

FINANCIAL MANAGEMENT CAPABILITIES AND FINANCIAL HEALTH OF PUBLIC SECONDARY SCHOOLS IN NYERI COUNTY, KENYA

^{1*}Andrew Joseph Munyalo

Postgraduate Student, Kenyatta University, Kenya

Dr. Charity Njoka (PhD)

Lecturer, Department of Accounting and Finance, Kenyatta University, Kenya

Email of corresponding author: amunyalo@yahoo.com

Publication Date: March, 2022

Abstract

Purpose of the Study: This study sought to establish the relationship between principals' financial management capabilities and financial health of public secondary schools in Nyeri County. The study objectives were to determine the relationship of principals' accounting and bookkeeping capabilities on financial health of public secondary schools, establish the relationship of principals' budgeting capabilities on financial health of public secondary schools and assess the relationship of principals' auditing capabilities on financial health of public secondary schools.

Methodology: This research applied the causal research design. Principals of public secondary schools in Nyeri County were targeted. Slovin's formula was used to calculate a sample of 140 principals. For the purposes of data collection, questionnaires were used. Regression was used to establish the effect of principals' financial management capabilities on financial health of public secondary schools in Nyeri County.

Results: The vast majority (96.2%) of the respondents had undertaken the KEMI diploma course. Majority (63%) of respondents had high accounting and bookkeeping capabilities. Majority (69%) indicated that there was strict adherence to budget plans in the school. There was a strong positive correlation between principals' financial management capabilities and financial health of public secondary schools. Evidence shows that 67.9% of financial health of public secondary schools in Nyeri County can be attributed to principals' financial management capabilities. Accounting capabilities ($p=0.031$) and budgeting capabilities ($p=0.000$) were statistically significant.

Conclusion: The study concluded that principals' financial management capabilities have a strong and positive influence on financial health of public secondary schools in Nyeri County.

Recommendations: The study recommended that secondary school principals should involve board of management in scrutinizing budget draft to enable better decision making.

Keywords: *Financial management capabilities, financial health, budgeting capabilities, bookkeeping capabilities and auditing capabilities.*

INTRODUCTION

School principals use the institution's financial assets with the aim of maximizing the students' results. This expects them to assume liability for planning and monetary arrangement, focusing on accessible cash adequately and effectively seeking after elective wellsprings of financing. (Australian Council for Educational Research, 2018). Unfortunately, many scholars have observed that principals are unable to effectively perform their financial management responsibilities creditably. Mutua, Chiriswa and Thinguri (2014) indicated that the basic courses in Kenya like Bachelor of Education do not prepare teachers adequately to become principals who can manage educational institutions professionally and especially the financial management aspect.

In the United States of America, workshops intended to enable principals to distinguish specialized aptitude inside the locale in such territories as law, planning, book keeping, utilization of finances are conducted. What's more, preparing incorporates workshops on compelling strategies for working with staff, including listening abilities, giving data, and participatory basic leadership. (Hernández & Martínez, 2016). The New Vision programme was made in the United Kingdom to in the first three years of school leadership, meet management's leadership growth needs (Aiello & Watson, 2010). The Ministry of Education in China implements the National Training Program for Primary and Secondary School Principals. This strategy is designed to provide leaders with the skills necessary to reform and to act as templates for other leaders (Jiang *et al.*, 2018).

In Nigeria, Ayeni (2010) noted that head teachers' financial performance is assessed every year to decide if they have the potential for three distinctive vocation ways. These are; three years' instructing, and three profession ways separately as ace instructor, authority in educational program and a research or school pioneer. Mathibe (2015) takes note that in South Africa, not as like the UK and USA, whereby any instructor can be designated to work as principal. They have independent ways of managing schools. Schools in Tanzania and Uganda, have professional development training content, materials and trainees acquire characteristics that are dynamic and in tandem with staff professional development. The training also makes them acquire skills necessary to improve service delivery (Onunga & Akumba, 2018).

The management of school funds according to The Basic Education Act 2013 is the responsibility of the school principal who becomes the chief accounting officer in the

institution The principals' primary monetary administration obligations are planning of school spending, acquisition of products and ventures, controlling livelihoods, bookkeeping and preparation of budget summaries. (Mgandi, Mathuva & Egondi, 2017). It is imperative that state funded school principals need the ability, information and suitable frames of mind that are required so as to guarantee prudent asset management (Ntseto, 2009).

Kenya Education Management Institute (KEMI) was found in 1982 to enhance the capacity of stakeholders in the education sector. Specifically, KEMI was developed to better the skills and knowledge of heads of schools and teachers (Musembi, 2016). It is a public development institute that is managed by the Ministry of Education. It was established in 1981 by the Kenyan government. The institution is required to conduct management preparation, study and consulting services in accordance with Legal Notice 19/2010 of the Education Act (Kenya Education Management Institute, 2014). KEMI offers certificates and diplomas in principles of management, financial management and resource management among others to principals equipping them with appropriate management skills (KEMI, 2014). The diploma programme has been designed to enable education managers to acquire the necessary knowledge and skills for efficient and effective management of education services. This study therefore sought to assess the relationship of principals' financial management capabilities and financial health of Public Secondary Schools in Nyeri County, Kenya.

Public Secondary Schools in Kenya

In 1963, there were only 151 secondary schools in Kenya with a total population of 30,120 students. Today the number of public secondary schools is slightly above 9000 with a total student population of 1.6 million (Ministry of Education, Science and Technology (MOEST), 2018). Public secondary schools are categorized as follows: National schools, Extra county schools, County schools and Sub- county schools Some schools are day and others boarding: Teachers teaching in these schools are mainly employed by teachers service commission although due to teachers shortage there are some that are engaged by board of management (Otieno, 2013). The number of teachers is about 120, 000 (MOEST, 2018). The minimum qualification of a secondary school teacher is a diploma in education from a recognized college or university.

Public secondary schools in Kenya receive considerable funds starting with distinctive wellsprings for example, the free day secondary education funds (FDSE), bursary schemes and school fees. Furthermore infrastructural change which necessitated correct use of the funds for

training managers as changed the situation (Otieno, 2013). Furthermore in 2008, donors and the Kenya government paid a total of Ksh. 28. 3 billion for infrastructure in schools. Facts demonstrate that up to 60% of these funds have been mismanaged which means there is poor auditing of school funds. The Ethics and Anti-Corruption Commission (EACC) (2016) reports that Head teachers and school boards misuse education cash during travel abroad, sitting payments and other things that are sporadic. The study also states that they exaggerate registrations to raise more revenue, which they then depend on for personal purposes.

Financial Health of Public Secondary Schools

Financial health is a term used to describe the state of an entity's financial situation. According to Rafiei, Manzari and Bostanian (2011), it is a way in which to measure the overall financial aspect of an individual or an institution that includes the amount of assets they own and how much income they must pay out to cover regular and other expenses. Financial health is frequently used to depict a wide range of sorts of appraisals and examination, however at its center, money related wellbeing means assessing an organization's fiscal summaries (Klieštík, Kočíšová & Mišanková, 2015). Schools do experience difficulties in such manner. The principle contributory factor is by all accounts to a great extent credited to the absence of ability to execute money related responsibility works as showed in planning, bookkeeping and announcing capacities (Xaba & Ngubane., 2010).

