility to optimise budgetary control and budgeting plans.

Principals can use data and results of the current budget to make smarter future budgeting decisions (Radzi et al., 2018). They can improve their existing budget strategies by optimising future scenarios. This action can be done accurately and confidently if they have reliable, accurate and timely data. Principals can make better budget decisions with access to comprehensive spending data (Idris, 2018). Greater spending visibility enables them to identify spending patterns, improve school cost savings and capitalise on new opportunities (Hannif et al., 2018).

The basic components of a school budget include the operating budget, capital budget and cash budget (Lipham, 2016). In a study on accountability and integrity in managing school finances in Malaysian districts, Mohamad and Ibrahim (2017) clarified that an operating budget enables the principal and the school management to track school revenue and expenses related to financial activities. Similarly, in their evaluation of financial decentralisation in Malaysian schools, Radzi et al. (2018) stated that capital budgets help principals to fund, manage and develop diverse school resources such as procurement and development of infrastructure, equipment, property and IT systems. Cash budgets combine operational and capital budgets with a specific focus on the time of payments and receiving cash revenues.

In their study on the decentralisation of financing and administration of public schools in Thailand, Rupavijetra et al. (2019) emphasised that principals should decipher whether a variation from the estimated budget cost is a one-time or long-term variation. If the item cost continues to vary, principals either need to adjust the budget by reducing the item or re-adjust the budget to make the cause of variation fit within the budgeted amount.

In many schools, principals do not carry out the financial management function as it should (Shkurina, 2018), and do not fully involve their boards in financial management, compromising accountability of financial resources (Beyers & Mohloana, 2015; Mapolisa et al., Rupia & Chai, 2022; 2014). Principals often implement financial procedures and policies outlined by the government (Edmund & Lyamtane, 2018). Sadly, misallocated funds have an unplanned flow of money, leading to insufficient supplies for the school and increased debts to suppliers. Financial management needs ratification by the school management for implementation by the school head. However, school heads poorly record and report financial matters and rampantly misallocate and mismanage financial resources (Mapolisa et al., 2014). Aliyu (2018) uncovered that secondary school principals in Kaduna State, Nigeria, did financial budgeting and financial operations without following due processes. Consequently, school fiscal management was done with little consideration of the established procedures. Some head teachers either did not prepare or poorly prepared budgets, financial reports and records.

### Research Methodology

This study adopted quantitative and qualitative methodologies used complementarily to facilitate methodological triangulation.

#### Quantitative methodology

Quantitative research is based on measuring quantity or amount (Wallen & Fraenkel, 2019), where a process is expressed or described in terms of one or more quantities. Quantitative research methods can be used to observe events that affect a particular group of individuals (Xiangyu, 2021). In this type of research, diverse numerical data is collected through various methods and then statistically analysed to aggregate, compare or show relationships among the data. Quantitative research methods include questionnaires, structured observations and experiments (Bingham & Witkowsky, 2022).

#### Qualitative methodology

Qualitative methodology was also used to facilitate methodological, site and data analysis triangulation. Qualitative research concerns qualitative phenomena (Silverman, 2023) and is non-numerical, descriptive, applies inductive reasoning and uses words. It involves collecting and analysing non-numerical data to understand concepts, opinions or experiences (Vargas-Hernández, 2020). It can be used to gather in-depth insights into a problem or generate new ideas for research. Qualitative research methods allow for in-depth and further probing and questioning of participants based on their responses (Cohen et al., 2018). The interviewer tries to understand participants' motivations and feelings. Qualitative research methods are designed to reveal the behaviour and perceptions of target participants concerning a particular topic (Bingham & Witkowsky, 2022). Accordingly, in-depth interviews were used to generate qualitative data.

#### Research Design

For the quantitative component, this study adopted a correlational research design to measure principals' fiscal competencies in budgeting and their effectiveness in performing financial management functions. It also evaluated their strengths and the direction of the relationship. A correlational study aims to determine a systematic relationship between the variables under study (Bingham & Witkowsky, 2022). This design involves measuring the independent and dependent variables and evaluating their correlation without manipulating the variables (Barton & Hyhoe, 2021). Respondents in this study were required to give direct responses. The design was appropriate since it allowed researchers to conduct an in-depth study of selected financial management competencies and performance of selected roles with minimal effort, time and financial resources. A case study was used to select three auditors based at the office of the County Director of Education in Kajiado County and study their perceptions of the principals' knowledge and competencies in budgeting. As Coombs (2022) explained, a case study is a methodological approach used to generate an in-depth understanding of a phenomenon in a bounded system, which in this case was the three auditors.

