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The Influence of Technological Proficiency among School Accounting Officers in Managing School Funds: A Case Study of a Selected Secondary School in Dodoma City Council and Chamwino District in Tanzania

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Abstract: *The study investigated the influence of technological proficiency in enhancing the skills of school accounting officers in managing school funds within selected public secondary schools in the Dodoma Region, Tanzania. The study was guided by one research question: What role does technological proficiency play in influencing the competencies of school accounting officers in the effective management of school funds in selected public secondary schools in Tanzania? The study used a descriptive survey research design with purposive and simple random sampling methods. The data were collected from 129 respondents, including school cashiers and heads of schools, through structured questionnaires. The findings reveal a significant correlation between technological proficiency and effective financial management, with 80% of proficient officers capable of generating accurate financial reports. Conversely, only 25% of those lacking proficiency demonstrated similar skills. The study further stresses the importance of familiarising oneself with financial software tools and integrating systems like the Financial and Fiscal Accountability Reporting System (FFARS) in report writing and improving financial management. Statistical analyses, including Chi-square tests, confirmed the positive impact of technology on financial management practices. The study concludes that enhancing technological skills among school accounting officers is important for ensuring transparency, accountability, and efficient resource allocation in educational institutions.*

Keywords: *Technological proficiency, financial management, school accounting officers, financial software tools, Tanzania*

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1. Introduction

The digital era has significantly transformed financial management through the rise of digital financial management systems. These systems use advanced technologies to streamline and optimise financial operations, allowing individuals and organisations to manage their finances more effectively (Sipenji et al., 2024). The use of modern technology in financial management is an emergent feature that, especially at the school level, cannot be ignored because of its role in enhancing management efficiency (Banu, 2023; Budiasih, 2024; Muema, 2015). A study by Muema (2015) indicates that ICTs facilitate financial transactions and the use of money, enhance budgeting and budget control and reduce the chances of fraudulent loss of

school funds. Moreover, the study adds that ICT competence is a necessary skill that school leaders should possess to effectively use technology in managing school finances. A study by Amanati et al. (2024) on education financing management to improve the quality of education indicates that integrating technology in education requires not only the acquisition of equipment but also effective skills for school management to manage financial resources. Furthermore, Amanati et al. (2024) add that integrating digital technology in education financing systems offers process automation, real-time monitoring, and improved financial reporting opportunities. Mwawasi (2014)and Quidasol (2020) argue that changes in terms of technology in the educational milieu require not only the procurement of technical equipment but also the systematic and efficient utilisation of established systems in managing finances. Other studies indicate that efficiency in technological use optimises the ability of school leaders to manage funds and allows schools to allocate in the most productive way that every pen contributes directly to improve the quality of services in schools (Azzahra & Safira, 2022; Damka et al., 2021; Khoirudin et al., 2023)

A study conducted in Kenya by Sipenji et al. (2024) examined the impact of a digital financial management system on the accountability of public secondary schools in Bungoma County. The findings reveal that the automation of school fee collection has emerged as a transformative solution for educational institutions, revolutionising how schools handle financial transactions. The study further indicated that automated school fee collection systems offered streamlined processes for collecting, tracking, and managing school fees, replacing traditional manual methods that were time-consuming and prone to errors. Another study, Muthanga (2017) studied the effect of accounting practices on the management of funds in public secondary schools in Nairobi County and found a substantial positive connection between computerised accounting skills and funds administration among heads of public secondary schools. Wessels (2005) described that information technology is one of the key drivers in a changing business environment that every accounting officer at any level of education should possess. The study adds that the ICT skills must be competent and required by professional accountants in today's work environment. In another study, Wessels (2015) explains that digital technology competencies are necessary for school accountants to manage school funds and, at the same time, proceed with their work. As described by Muthanga, (2017), school accountants, like professional accountants in other sectors, need to leverage technology to handle financial records and reports, ensuring proper fund management in schools. Eremie & Agi (2020) stated that ICT skills are essential for every school administrator who aims to be effective and efficient in fulfilling their responsibilities. The study also updates that integrating ICT can enhance transparency and cost-efficiency in the management of school funds and other resources. Afshari et al. (2012) explain that school principals need basic ICT skills for effective daily administration and resource management. The study adds that these skills allow principals to analyse the school's resource needs and mobilise physical, financial, and human resources efficiently.