A budget is an arrangement quantified in fiscal terms; arranged furthermore to sanction an action with a characterized period of time. As a rule it indicates arranged money to be created and used/incurred throughout that period (Kahavizakiriz, Walela & Kukubo, 2015). Planning is the procedure of claiming allocated limited assets of the prioritized necessities for an association. It will upgrade productive asset usage done in schools through rationing. Furthermore budgetary control policies must be set up. In addition, careful budgeting as a realistic bridge between planning and evaluation is essential for effective planning and evaluation (Oboegbulem & Kalu, 2015). Allotment of state funded subsidizes for a school is guaranteed towards adopting a plan that incorporates all assessed incomes and suggested uses for a 12-month monetary year. Mncube and Makhasane (2013) suggest that adequate capacity building on financial management is not given to most school principal which cripples them in carrying out budget task.

In South Africa, the heads of department (HoDs) as bookkeeping officials for the common divisions of instruction, ordinarily endorse through fliers to the principal and SGBs how the

State's asset portion for schools ought to be spent. The schools are committed to spend State assets, administration and fixes support of schools (Mestry, 2013). Kenyan schools are presented with ecclesiastical rules on the vote heads and allotment of assets. Be that as it may, schools are at freedom to think on school needs, organize them and deal with the assets as indicated by the law governing income and expenditure. Schools compose and deal with their assets as indicated by the number of inhabitants in understudies, framework, initiative and staffing. Likewise, they use independence and investment in co-curricular activities (Wagithunu, Muthee & Thinguri, 2014).

STATEMENT OF THE PROBLEM

Secondary School Principals ought to be properly prepared and equipped with the necessary institutional and financial management skills to enable them manage schools more effectively and efficiently and also increase the level of accountability (Kenei, 2016). In cognisance of this, the ministry of education came up with a training program under KEMI to empower principals in financial management (MOEST, 2018). Although KEMI offers to capacity build principals, it has stopped this course and it is possible to find the newly appointed principals who have not been trained (Indiazi, 2018). In addition the KEMI diploma emphasizes more on administration functions and very little is taught on financial management. This leaves principals with scanty skills on financial management and this makes them depend heavily on freelance Bursars and Accounts clerks.

Despite attempts to improve managerial ability by the Ministry of Education, Kenyan secondary schools are concerned about financial management ability. Mogire (2013) found that deficit budgeting is a significant problem in schools and that, if not adequately handled, school administrators find it impossible to deliver timely and high quality programs regularly. Beyers and Mohloana (2015) claim that school leaders are often not mindful of their financial and transparency obligations. In Nyeri County, the county schools Auditor (2015-2018) reports indicated that there was widespread deficit on important vote heads such as tuition and boarding. Most schools had cash books that were not updated on daily basis as the affected schools use the services of freelance bursars and accounts clerks. Similarly the monthly trial balances were lacking. Fees registers were not being updated on regular basis. Ledgers had not been kept in most schools. There was widespread non-payment of suppliers and several schools have been sued over non-payment of dues. It is evident that there are inherent concerns affecting schools that need to be addressed.

Despite the importance of principals' financial capabilities and good financial health of schools, the relationship between these two aspects is under researched. Majority of available studies were descriptive and do not compare financial management practices with any outcome variable. Those that were analytical related financial management practices with academic outcomes of schools. Since financial management and expertise play an important role to improve education and improve successful decision-making at all school governance levels, this study sought to establish the relationship of principals' financial management capabilities and financial health of public secondary schools in Nyeri county.

RESEARCH OBJECTIVES

The following were the objectives of the study:

- i. To determine the relationship of principals' accounting and bookkeeping capabilities on financial health of public secondary schools in Nyeri County, Kenya.
- ii. To establish the relationship of principals' budgeting capabilities on financial health of public secondary schools in Nyeri County, Kenya.
- iii. To assess the relationship of principals' auditing capabilities on financial health of public secondary schools in Nyeri County, Kenya.

LITERATURE REVIEW

Principals' Accounting and Bookkeeping Capabilities and Financial Health of Public Secondary Schools

Accounting is concerned with distinguishing monetary data, communicating the data in numeric terms and conveying this data to invested individuals (Oboegbulem & Kalu, 2015). Book keeping is the art of entering transactions in relevant books of accounts. All accounting transactions are journalized and then posted to relevant ledger accounts using the double entry system (Otieno & Nyangechi, 2013). Accounting gives the information that enables the management to make the important decisions for the organization. Identified with planning may be the bookkeeping framework. Bookkeeping may be worried for recognizing money related information, expressing the majority of the data over numeric terms also conveying this majority of the data to the intrigued gatherings (Oboegbulem & Kalu, 2015). Book keeping will be the symbolization of entering transactions to applicable books about accounts. Know accounting transactions are journalized et cetera presented in pertinent record accounts utilizing the twofold passage framework (Otieno & Nyangechi, 2013). Bookkeeping provides for the

majority of the data that empowers the administration to settle on the paramount choices for the school. There will be one school manager who will do legitimate money related bookkeeping, demonstrating best possible records. However, Kamau (2012) reported that when the head teachers make budgets and aim to implement them, the accounts are severely impeded. Musembi (2016) noted that directors' financial management practices are highly dependent on the successful execution of the KEMI training course. Atieno (2013) also established that on the job training of head teachers' had an influence on their management of finances in secondary schools. Origa (2013) has determined that management preparation, education level, managerial skills, support groups and the available funds have an effect on the financial management of head teachers at public elementary schools in the Municipality of Kisumu.

Matshika (2014) found that 91% of schools have cash registers, 67 have a small register, 84% have a deposit register and 24% have a liability register. The percentage of those who keep a commitment record is alarming given its usefulness in monitoring and maintaining a school budget. The non-appearance of a commitment register in most schools is evidence that schools don't control and monitor their financial plan/budget. The vast majority of the members in Mpolokeng (2011) concurred that as principals and bookkeeping officials, together with the fund advisory group (as a component of the SGB) manage the budgetary records of the school. Different members concurred with the aforementioned, however, also included different gatherings. These different gatherings incorporate the monetary assistant, a clerk, account advisory group, the School Management and Governance Developer (SMGD) and autonomous evaluators.

Principals' Budgeting Capabilities and Financial Health of Public Secondary Schools

A South African study by Matshika (2014) found that the majority (84%) of respondents appeared to follow the budgetary procedures outlined in SASA. However, after further analysis of the data, it becomes clear that several principals lack the abilities, skills and knowledge to manage the finances of the school effectively and efficiently. A Nigerian study by Aliyu (2018) discovered that principals utilize the accompanying practices in setting up the school spending plan: stock taking and market study is made before spending arrangement, a surplus spending plan is normally embraced, all frivolous reserve produced inside the school is engaged with spending plans, staff pay rates are suited in the financial limit, the expense of executing instructive projects are deliberately considered, principals work together with heads of division for budgetary plans, principals are called upon to protect their spending proposition before

endorsement and the monetary allowance needs to go through the bookkeeper general of the state who produces the warrant and gets ready command and sends to the bank.