### Research Population

The study targeted all public secondary school principals, bursars and school auditors who performed selected financial management roles. Principals were targeted because they performed budgeting, which could be affected by their competencies in respective financial management practices. County school auditors were targeted since they supervised principals' performance of financial management roles. The inclusion of school bursars as respondents was to facilitate data triangulation.

### Sampling Procedure and sample size

Kajiado County was purposively sampled from 47 Counties in Kenya because it did not perform the financial management function as effectively as required. Ketokivi (2019) explains that purposive sampling is a time-effective and cost-effective sampling method. A survey design was used to identify school auditors and bursars who perform supervisory roles for principals and school bursars. All the school bursars from participating schools were included as respondents. This research adopted multistage sampling to identify principals and bursars who performed financial management roles in Kajiado County. Various sampling techniques were adopted at various stages for sampling principals and bursars. Principals were stratified into male and female. Schools were stratified into girls, boys and mixed boarding, mixed day, and mixed day and boarding schools. The study adopted proportionate sampling to establish proportionate samples of principals for each data stratum.

A simple random sample was adopted where all members of the study's population had an equal chance of being selected (Schuberth et al., 2020). This sampling method was adopted to find informants from the proportionate samples of principals. The accessible population of this study was 160 principals and an equivalent number of bursars. From Krejcie and Morgan's (1970) table of sample size, 113 principals and bursars were sampled and surveyed respectively from a population of all 160 principals and 160 bursars. The three bursars based at the office of the County Director of Education were selected purposively.

### Research Instruments

Primary data was obtained through questionnaires filled by principals and bursars, while an interview schedule was used to generate data from three school auditors. The questionnaires with the same items were administered to principals and school bursars. Additional primary data was collected from county school auditors based at the county education office in Kajiado to curb the principals' self-rating bias.

### Data Analysis on Principals' Competencies in Budgeting

This study sought to establish the relationship between principals' competencies in budgeting and the performance of selected financial management roles in public secondary schools in Kajiado County. This section presents data analysis that addresses this objective. Descriptive analysis is done by calculating percentages as Tables 1 and 2 reflect.

Table 1: Principals' Competencies in Budgeting according to Principals

Statement	Principal (N= 106)			
	SD	D	A	SA
I have the necessary budgeting competencies to promptly prepare budgets.	16%	18%	24%	42%
I have the necessary budgeting competencies to regularly interpret budgets.	14%	25%	30%	31%
I have the necessary budgeting competencies to regularly guide the HoDs in budget making.	18%	21%	31%	30%
I have the necessary budgeting competencies to regularly link school development plans to the school budget.	12%	24%	33%	31%
I have the necessary budgeting competencies to regularly align budgets with vote heads.	19%	19%	33%	29%
I have the necessary budgeting competencies to regularly prepare comprehensive budgets.	17%	22%	26%	35%

I have the necessary budgeting competencies to regularly assist the bursar/ accounts clerk in budget making.	17%	16%	27%	40%
I have the necessary budgeting competencies to regularly involve the finance committee of the BoM in budget preparation.	12%	26%	31%	30%
I have the necessary budgeting competencies to regularly monitor budget spending.	19%	19%	32%	30%
I have the necessary budgeting competencies to regularly monitor the budget implementation.	17%	23%	32%	28%

Table 2: Principals' Competencies in Budgeting according to Bursars

My principal has the necessary budgeting competencies to:	Bursars (N=100)			
	SD	D	A	SA
Promptly prepare budgets.	18%	17%	27%	38%
Regularly interpret budgets.	19%	23%	31%	27%
Regularly guide the HoDs in budget making.	19%	29%	35%	17%
Regularly link school development plans with the school budget.	17%	21%	32%	30%
Regularly align budgets with the vote heads.	24%	21%	28%	27%
Regularly prepare comprehensive budgets.	20%	24%	27%	29%
Regularly assist the bursar/ accounts clerk in budget making.	18%	20%	32%	30%
Regularly involve the finance committee of the BoM in budget preparation.	20%	25%	22%	33%
Regularly monitor budget spending.	20%	31%	23%	26%
Regularly monitor the budget implementation.	19%	25%	29%	27%