Bisht (2023) argues that managing a school's finances is a major challenge, and small schools often face the biggest hurdles when it comes to dealing with fee management and expenses. The study adds that using manual processes to collect payments or relying on outdated systems, streamlined tuition management software can provide a much easier and more streamlined approach. The study concludes that with the payment software solution, you can easily manage all aspects of your student payments, from tracking account information to generating invoices and receipts. On the other hand, Hartley (2024) stated that school principals must stay ahead of the curve to maintain efficient and effective educational management, especially regarding financial management and payment systems. Concerning Tanzania, the integration of technologies of various payment systems to manage transactions across all levels of education has been implemented, as it includes the use of control numbers, which are connected with national and other institutions such as GePG. According to Tanzania's National Digital Education Strategy for 2024/2025, the use of ICT (Information and Communication Technology) is intended to develop 21st-century skills and enhance the effective functioning of schools, particularly in teaching and managing resources allocated by the central government. For instance, in 2002, the government decentralised funding systems, making each public primary and secondary school responsible for managing its finances (Matete, 2022; MoEST, 2019). As Edmund & Lyamtane (2018) explain, these decisions led to the introduction of several guidelines, some of them being financial management accounting guidelines and procurement guidelines. Furthermore, the National Digital Strategy emphasises harnessing the potential of ICT not only for the skill development of school leaders but also for increasing accountability and transparency in the management of school funds allocated to each institution.

Muema (2015) described that the successful integration of ICTs in school financial management, as well as their ability to enhance efficiency, transparency, and accountability, serves as a deterrent to corruption and fraud. Emmanuel (2023) explains that the government of Tanzania has recently introduced two electronic systems: the Planning, Budgeting, and Reporting (PlanRep) system and the new Facility Financial Accounting and Reporting System (FFARS). These systems are designed to manage financial transactions in various institutions, including schools. The study further notes that the launch of these electronic financial systems in 2016/2027 aims to implement computer-based information management for preparing plans and

budgets. This initiative seeks to standardise financial management at all levels of government, ensuring efficiency, transparency, and accountability in the use of funds among local government authorities (LGAs) and facilities. Ultimately, the goal is to improve the delivery of public services to citizens (Emmanuel 2023). In a recent evaluation, Ruhago et al. (2023) examined the Facility Financial Accounting and Reporting System (FFARS) in Tanzania, concentrating on its effectiveness in managing school facilities. The study found that FFARS positively impacts financial management by simplifying various tasks and providing clear information on financial utilisation. It enables users to track how funds are spent on their activities and ensure that expenditures are in line with the planned budget.

As detailed in the USAID Report of 2020, the implementation of the Facility and Financial Accountability Reporting System (FFARS) began in July 2017 across 20,083 primary and secondary schools. FFARS allows organisations, such as schools, to conduct transactions, manage bank accounts, maintain internal controls, and generate financial reports (Emmanuel, 2023; Nicholaus et al., 2023). As observed by Muema (2015) that despite the extensive use of information and communication technologies (ICTs) in financial management within the educational sector, many schools have not fully utilised ICTS' potential in their financial practices. The study adds that the lack of adoption is often due to the unwillingness or inability of teachers, head teachers, and other staff members to use ICTs effectively, even in schools that are equipped with such technologies.

2. Literature Review

Managing school funds is one of the core responsibilities of the school head, where money has to be managed properly for the benefit of the school (Chai, 2022; Musa, 2022; Sospeter, 2022). Another study, Nwune et al. (2016), describe management as careful and proper planning in the supervision of financial resource expenditures and allocation of resources to activities for the attainability of the anticipated goals and objectives. Chai (2022) explains that good management of finances is very important as it ensures the speedy procurement of educational resources in schools, which can facilitate education provision. As described by Egwu (2016) school heads are the ones trusted to lead schools, and they are empowered with a voice in all affairs. and also draw a budget for schools, manage schools and oversee all activities planned in the schools for education development. The technological skills of school accounting officers in this study were guided by the Management Competence Theory (MCT), originally developed by Silva (2014) theory is premised on the role of practical and technical skills in achieving organisational goals. Silva’s theory of competencies consists of behavioural attributes that include knowledge, skills, and attitudes essential for individual success in professional settings. Regarding the management of school funds, Silva's competencies play a significant role in building professional integrity, career development, and commitment in the workplace, particularly for individuals responsible for managing finance and administration.