Ikegbusi (2016) tried to discover the budgetary administration aptitudes that auxiliary school principals could receive for compelling organization of schools. From the outcomes, it was the assessment of the principals that organizing monetary designation as per needs, guaranteeing that spending limits imitate concurred objectives and targets, appointing the system of budgetary issues to fit staff, keeping close scrutiny of money related issues assigned to staff, working inside the imperatives of the school spending plan, arranging and sourcing for assets for school advancement, keeping exact monetary data about the school and giving time and reasonable perspective on monetary position of the school are monetary administration aptitudes required by principals for viable auxiliary school organization.

Wairima and Nasieka (2019) looked to discover the elements influencing budgetary administration adequacy in schools in Kenya and to give useful proposals to improving the viability of the schools money related administration framework. The study showed that financial expertise has a statistically positive impact on financial management performance at the Gatanga sub-county public high schools and that the financial management effectiveness is also efficient in the financial management of public secondary schools. Given the favourable association and substantial influence between budget control and financial management effectiveness in the Gatanga sub-county public secondary schools, it was concluded that budget control has a statistically important positive impact on the effectiveness of financial management in the Gatanga sub-county. The causal impact interaction ensures that administrators will maximize the performance of their schools' financial management by improved budget controls to ensure that all project expenses conform to the previous budgets.

Principals' Auditing Capabilities and Financial Health of Public Secondary Schools

Kiyondi (2016) discovered that review arranging has a positive noteworthy impact on the board of funds, review lead has a positive critical association with the executives of accounts, review announcing has an irrelevant association with the executives of funds in Secondary schools and that review follow-up has a positive and huge commitment to the administration of accounts in Secondary schools. It was reasoned that administration of funds in schools is poor in light of the fact that inspecting practices are not broadly connected to the administration of schools.

A research conducted by Mukundi (2012) showed that the headmasters of high schools had audit financial management issues in their schools. In another study, Kenei (2016) showed 99% of the Head Instructors seem not send their books to the evaluator for review. One percent of the head instructors made an endeavor of showing their books of accounts for review. They contend that they had no competence of planning them and so they were dreading victimization in the event that their case was not substantial.

Since schools are public institution, their collecting and spending of cash must be evaluated and examined on a yearly basis and on an as-required premise, as dictated by the overseeing body. Kiyondi (2016) reports that administration of accounts in schools is poor in light of the fact that examining practices are not broadly connected by the administration of schools. Matshika (2014) found that most schools (95%) are audited once a year. There were six schools whose financial books had been audited half-yearly. A large portion of members in Mpolokeng (2011) referenced that an account advisory group (as sub-council of the SGB) is set up at their schools and that this board of trustees carefully sticks to the right execution of the financial limit. The reviewers help where vulnerabilities emerge. A large portion of the members expressed that reports on receipt books, store ledgers, fees registers, counterfoils and cheque books must be made quarterly to the SGB. The schools have external evaluators who check the school budgetary records every year to ensure the right bookkeeping system is adhered to. These techniques add to straightforwardness and responsibility. A portion of these members likewise demonstrated that they need to pick up information of how to review the accounts of the school inside before sending it to the outer evaluators. It was likewise shown that they need to realize how to decipher reports that are composed by outer examiners.

RESEARCH METHODOLOGY

Research Design

This study applied the causal research design. Causal analysis can be described as an investigative approach for determining the relationship between cause and effect between two variables (Samii, 2016). It is chosen because it contributes to the identification of the causes of systems processes. The advantage of replication is also provided if it is required. Using this design, the study assessed the how book keeping, budgeting, accounting, auditing and financial reporting capabilities of principals cause financial health of secondary schools.

The target audience refers to all people from a genuine or theoretical set-up of people or opportunities or papers to be produced by a scientist (Burns, 2010). The study targets principals of public secondary schools in Nyeri County. There were 216 public secondary schools in Nyeri County as shown in Table 1.

Table 1: Target population

Category of schools	Number
National	3
Extra-county	19
County	18
Sub-county	176
Total	216

Source: MOEST (2019)

Sampling Procedure

Sample size determination was conducted using Slovin's formula. Slovin's formula enables an analyst to test the populace with an ideal level of precision. It gives the specialist a thought of how enormous his sample size should be to guarantee a sensible precision of results.

$n = N / (1 + N e^2)$ where “n” represents the sample size, “N” represents the population while *e* is the margin of error =0.05

Therefore in a population of 216 schools,

$$n=216/ (1+216*0.05^2) =140.26$$

The study used a sample of 140 public secondary schools in Nyeri County

Stratified random sampling is used to distribute the sample size across the different tiers of secondary schools. Stratified sampling is a probability examining technique and a type of arbitrary inspecting in which the populace is partitioned into at least two gatherings (strata) as indicated by at least one normal qualities (Khan, Reddy & Rao, 2015). This method is preferred because it increases precision and representativeness without increasing sample size. In this study, principals are stratified according to the category of school as shown in Table 2. The sample size is distributed across the various school categories based on the relative total number of schools in that category so that the sample is representative.

Table 2: Sampling Frame

Category of schools	Number	Sample
National	3	2

Extra-county	19	12
County	18	12
Sub-county	176	114
Total	216	140

Source: Researcher (2019)

The study therefore has a sample of 140 respondents drawn from 2 National schools, 12 extra county schools, 12 county schools and 114 sub county schools.

Data analysis

Data analysis refers to the way toward requesting, organizing and offering importance to the gathered information (Mugenda & Mugenda, 2010). Collected information was altered to guarantee precision and fulfillment and after that was coded and scored. Descriptive statistics which include percentages and mean enabled the study determine the financial health of public secondary schools in the study, principals’ accounting and bookkeeping capabilities, principals’ budgeting capabilities and principals’ auditing capabilities. Regression was used to establish the relationship of principals’ financial management capabilities on financial health of public secondary schools in Nyeri County using the model below

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where:

Y = Financial Health of public secondary schools

β_0 = Constant

$\beta_1 - \beta_4$ = Beta values

X_1 = Principals’ accounting and bookkeeping capabilities

X_2 = Principals’ Budgeting Capabilities

X_3 = Principals’ Auditing Capabilities

e = Error term

RESEARCH FINDINGS AND DISCUSSIONS

Response Rate

A total of 133 questionnaires were returned which were fit for analysis. This represents a response rate of 95% as shown in Table 3. This rate is considered sufficient to legitimize

speculation of the results to the study population because it is well over the 70% prescribed by Mugenda and Mugenda (2010).