As Tables 1 and 2 display, 66% of principals and 65% of bursars stated that principals had the necessary budgeting competencies to prepare budgets promptly. A small proportion of principals (34%) and bursars (35%) indicated that principals did not have the necessary budgeting competencies to prepare budgets promptly. Furthermore, 39% of principals and 42% of bursars held that principals did not have the necessary budgeting competencies to interpret budgets regularly. This research supports Biro's (2017) conclusion that the managers' expertise in budgeting is essential as they establish financial priorities and plan the schools' financial operations. Implementing well-planned school budgets is important because they foster financial flexibility and independence (Lipham, 2016).

An analysis of qualitative data related to the above responses shows diverse views about the principals' competencies in preparing budgets. It is based on the narrative responses from three school auditors coded SA1, SA2 and SA3. In this regard, SA1, disclosed:

*"One of the causes of poor budget implementation in some schools in Kajiado County is inadequate financial management skills of principals, non-involvement of the BoM in budget preparation, haphazard spending outside the budget and unstable commodity prices. Some do not refer to the previous budget, some just copy the previous budget, and some do not refer to previous budgets during preparation. Another challenge is that principals seldom involve other teachers, the BoMs, HoDs and bursars during budget development."*

Expressing positive sentiments about the principals' competencies in budget preparation, SA2 asserted:

*"Most principals can prepare comprehensive budgets, interpret budgets from other departments, and guide other teachers and HODs in budget development. They also align the budgets with the school's needs and involve the BOM members in budget development. However, some principals are unable to do the same."*

On the contrary, SA3 indicated that principals experienced challenges related to budget development, thus:

*"In many instances, principals face challenges relating to incomplete information, price variation of goods and services in the market, and poor records from previous budgets. Moreover, some schools don't have bursars or account clerks. Finally, some principals may not be knowledgeable about financial matters."*

Principals must have strong financial management abilities to run schools effectively. In the current study, 39% of principals and 48% of bursars averred that principals did not have the necessary budgeting competencies to guide the HoDs in budget-making. Moreover, as Tables 1 and 2 display, 36% of principals and 38% of bursars held that principals did not have the necessary budgeting competencies to link school development regular plans to

budgets. This finding is consistent with Migwi's (2018) assertion in the South African context that all school managers, regardless of their position within the school management team (SGB), must possess certain financial acumen and expertise related to school administration. In this study, 38% of principals and 45% of bursars asserted that principals had the necessary budgeting competencies to align budgets with the vote heads regularly. Effective management of the budget is crucial to achieving the school's goals.

As Tables 1 and 2 reflect, 39% of principals and 44% of bursars stated that principals did not have the necessary budgeting competencies to prepare comprehensive budgets regularly. This finding resonates with an earlier one by Migwi (2018), which stated that various principals and SGB members lacked the necessary financial skills and knowledge. This situation places them under tremendous pressure and renders them unable to resolve some financial management problems.

Cumulatively, 33% of principals and 38% of bursars asserted that principals did not have the necessary budgeting competencies to assist bursars/accounts clerks in budget-making. School principals must have management skills related to financial matters for their work to be efficient. This finding corroborates Biro's (2017) conclusion that most principals lack the necessary skills in budget preparation, which exacerbates misallocation, misappropriation, and poor control of funds and auditing.

Furthermore, 38% of principals and 45% of bursars affirmed that principals did not have the necessary budgeting competencies to involve the BoMs' finance committees in budget preparation. Similarly, Mapolisa et al.'s (2014) observed that some principals in South African schools misallocated funds and rampantly mismanaged financial resources. By implication, if school administrators lack the necessary budgeting skills, teaching, learning and academic performance could be impaired.

Altogether, 38% of principals and 51% of bursars maintained that principals did not have the necessary budgeting competencies to monitor budget spending regularly. School administrators are responsible for monitoring the budget's implementation for efficient performance. Similarly, 40% of principals and 44% of bursars said principals did not have the necessary budgeting competencies to monitor budget implementation regularly. In this regard, Lipham's (2016) assertion that principals require financial management skills for effective planning, financial resourcing and use of school funds since most face budgetary constraints. This view suggests that budgeting competencies are required to implement any financial transactions.