Table 3: Response Rate

Category of schools	Questionnaires distributed	Questionnaires returned	Response rate (%)
National	2	1	50.0
Extra-county	12	11	91.7
County	12	12	100.0
Sub-county	114	109	95.6
Total	140	133	95.0

Source: Researcher (2021)

Reliability Test

Results in Table 4 show that all the variables achieved a Cronbach alpha coefficient of 0.7 and above. This means that the questionnaire has adequate levels of internal consistency as all the variables achieved a Cronbach alpha coefficient of 0.7 and above as recommended by Saunders et al. (2009).

Table0: Reliability Test Results

Variable	Number of items	Cronbach alpha
Accounting and bookkeeping capabilities	7	0.83
Budgeting capabilities	10	0.77
Auditing capabilities	8	0.80
Financial health	15	0.79
Total	40	0.79

Source: Researcher (2021)

Characteristics of Participating Schools and Respondents

Characteristics of Participating Schools

The study collected data to describe the participating schools. This included the type of school in terms of categorisation, gender and whether day or boarding. The results are presented in Table 5.

Table 5: Characteristics of Participating Schools

Characteristic (Type of school)	Categories	Frequency (n=133)	Percent (%)
Level	National	1	0.8
	Extra-county	11	8.3
	County	12	9.0
	Sub-county	109	82.0
Gender of students	Boys	68	51.1
	Girls	30	22.6
	Mixed	35	26.3
Day/Boarding	Day	55	41.4
	Boarding	78	58.6

Source: Researcher (2021)

The vast majority 82% (n=109) were sub county schools. Results in Table 4.6 show that slightly above half 51.1% (n=68) of the schools were boys schools while 26.3% (n=35) were girls' schools. The findings also show that slightly above half 58.6% (n=78) of the schools in the study were boarding schools. These findings therefore show that there was ample variety in the characteristics of the participating schools which justifies the generalization of the study findings.

Socio-Demographic Characteristics of Respondents

Table 6: Socio-Demographic Characteristics of Respondents

Characteristic	Category	Frequency (n)	Percent (%)
Gender	Male	99	74.4
	Female	34	25.6
Age (years)	41-50	87	65.4
	51-60	46	34.6
Education	Bachelor's degree	72	54.1
	Master's degree	59	44.4
	PhD	2	1.5
Working experience (years)	<3	10	7.5
	3-8	14	10.5
	9-14	56	42.1
	15-20	33	24.8
	>20	20	15.0

Source: Researcher (2021)

Results in Table 6 show that the majority 74.4% (n=99) of the respondents were male. This maybe from the high number of boys' schools compared to girls' schools in the study area. Majority 65.4% (n=87) of the respondents were aged between 41 and 50 years while the rest

34.6 be% (n=46) were aged between 51 and 60 years. The mean age for the study sample was 47 years. This shows that most of the study respondents were middle aged.

On education, the results show that all 100% (n=133) the respondents had acquired higher education with 54.1% (n=72) having acquired a bachelor’s degree while 44.4% (n=59) having acquired a master’s degree. This therefore shows that there was a high education attainment among respondents in this study. It means that respondents in the study could understand the study questions and respond appropriately. The results show that slightly less than half 42.1% (n=56) had a working experience of between 9 and 14 years while 24.8% (n=33) had a working experience of between 15 and 20 years. This shows that the respondents in the investigation had gained sufficient working experience to empower them react ingeniously to the examination questions. This can be attributed to the many years of experience required before one can be appointed a principal.

Principals’ Accounting and Bookkeeping Capabilities

The study collected data on the principals’ accounting and bookkeeping capabilities. This would enable the study determine the relationship of principals’ accounting and bookkeeping capabilities on financial health of public secondary schools in Nyeri County. The results are presented in this section.

Professional Qualification in Accounting and Book Keeping

Respondents in the study were asked to indicate whether they had undertaken an accounting course. The results are presented in Table 7

Table 7 Professional Qualification in Accounting and Book Keeping

	Yes		No	
	n	%	n	%
Undertook KEMI course	128	96.2	5	3.8
Completed KEMI course	125	94.0	8	6.0
Has professional qualification in accounting and book keeping	18	13.5	115	86.4

Source: Researcher (2021)

The findings show that the vast majority 96.2% (n=128) of the respondents had undertaken a KEMI diploma course. The findings show that the vast majority 94% (n=125) of those who had undertaken the course had completed the course successfully. However, majority of the principals did not have a professional qualification in accounting and book keeping.

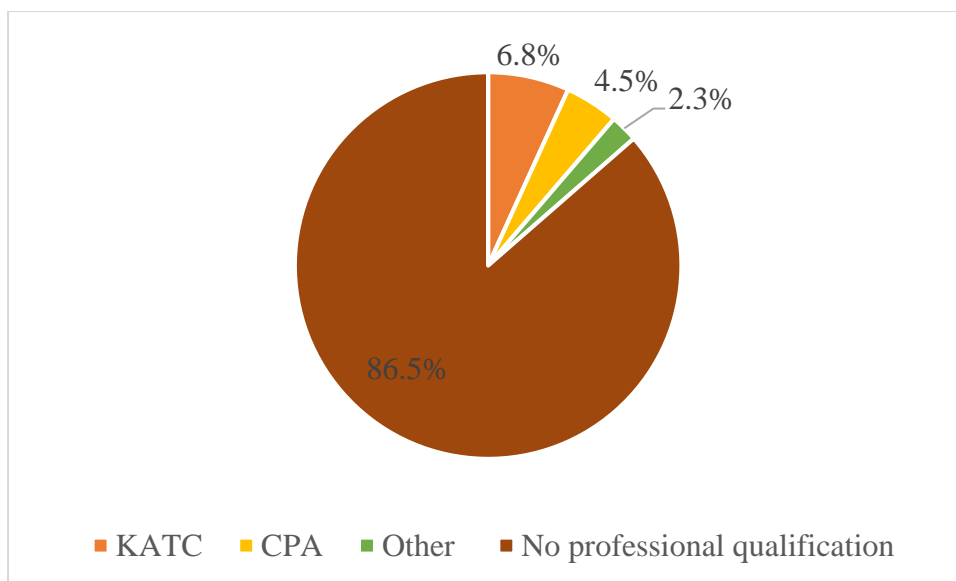


Figure 1 Principals' Professional Qualification in Accounting and Book Keeping

Source: Researcher (2021)

Results show that the vast majority 86.5% (n=115) had no professional qualification in accounting and book keeping. Out of those who had a professional qualification, 6.8% (n=9) had KATC while 4.5% (n=6) had CPA. This finding concurs with findings of Musembi (2016) that financial management practice of principals in schools was heavily dependent on the successful undertaking of the KEMI training course. Atieno (2013) also established that head teachers on the job training influenced their management of finances in secondary schools. Origa (2013) established that exposure to management training, level of education, administrative experience, professional support groups and availability of funds influenced management of school funds.

Accounting and Bookkeeping Practices

The study assessed principal's accounting and budgeting practices in order to establish their capabilities.

Table 8 Accounting and Bookkeeping Practices

	Large extent	Great extent	Moderate extent	Small extent	Not at all
Able to interpret the contents of a payment voucher when I am signing	58%	30%	0%	12%	0%
Able to interpret the contents of a trial balance when I am signing	53%	41%	2%	4%	0%
I am able to understand why the cash book balance and cash at bank balance differ (bank reconciliation statement)	55%	41%	0%	4%	0%
I am able to interpret the contents of a balance sheet	63%	37%	0%	0%	0%
To what extent are cash payments signed for by the recipients?	58%	31%	0%	31%	0%
How often do you sign a blank cheque?	76%	24%	0%	0%	0%
I feel that I need more training on accounting and book keeping	33%	30%	8%	20%	9%

Source: Researcher (2021)

Slightly above half (58%) of respondents were able to interpret the contents of a payment voucher when signing to a large extent. Majority (53%) of respondents were able to interpret the contents of a trial balance when signing to a great extent. Results show that majority (55%) of respondents were able to understand why the cash book balance and cash at bank balance differ (bank reconciliation statement) to large extent. Majority (63%) of respondents also indicated that they were able to interpret the contents of a balance sheet to a large extent. Slightly above half (58%) of respondents indicated that cash payments signed for by the recipients to a large extent. The vast majority (76%) of respondents indicated that they signed a blank cheque to a large extent. In addition, majority (63%) of the respondents felt that they needed more training on accounting and book keeping to a great extent.

The vast majority of the respondents therefore agreed to a large extent to the items tested. It therefore shows that majority of respondents had high accounting and bookkeeping capabilities. This lends support to the results of Ndambuki (2016) who found that directors knew about the procedures for maintaining books. They followed the accounting protocol and guaranteed a solid system of transparency. However, the results are different from those seen in Mukundi (2012) where secondary school directors had financial reporting issues in their schools with regard to accounting.

Principals’ Budgeting Practices

The study assessed principals budgeting practices in order to establish their capabilities. This would enable the study establish the relationship of principals’ budgeting capabilities on financial health of public secondary schools in Nyeri County.

Table 9: Principals’ Budgeting Capabilities

	Large extent	Great extent	Moderate extent	Small extent	Not at all
I involve HODs in preparing the school budget	37%	54%	5%	4%	0%
The first budget draft is prepared by the school bursar	53%	18%	8%	17%	4%
How often do you involve the BOM executive in scrutinizing budget draft?	26%	18%	56%	0%	0%
How rarely does the BOM executive amend the budget draft?	57%	34%	4%	5%	0%
How often does the full board of management adopt the fair budget draft?	59%	17%	11%	12%	1%
Sometimes it is possible to find items not budgeted for featuring in the expenditure	23%	67%	10%	0%	0%
What is the frequency of virement in your institution?	25%	51%	9%	8%	7%
How often is the reviewing of the previous budget done?	19%	57%	15%	2%	7%
There is strict adherence to budget plans in the school	69%	13%	7%	8%	3%
I feel I need more training	61%	25%	14%	0%	0%

Source: Researcher (2021)

Majority (54%) of principals indicated that they involved their HODs in preparing the school budget to a great extent. Majority (53%) indicated that the first budget draft is prepared by the school bursar. Majority (56%) of the respondents also indicated they involved the BOM executive in scrutinizing budget draft to a moderate extent.

Slightly above half (57%) of the respondents opined that the BOM executive amend the budget draft to a large extent. Slightly above half (59%) also said that the full board of management adopt the fair budget draft. Majority (67%) indicated that it is possible to find items not budgeted for featuring in the expenditure to a great extent. Majority (51%) indicated that the frequency of virement in their institution was to a great extent. The findings show that majority (57%) indicated that reviewing of the previous budget was done to a great extent. Majority

(69%) indicated that there was strict adherence to budget plans in the school. The vast majority (61%) of respondents felt that they needed more training on budgeting.

Majority of the respondents therefore appeared to agree to the statements put to them to a large extent. This shows that respondents had good budgeting practices therefore high budgeting capabilities. This finding is consistent with findings of Matshika (2014) found that most (84%) of the respondents seem to follow budgeting processes. Kahavizakiriza et al. (2015) that it was evident that schools did not involve all the people in the school system in budget building. This discovery, however, differs from the conclusion of Mukundi (2012), which concluded that school principals had not received professional training in budgeting and accounting and that the two-week introduction course of KESI was insufficient to train management staff in budgeting and accounting.

School Records

The study also looked at school financial records kept by the respondents.

Table 10: School Records

Record	Yes		No	
	n	%	n	%
Farm records	120	90.2	13	9.8
A file for operation account payment vouchers	128	96.2	5	3.8
A file for tuition account payment vouchers	126	94.7	7	5.3
A file for boarding/lunch account payment vouchers	121	91.0	12	9.0
A list of school creditors	124	93.2	9	6.8
A file for school debtors	125	94.0	8	6.0
A file for school financial accounts	130	97.7	3	2.3
A file for trial balances	126	94.7	7	5.3

Source: Researcher (2021)

Majority 90.2% (n=120) indicated that they kept farm records. The vast majority 96.2% (n=128), 94.7% (n=126), and 91% (n=121) indicated that they kept files for operation account payment vouchers, tuition account payment vouchers and boarding/lunch account payment vouchers respectively. The findings show that majority 93.2% (n=124) kept a list of school creditors while 94% (n=125) kept a file for school debtors. A file for school financial accounts and a file for trial balances were kept by majority 97.7% (n=130), 94.7% (n=126) of the respondents respectively. These findings therefore show that respondents in the study had good record keeping practices. The conclusions from a report by Nyanyuki et al. (2014) are consistent, which found that satisfactory accounts have often been preserved and modified at public secondary schools. Hansraj (2017) also found that the interviewees suggested the

preservation of strict paperwork and documents, the different stakeholders receive constant reports (parents, educators, governing body). The conclusion was, however, in contradiction to Mpolokeng's findings (2011) which found that the financial reports of schools are overseen by the directors and accountants, along with the finance Committee (SGB).

Principals’ Auditing Capabilities

The study also assessed principal’s auditing practices in order to establish their capabilities. This would enable the study establish the relationship of principals’ auditing capabilities on financial health of public secondary schools in Nyeri County.