Concerning the reasons for the poor implementation of the budget, SA3 opined:

*"Some administrators tasked to prepare school budgets often refer to previous budgets while preparing current ones, yet circumstances may have changed. However, inadequate budget monitoring and evaluation is the major challenge affecting the effective implementation of school budgets."*

However, SA1 indicated that principals experienced challenges related to budget development in this way:

*"Principals often face challenges relating to incomplete information, price variation of goods and services in the market, poor records from previous budgets, and lacking bursars or account clerks. Finally, some principals may not be knowledgeable about financial matters."*

Commenting further on the subject, SA2 stated:

*"All principals face many challenges, including incorrect interpretation of financial data, inadequate financial information and poor maintenance of the schools' financial records."*

#### Data Analysis on Performance of Budgeting Functions

Descriptive statistics were used to analyse the principals' performance of financial management functions, focusing on budgeting. The level of effectiveness was rated using a four-point Likert scale. The results are presented in Tables 3 and 4.

Table 3: Performance of Budgeting Functions According to Principals

Principal (N= 106)				
Kindly rate your effectiveness in the performance of the following budgeting roles				
Statement:	NE	LE	E	VE
Promptly prepares budgets	14%	26%	25%	34%
Regularly interprets budgets	13%	28%	31%	27%
Regularly guides HoDs in budget making	15%	28%	35%	22%
Regularly links school development plans to school budget	11%	30%	37%	22%
Regularly aligns budgets with vote heads	14%	29%	32%	25%
Regularly prepares comprehensive budgets	19%	28%	25%	28%



Regularly assists the bursar/ accounts clerk in budget making	12%	33%	26%	28%
Regularly involves the finance committee of the BoM in budget preparation	20%	24%	27%	29%
Regularly monitors the budget Implementation	14%	31%	29%	25%

Table 4: Performance of Budgeting Functions According to Bursars

<b>Bursars (N=100)</b>				
<b>Kindly rate your principal's effectiveness in the performance of the following budgeting roles</b>				
<b>Statement:</b>	<b>NE</b>	<b>LE</b>	<b>E</b>	<b>VE</b>
Prompt preparation of budgets	18%	22%	29%	31%
Regularly interprets budgets	17%	26%	33%	24%
Regularly guides HoDs in budget making	9%	39%	37%	15%
Regularly links school development plans to school budget	18%	27%	39%	16%
Regularly aligns budgets with vote heads	18%	31%	30%	21%
Regularly prepares comprehensive budgets	19%	34%	22%	25%
Regularly assists the bursar/ accounts clerk in budget making	20%	28%	27%	25%
Regularly involves the finance committee of the BoM in budget preparation	22%	28%	21%	29%
Regularly monitors the budget implementation	16%	23%	37%	24%

In this study, 26% of principals and 22% of bursars maintained that principals were less effective, with 14% of principals and 18% of bursars saying that principals were ineffective in promptly preparing the budgets. This result corresponds with Akinfolarin's (2017) finding that attaining school objectives is predicated upon efficient and timely preparation of budget estimates, yet principals do not perform this well. Budget preparation includes quantifying financial resources required to achieve school objectives, action plans for the next fiscal year and satisfying the demands of the BoMs, lenders or investors.

Some 28% of principals and 26% of bursars indicated that principals were less effective, with 13% and 17 %, respectively, saying they were ineffective in regularly interpreting school budgets. This view concurs with Ogbonnaya et al.'s (2017) contention that everyone involved in the school's budgeting needs the ability to prepare and interpret budgets correctly. Thus, the inability to interpret school budgets correctly could hamper its implementation.

Furthermore, 28% of principals and 39% of bursars reported that principals were less effective, with another 15% and 9% of principals and bursars saying that they were ineffective in guiding the heads of departments in budget-making. These findings corroborate Aliyu's (2018) suggestion that principals should support other staff members in preparing school-wide budgets to ensure they are comprehensive and exhaustive. This finding suggests that some Kajiado County public secondary school principals did not give their heads of departments the necessary support when making departmental budgets.