Table 11: Principals’ Auditing Capabilities

	Large extent	Great extent	Moderate extent	Small extent	Not at all
I am aware of audit records and requirements by the auditor	2%	5%	53%	17%	23%
The county schools auditor’s recommendations are implemented	8%	5%	53%	23%	11%
I avail the records of audit to the school auditor	77%	11%	12%	0%	0%
I am able to interpret the auditor’s report	12%	9%	65%	11%	3%
How frequent do you discuss the audit report with the board of management?	1%	7%	59%	10%	23%
Do you keep a file of school’s audited accounts reports?	19%	63%	7%	9%	2%
How often do you address the grey areas identified by the school’s auditor in his/her report?	9%	63%	5%	9%	14%
I feel that I need more training on auditing	13%	79%	0%	5%	3%

Source: Researcher (2021)

Slightly above half (53%) of the respondents in the study stated that they are aware of audit records and requirements by the auditor. Similarly, 53% posited that county schools auditor’s recommendations were implemented to a moderate extent. A high number (77%) of participants in the study they availed the records of audit to the school auditor. Most (65%) however said that they were only able to interpret the auditor’s report to moderate extent. Similarly, 59% stated that they discussed the audit report with the board of management to moderate extent. Most (63%) retorted that they kept a file of school’s audited accounts reports to a great extent. An equal number (63%) of the said that they addressed the grey areas identified by the school’s auditor in his/her report to a moderate extent. The vast majority (79%)

indicated that they felt that they needed more training on auditing. The results above indicate that a high number of respondents concurred with the statements to a moderate extent. This suggests lack of adequate auditing capabilities. Similar to Kiyondi's results (2016), financial reporting of public secondary schools is weak since the audit procedures in school management are not generally implemented. It is likewise close to the results from Mukundi (2012) who found that high school directors had financial management issues with auditing in their schools. However, the finding differs with findings of Kenei (2016) who found that 99 percent of the head instructors were not able to show their books for review to the sub-county evaluator. One percent of the head instructors made an endeavor of showing their books of accounts for review.

Financial Health

The study also assessed the financial health of parctiaptng schools. This would enable the study establish the relationship of principals' financial management capabilities and financial health of public secondary schools in Nyeri County.

Table 12: Financial Health

	Large extent	Great extent	Moderate extent	Small extent	Not at all
How often are suppliers paid on time?	11%	7%	9%	51%	32%
Does your institution have accrued debts?	57%	20%	13%	7%	3%
Sometimes school leavers complete their course without paying school fees	63%	28%	9%	0%	0%
The payment of school workers' salaries is done timely	7%	13%	23%	57%	10%
The payment of school utilities is done on time	0%	7%	61%	33%	49%
There is recovery of school's bad debts	3%	9%	53%	54%	21%
During your term has the school been sued for non-payment of suppliers' dues?	61%	25%	9%	21%	4%
Have your ever closed the school before the official closing date due to financial constraints?	0%	0%	0%	97%	3%
How frequent does the school send learners home at the middle of the term to collect fees?	59%	23%	9%	9%	0%
How frequent have there been issues of students concerning services rendered to them?	65%	27%	3%	5%	0%
How frequent does the virement happen?	59%	19%	11%	23%	8%
How frequent do learners pay more fees than the ministry's threshold?	0%	0%	0%	95%	5%
How often does the income and expenditure statement exhibit a surplus?	0%	0%	0%	99%	1%
How often does the income and expenditure statement exhibit a deficit?	87%	10%	3%	0%	0%
How frequent does the institution hold/organize fundraisers?	61%	21%	9%	33%	6%

Source: Researcher (2021)

Slightly above half (51%) of the participants stated that suppliers are paid on time. According to the results, 57% indicated that their school had accrued debts. A slightly higher number (63%) indicated that school leavers complete their course without paying school fees. Slightly above half (57%) posited that the payment of school workers' salaries is done timely. A slightly higher number (61%) showed that the payment of school utilities is done on time. Just above half (53%) of the respondents retorted that there was recovery of school's bad debts. According

to 61% of the participants, during their term the school had been sued for non-payment of suppliers' dues. A very high number (97%) reported that they had ever closed the school before the official closing date due to financial constraints.

Slightly above half (59%) said that they send learners home at the middle of the term to collect fees. A slightly higher number (65%) reported that there have been issues of students concerning services rendered to them. Similarly, 59% indicated that virement happened. A very high number (95%) of study participants reported that learners pay more fees than the ministry's threshold. Similarly, a very high number (99%) study subjects indicated that income and expenditure statement exhibits a surplus. Majority (87%) stated that income and expenditure statement exhibits a deficit. Most (61%) also indicated that their institution held fundraisers.

The results above show that the financial health of participating schools was moderate. In line with Manei and Omagwa (2019) reports, a great many issues have been brought together in the most public secondary school fund management schemes, such as graft, maladministration, problems with rejected secondary certificates owing to non-existent deductions and parents charging the schools with balancing fake charges. Edmund and Lyamtane (2018) have found that the school leaders were inefficient and had low performance in handling the financial capital of schools. They should not comply with government procurement procedures and carry out payments in School funding at a satisfactory pace. This discovery by Matshika (2014) also showed that it is clear that several principals lack the abilities, skills and knowledge to manage the finances of a school effectively and efficiently.

Relationship of Principals' Financial Management Capabilities and Financial Health

To establish the relationship of principals' financial management capabilities and financial health of public secondary schools in Nyeri County, multiple regression analysis was conducted. Table 13 shows the model summary of the analysis.

Table 13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.824 ^a	.679	.575	.831

Source: Researcher (2021)

The model summary in Table 13 shows that there was a strong positive correlation ($r=0.824$) between principals' financial management capabilities and financial health. The r square value

of 0.679 means that 67.9% of financial health of public secondary schools in Nyeri County can be attributed to principals’ financial management capabilities. This finding therefore shows the importance of principals’ financial management capabilities on financial health of public secondary schools. These findings are in agreement with findings of Atieno (2013) who established that In-service training influences head teachers’ management of finances in secondary schools. Origa (2013) established that exposure to management training, level of education, administrative experience, professional support groups and availability of funds influence head teachers’ financial management practices.

Table 14 shows the analysis of variance (ANOVA) results.

Table 14 ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	55.911	3	18.637	27.005	.000 ^b
1 Residual	87.647	127	.690		
Total	143.557	130			

Source: Researcher (2021)

The ANOVA output in Table 14 shows that there is a significant effect [$F(3,127) = 27.005$, $p=0.000$] between financial management capabilities and financial health. This therefore shows that the model adopted is valid in predicting financial health of public secondary schools in Nyeri County. These findings are therefore consistent with findings of Atieno (2013), Origa (2013), Matshika (2014) and Musembi (2016) who found a significant association between financial management capabilities and financial performance of secondary schools. Table 15 shows the table of coefficients.

Table 15 Coefficients Table

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.331	.377		.877	.382
1 Accounting	.181	.083	.189	2.182	.031
Budgeting	.462	.082	.469	5.643	.000
Auditing	.100	.115	.068	.873	.384

Source: Researcher (2021)

The coefficients in Table 15 shows that accounting ($p=0.031$) and budgeting ($p=0.000$) were statistically significant. This shows that out of the financial management capabilities, accounting and budgeting capabilities are the most influencing. Therefore, the first (H_{01}) and

second (H_{02}) hypotheses are rejected. The study therefore concludes that there is a significant relationship between principals' accounting and bookkeeping capabilities and financial health of public secondary schools in Nyeri County. This concurs with the results of Ndambuki (2016) who found that directors knew about the procedures for maintaining books. They followed accounting and ensured a good system of governance. The study also concludes that there is a significant relationship between principals' budgeting capabilities and financial health of public secondary schools in Nyeri County. This finding is therefore consistent with findings of Mukundi (2012), Matshika (2014) and Kahavizakiriza et al. (2015) who found that principals' budgeting capacity is important for financial health of their school.

The beta values in Table 15 can be substituted in the new model as shown below.

$$Y = 0.331 + 0.181 X_1 + 0.462 X_2 + 0.1 X_3 + e$$

Where:

Y = Financial Health of public secondary schools,

X_1 = Principals' accounting and bookkeeping capabilities,

X_2 = Principals' Budgeting Capabilities,

X_3 = Principals' Auditing Capabilities and

e = Error term

The new model shows that without financial management capabilities, financial health of public secondary schools in Nyeri County would be 0.331. The new model shows that all the independent variables are positive which means that accounting and bookkeeping, budgeting and auditing promote financial health. Out of the capabilities investigated, the findings show that budgeting ($\beta = 0.462$) is the most influencing of the three variables followed by accounting ($\beta = 0.181$) and auditing ($\beta = 0.100$). This means that a unit change in budgeting capabilities yields a 0.462 change in financial health. This finding is therefore consistent with findings of Mukundi (2012), Matshika (2014) and Kahavizakiriza et al. (2015) who found that principals' budgeting capacity is important for financial health of their school.

SUMMARY OF FINDINGS

Principals' Accounting and Bookkeeping Capabilities and Financial Health of Public Secondary Schools

The study sought to determine the relationship of principals' accounting and bookkeeping capabilities and financial health of public secondary schools in Nyeri County. The findings show that the vast majority 96.2% (n=128) of the respondents had undertaken a KEMI diploma course. The findings show that the vast majority 94% (n=125) of those who had undertaken the course had completed the course successfully. Majority of respondents had high accounting and bookkeeping capabilities. Accounting ($p=0.031$) was statistically significant in the regression analysis. A unit change in accounting would produce a 0.181 change in financial health.

Principals' Budgeting Capabilities and Financial Health of Public Secondary Schools

The relationship of principals' budgeting capabilities and financial health was investigated. The findings show that reviewing of the previous budget was done to a great extent. Majority indicated that there was strict adherence to budget plans in the school. However, the vast majority of respondents felt that they needed more training on budgeting. Budgeting ($p=0.000$) was significant in the regression analysis. Budgeting capabilities would yield a 0.462 change in financial health with a unit change. Out of the capabilities investigated, the findings show that budgeting ($\beta =0.462$) was the most influencing of the three variables.

Principals' Auditing Capabilities and Financial Health of Public Secondary Schools

The relationship between principals' auditing capabilities and financial health of public secondary schools in Nyeri County was assessed. The vast majority of respondents indicated that they availed the records of audit to the school auditor. However, majority reported that they were only able to interpret the auditor's report. Similarly, most of the stated that they discussed the audit report with the board of management ($M=3.70$, $SD=1.168$). The average mean ($M=3.04$, $SD=1.223$) suggested lack of adequate auditing capabilities. Auditing ($p=0.384$) was not significant in the regression analysis. A unit change in auditing would only yield (0.100) in financial health.

Principals' financial management capabilities on financial health of public secondary schools

The relationship between principals' financial management capabilities and financial health of public secondary schools in Nyeri County was studied. The study found that there was a strong positive correlation ($r=0.824$) between principals' financial management capabilities and financial health. The r square value of 0.679 means that 67.9% of financial health of public secondary schools in Nyeri County can be attributed to principals' financial management capabilities. There was a significant effect [$F(3,127) = 27.005, p=0.000$] between financial management capabilities and financial health.

CONCLUSION

The study concluded that principals' accounting and bookkeeping capabilities are important in financial health of public secondary schools in Nyeri County. Principals in the study were found to have high accounting and bookkeeping capabilities. This is because they observed recommended procedures and kept necessary records and files. The principals were able to interpret accounting information and prepare simple trial balances. This enabled financial health of the school as the principal was in control of the school records. The principals' budgeting capabilities are vital for financial health of public secondary schools in Nyeri County. In fact, budgeting capabilities are the most important financial management capabilities. Principals in the study were able to participate in budget making and implementation. This enabled better financial health of the school as it enabled the school management to manage available funds more effectively and monitor performance. Principals' budgeting capabilities also enabled improve decision-making and ability to identify problems before they occurred.

The study also concluded that principals' auditing capabilities are not very important for financial health of public secondary schools in Nyeri County. This is because much of the auditing was done externally by the schools auditor and the principal's role was limited to reading the report and implementing the recommendations where necessary. However it was found that the school auditors' report was not often discussed with the board and the recommendations were seldom implemented.

RECOMMENDATIONS

Secondary school principals should involve BOM executive in scrutinizing budget draft to enable better decision making. The audit report from the auditor should also be discussed by board and the recommendations implemented to enhance financial health of the school. More educational institutions such as universities, Kenya Institute of Management and other colleges should be involved in providing short courses for principals and teachers in financial management.

REFERENCES

- Adebowale, M. O. F., & Osuji, S. N. (2016). *Record Keeping Practices of Primary School Teachers in Ondo State: Implications for Successful Implementation of the Universal Basic Education Programme in Nigeria*. Retrieved from <https://nau.edu/uploadedFiles/Academic/COE/About/Projects/Record Keeping Practices of Primary School Teachers in Ondo State.pdf>
- Aiello, M., & Watson, K. (2010). The Role of the Headteacher in Teachers' Continuing Professional Development. In *Teachers as Learners* (pp. 199–216). Dordrecht: Springer Netherlands. https://doi.org/10.1007/978-90-481-9676-0_10
- Akinfolarin, A. V. (2017). Analysis of principals' managerial competencies for effective management of school resources in secondary schools in Anambra State, Nigeria. *IJSSHE-International Journal of Social Sciences, Humanities and Education*, 1(4). Retrieved from <https://files.eric.ed.gov/fulltext/ED580924.pdf>
- Beyers, L. J. E., & Mohloana, T. (2015). Financial Management Capacity of Principals and School Governing Bodies in Lebowakgomo, Limpopo Province. *International Journal of Educational Sciences*, 9(3), 343–350. <https://doi.org/10.1080/09751122.2015.11890324>
- Deacon, J., Colditz, P., Van Rooyen, J., Mellet, S., Van der Merwe, J., Swemmer, D., & Van der Bergh, R. (2017). Financial Management in Public Schools: A practical guide to legislative compliance - Juta. Retrieved February 27, 2019, from <https://juta.co.za/print/catalog/Product/3305>
- Doussy, F., & Doussy, E. (2014). *Financial statements and the discharging of financial accountability of ordinary public schools in South Africa*. *Journal of Governance and Regulation* (Vol. 3). Retrieved from https://virtusinterpress.org/IMG/pdf/10-22495_jgr_v3_i4_p3.pdf
- Fitzgerald, S., & Drake, J. (2013). Responsibility for financial management in primary schools. *Management in Education*, 27(3), 96–105. <https://doi.org/10.1177/0892020613490501>
- Hernández, M. J., & Martínez, M. A. (2016). Bringing headteachers' voices to the professional development debate: A case study from Spain. *Journal of Research in International Education*, 15(1), 52–66. <https://doi.org/10.1177/1475240916635431>