Moreover, 30% of principals and 27% of bursars observed that some principals were less effective in linking school development plans to school budgets, with another 11% of principals and 18% of bursars saying they were ineffective in this role. This finding corroborates Edmund and Lyamtane's (2018) assertion that a principal should have the requisite competencies to understand the budget preparation methods consistent with the school's academic and infrastructural development needs and fiscal goals of the school. Principals must be efficient and competent in tying school spending directly to strategies, objectives and action plans for the upcoming fiscal year and aligning them with the strategic plan.

Furthermore, 33% of principals and 28% of bursars indicated that principals were ineffective in regularly assisting bursars or accounts clerks in budget making. In comparison, another 12% of principals and 20% of bursars said they were ineffective in performing this role. This finding is in accord with Mapolisa et al. (2014) and Aliyu's (2018) conclusion that principals appear to handle all financial management tasks without consulting other accounting staff members. Thus, it may be inferred that inefficient and unproductive budgeting practices in schools can cause schools to lack resources and prevent them from achieving their goals.

A further 29% of principals and 31% of bursars indicated that principals were ineffective in aligning budgets to vote heads. In comparison, 14% and 18% reported that principals were ineffective in performing this role. Similarly, Goda (2018) found that while principals should lead the development and management of budgets to ensure quality services and that they correspond with the given vote heads, as guided by the MoE's guidelines and regulations, they were inept in this role.

Furthermore, 47% of principals and 53% bursars said principals were ineffective in preparing comprehensive budgets. Similarly, Quak (2020) and Idri (2018) found that principals haphazardly spent financial resources in Tanzanian schools without following established budgets. This anomaly implies that inadequate budget alignment may make it more difficult for principals and the BoM to monitor and control the schools' financial resources, leading to financial mismanagement and misallocation.

Altogether, 44% of principals and 50% of bursars reported that principals did not regularly involve the BoMs' finance committees in budget preparation. This finding corroborates Phylisters et al.'s (2018) claim that principals should include relevant BoM members in preparing and using financial resources, data and outcomes from the current budgets to inform future budgetary decisions. The non-involvement of finance sub-committee board members in the development and execution of the budget leads to suspicion, inadequate budgetary support and audit queries.

Furthermore, 45% of principals and 39% of bursars asserted that principals were less effective in monitoring budget implementation. This finding is consistent with Amos et al.'s (2021) claim that Tanzanian principals did not monitor and prepare the necessary changes in their schools' budgets during the implementation. This study's results suggest that a lack of precise criteria for creating budgets and overseeing their execution may harm overall financial performance. Monitoring budget implementation presents a historical reference point for the upcoming budget planning cycle.

#### Hypothesis Testing

The first null hypothesis tested in this section was H01: "There is no statistically significant relationship between the principals' competencies in budgeting and effective performance of selected financial management roles in public secondary schools in Kajiado County, Kenya". This study's judgement to reject or fail to reject the null hypotheses was set at 0.05 alpha levels; that is, reject H0: if  $p < 0.05$ ; otherwise, fail to reject the H0: if  $p > 0.05$ . A correlation test was performed between the principals' budgeting competencies and the effective performance of selected financial management roles in Kajiado County. The correlation test result is presented in Table 5.

Table 5: Correlation between the Principals' Competencies in Budgeting and their Performance of Financial Management Roles

		Principals' performance of financial management roles
<b>Budgeting competencies</b>	Pearson Correlation r	.703**
	Sig. (2-tailed)	.000
	N	106

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The Pearson product-moment correlation coefficient test yielded a result of ( $p = 0.703^*$ ;  $p < 0.05$ ) at alpha 0.05 level, as shown in Table 5. Consequently, the null hypothesis was rejected since the p-value (0.000) is less than 0.05 alpha levels. Therefore, it is concluded that there was a positive and statistically significant relationship between the principals' budgeting competencies and their performance of financial management roles in Kajiado County. In their study, Amos et al. (2021) found that the school principals' skills in preparing budget estimates are important in directing financial resources to acquire teaching and learning resources. This finding implies that effective performance of financial reporting roles could improve when principals possess the necessary skills and competencies in budgeting. Likewise, inadequate skills in budgeting could negatively affect their performance of financial reporting roles.

The study's objective was to ascertain the relationship between the principals' competencies in budgeting and the efficient performance of selected financial management roles in public secondary schools in Kajiado County. Thus, this study's significant finding is a positive and statistically significant relationship between the principals' budgeting competencies and their effectiveness in performing selected financial management roles.