- Indiazi, P. L. (2018). Challenges Influencing Head Teachers Training In Public Primary Schools in Lugari Sub County, Kenya. *European Journal of Education Studies*.
- Inganga, A. J. (2014). Evaluation of effectiveness of principal' s in-service training in financial management of public secondary schools in Butere sub-county , Kenya.
- Jabareen, Y. (2009). Building a conceptual framework: philosophy, definitions, and procedure. *International journal of qualitative methods*, 8(4), 49-62.
- Jiang, N., Sumintono, B., Perera, C. J., Harris, A., & Jones, M. S. (2018). Training preparation and the professional development of principals in Henan Province, China: formal and informal learning. *Asia Pacific Education Review*, 19(1), 41–51. <https://doi.org/10.1007/s12564-017-9513-6>
- Kabue, L. W., & Kilika, J. M. (2016). *Journal of management and strategy*. Sciedu Press. Retrieved from <https://ir-library.ku.ac.ke/handle/123456789/17866>
- Kahavizakiriz, R., Walela, K. B., & kukubo, D. wanyonyi. (2015). Financial Management In Public Secondary Schools In Kenya A Case Study Of Lurambi Sub-County Kakamega County. *International journal of scientific & technology research*, 4(9). Retrieved from <https://www.ingentaconnect.com/content/doaj/22778616/2015/00000004/00000008/art00624?crawler=true>
- Kamau, K. W. (2012). Financial management practices in Kenya secondary schools : problems and issues. Retrieved from <https://ir-library.ku.ac.ke/handle/123456789/5039>
- Khan, M. G. M., Reddy, K. G., & Rao, D. K. (2015). Designing stratified sampling in economic and business surveys. *Journal of Applied Statistics*, 42(10), 2080–2099. <https://doi.org/10.1080/02664763.2015.1018674>
- Kiyondi, N. O. (2016). Influence of auditing practices on management of finances in public secondary schools. A case of Kisii South sub-County, Kenya. Retrieved from <http://ir.jooust.ac.ke/handle/123456789/294>
- Liu, T., Ullah, B., Wei, Z., & Xu, L. C. (2017). The Dark Side of Transparency in Developing Countries: The Link between Financial Reporting Practices and Corruption. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2905078>
- Madhani, P. M. (2009). Resource Based View (RBV) of Competitive Advantages: Importance, Issues and Implications. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1504379

- Mestry, R. (2013). A critical analysis of legislation on the financial management of public schools: A South African perspective. *De Jure*, 46(1), 162–177. Retrieved from http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S222571602013000100010
- Mestry, R. (2014). *Financial accountability: the principal or the school governing body? South African Journal of Education Copyright ©* (Vol. 24). Retrieved from <https://www.ajol.info/index.php/saje/article/viewFile/24977/20661>
- Mgandi, E. N., Mathuva, E., & Egondi, P. (2017). Factors influencing principal's financial management capability in public secondary schools in Kaloleni and Rabai Sub-Counties, Kilifi County. *International Journal of Scientific Research and Innovative Technology* (Vol. 4). Retrieved from https://www.ijssrit.com/uploaded_all_files/3080116908_u2.pdf
- Miriti, J. M., & Moses, N. W. (2014). *Financial Management: Training Needs of Public Secondary School Principals in Machakos County, Kenya* (Vol. 4). Retrieved from www.iiste.org
- Mncube, V. S., & Makhasane, S. (2013). The dynamics and intricacy of budgeting in secondary schools in Lesotho: Case studies of three high schools. *Africa Education Review*, 10(2), 347–363. <https://doi.org/10.1080/18146627.2013.810903>
- Mukundi, J. W. (2012). The role of secondary school principal in the management of school finances: the case of Olkalou Division, Nyandarua District. Retrieved from <http://ir-library.ku.ac.ke/handle/123456789/2500?show=full>
- Mutua, V. M. M., Chiriswa, A. P., & Thinguri, R. (2014). *Journal of Education and Practice* www.iiste.org ISSN. *Journal of Education and Practice*, 5(23). Retrieved from www.iiste.org
- Njeru, J. W. (2004). Financial management practices of the head teachers in public secondary schools in Central division, Embu district, Kenya. Retrieved from <http://erepository.uonbi.ac.ke/handle/11295/18453>
- Oboegbulem, A. I., & Kalu, F. A. (2013). *Journal of Education and Practice* www.iiste.org ISSN (Vol. 4). Online. Retrieved from www.iiste.org

- Otieno, S. (2013). Effectiveness of Internal Control Procedures on Management Efficiency of Free Primary Education Funds: a case of Public Primary schools in Kisii central District, Kenya Simeyo Otieno. *Journal of Sociology and Social Work*, 1(June), 22–41.
- Park, J. (2011). School Finance - Education Week. Retrieved February 27, 2019, from <https://www.edweek.org/ew/issues/school-finance/index.html>
- Polston-Murdoch, L. (2013). *An Investigation of Path-Goal Theory, Relationship of Leadership Style, Supervisor-Related Commitment, and Gender*. Retrieved from https://www.regent.edu/acad/global/publications/elj/vol6iss1/2elj_vol6iss1_polston_murdoch.pdf
- Rafiei, M. F., Manzari, S. M., & Bostanian, S. (2011). Financial health prediction models using artificial neural networks, genetic algorithm and multivariate discriminant analysis: Iranian evidence. *Expert Systems with Applications*, 38(8), 10210–10217. <https://doi.org/10.1016/J.ESWA.2011.02.082>
- Rangongo, P. N. (2011). *The functionality of school governing bodies with regard to the management of finances in public primary schools*. Retrieved from <https://repository.up.ac.za/dspace/bitstream/handle/2263/27257/dissertation.pdf?sequence=1&isAllowed=y>
- Shaw, S. G., Pedersen, S., Cooley, D., & Callingham, R. A. (2013). *Intentions and Behaviours: Record-Keeping Practices of Pre-Service Teachers During Professional Experience*. This Journal Article is posted at Research Online (Vol. 38). Retrieved from <http://ro.ecu.edu.au/ajte/vol38/iss6/5> Available at: <http://ro.ecu.edu.au/ajte/vol38/iss6/5>
- Torak, M. A. (2015). *SURFACE Audit, Accountability and Commitment: School Business Officials' Perceptions of an Audit Regime*. Retrieved from <http://surface.syr.edu/etd>
- Wiedermann, W., Artner, R., & von Eye, A. (2017). Heteroscedasticity as a Basis of Direction Dependence in Reversible Linear Regression Models. *Multivariate behavioral research*, 52(2), 222–241. <https://doi.org/10.1080/00273171.2016.1275498>
- Wushe, T., & Shenje, J. (2014). An Analysis of Basic Management and Financial Skills By School Development Committees (Sdc) in Selected Harare Schools, 1(10), 378–386.
- Xaba, M., & Ngubane, D. (2010). Financial accountability at schools: challenges and implications. Retrieved from <https://repository.nwu.ac.za/handle/10394/17960>