The findings indicate that some principals do not have the necessary budgeting competencies to prepare budgets on time, while others lack the competencies to interpret the budgets regularly. Some respondents revealed that some principals did not have the necessary budgeting competencies to guide department heads in

budget-making. Similarly, some respondents said the principals did not have the necessary budgeting competencies to link school development plans to their budgets regularly.

This study's findings show that some respondents agreed that some principals had the necessary budgeting competencies to align budgets with the vote heads. It was also established that some principals did not have the necessary budgeting competencies to prepare comprehensive budgets regularly. Some respondents held that principals did not have the necessary budgeting competencies to assist bursars or accounts clerks in making budgets. Some principals stated they did not have the necessary budgeting competencies to involve the BoM's finance committee in budget preparation regularly. The study further established that some principals did not have the necessary budgeting competencies to monitor budget spending regularly.

Moreover, some principal and bursar respondents argued that principals were ineffective in preparing budgets promptly. The findings also show that several principals are less effective in regularly interpreting school budgets, while some are ineffective in guiding department heads in budget making. It was further observed that some principals in Kajiado County were less effective in linking school development plans to budgets. Some respondents indicated that principals were ineffective in regularly assisting bursars or accounts clerks in budget making. Additionally, some principals were unable to align school budgets to vote heads.

Furthermore, some respondents reported that several principals faced challenges in preparing comprehensive budgets, while some stated that they did not regularly involve the BoMs' finance committees in budget preparation. Some respondents reported that principals were either less effective or ineffective in monitoring budget implementation. This study established that some principals faced challenges of incomplete information, price variation of goods and services in the market, and poor records from previous budgets. Finally, the findings revealed that some schools did not have bursars or account clerks, while some principals were not knowledgeable about financial matters.

### Conclusions

The study's objective was to determine the relationship between the principals' competencies in budgeting and effectiveness in performing selected financial management roles in public secondary schools in Kajiado County, Kenya. From data analysis, it is concluded that there is a positive and statistically significant relationship between the principals' budgeting competencies and their effectiveness in the performance of selected financial management roles. Moreover, it was concluded that some principals did not have the necessary budgeting competencies to promptly prepare budgets, with others lacking competencies to interpret budgets regularly. It was also concluded that several principals did not have the necessary budgeting competencies to regularly guide heads of departments in budget making, link school development plans to the budget and align budgets to vote heads.

Another conclusion is that various principals did not have the necessary budgeting competencies to regularly prepare comprehensive budgets, assist bursars and accounts clerks in budget making and involve finance committee members of the BoM in budget preparation. Moreover, it is concluded that many principals did not have the necessary budgeting competencies to monitor budget implementation regularly. It is further concluded that some principals were ineffective in the timely preparation of budgets, regular interpretation of budgets, guiding heads of departments in budget making and linking development plans to budgets. Moreover, some principals were ineffective in regularly assisting bursars and accounts clerks in budget-making, aligning budgets to vote heads and preparing comprehensive budgets. Finally, it is concluded that many principals were ineffective in regularly involving finance committee members of the BoM in budget preparation and monitoring budget implementation.

### Recommendations

From the research findings, it is recommended that principals be trained, mentored and coached on the preparation, use and management of budgets. In-service training can be organized for principals on financial management, primarily on interpretation, guiding heads of departments on budget-making to enable them to link school development plans to the school budget and to align budgets with the vote heads. Such training can improve the principals' competencies in preparing comprehensive budgets, assist the bursar and accounts clerks in budget-making and involve the BoM's finance committee in budget preparation and budget implementation monitoring. More financial management courses should be infused into pre-service and in-service teacher training programmes at college and university levels to expose teacher trainees and trained teachers to financial management.

The Ministry of Education, Teachers Service Commission (TSC) and Kenya Secondary Schools Heads Association (KESSHA) can collectively or individually introduce a reward and recognition system to recognize and reward

principals who perform well in financial management. Additionally, the MoE, through the Directorate of Schools Audit Services (DSAS) and the TSC, should institute proper monitoring and evaluation mechanisms to support principals comply with various financial management requirements. Equally, the MoE and TSC should institute stringent policies, administrative actions, and sanctions against principals who do not comply with the budgeting requirements.

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