Ezenwaka et al., 2022) argue that the effective implementation of accounting software, such as the Integrated Payroll and Personnel Information System (IPPIS) and the Government Integrated Financial Management Information System (GIFMIS) in Nigeria, has significantly enhanced transparency in public secondary schools. Similarly, Nurlizai & Amirulkamar (2024) and Sakimin & Prihatin (2021) found that the use of the ARKAS application for managing School Operational Assistance (BOS) funds in Indonesia has improved efficiency, effectiveness, and transparency in school financial management. In a study conducted in Eritrea, Idris (2018) explored the role of principals in school financial management practices and found that many principals struggle with financial management, particularly when it comes to integrating technology into budgeting, banking, and recording expenditures. Kwateng et al. (2023) examined the impact of implementing Ghana's cohesive financial management information system in senior high school education. The study found that the adoption of financial management information systems could be both an immediate and long-term solution. Additionally, it noted that the current financial information technology system is replacing the previously used manual processes for governmental financial transactions. Mapolisa (2014) examined the challenges faced by school leaders in managing finances in Zimbabwe and discovered that school leaders often struggle with using technology for recording and reporting financial issues, leading to the misallocation of funds and poor management of school expenditures. Edmund & Lyamtane (2018) demonstrated that school heads in Moshi, Tanzania, lack effective leadership, particularly in utilising technology to monitor the financial procedures mandated by the government regarding financial expenditures. The study further reveals that school leaders do not possess essential technological skills related to financial management. As a result, they experience issues such as misallocation of funds and unplanned cash flow, leading to insufficient resources for schools and accruing debts to suppliers. In another study Chai (2022) and Musa (2022) assessed the preparedness of school heads to manage financial resources in public secondary schools in the Kwimba District, Mwanza Region. The findings indicate that school leaders were inadequately trained to use technology for financial management after their appointments. Consequently, they relied primarily on their experience rather than on technical knowledge to control finances.

3. Methodology

3.1Design

The study was guided by one research question using a descriptive survey research design. What role does technological proficiency play in influencing the competencies of school accounting officers in the effective management of school funds in selected public secondary schools in Tanzania? Using a descriptive design, the researchers collect, interpret, and analyse the information provided by respondents, leaving no room for data manipulation (Creswell, 2013, 2014). The design used enabled researchers to gather ample data from a selected population, yielding insights into their attitudes, opinions, and behaviours.

3.2 Population, Sampling and Sample Size

The targeted population consisted of a total of 129 individuals. Two sampling procedures were employed to select the sample for the study: purposive sampling and simple random sampling. Purposive sampling was used to select 65 school cashiers and 64 heads of schools (accounting officers). Simple random sampling was then used to select 65 primary schools from a pool of over 100 schools across two study site districts. The sample size was determined to be 129 participants using Krejcie & Morgan (1970) was adjusted to consist of 65 cashiers and 64 heads of schools, as illustrated in Figure 1.

N	*S*	*N*	*S*	*N*	*S*
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970

Figure 1. Sample size determination using the Krejcie and Morgan table

3.3 Data collection Methods

Structured questionnaires were used for data collection. The collected data was distributed to school cashiers and heads of schools to gather information about financial skills and compliance with ethical standards. Both open-ended and closed-ended questions were directed to

teachers. The response rate for the administered questionnaires was 100%.

3.4 Validity and Reliability

To determine the validity and reliability of the research instruments, the study employed content validity and Cronbach's Alpha (with a reliability coefficient of 0.7), which is considered acceptable to ensure reliable measurements across the various variables (see Table 1).

Table 1 Reliability Statistics

Variables	Cronbach's Alpha
Familiarisation with Financial Software	0.843
Generating Financial Reports	0.821
Integration with Other Systems	0.863

3.5 Data Analysis

The analysis of quantitative data was conducted descriptively, using frequencies and percentages. The results were then presented in a table using the Statistical Package for Social Sciences (SPSS). Additionally, chi-square tests and logistic regression were employed to assess the associations and effects related to technology proficiency in the management of school funds.

4.6 Ethical considerations

The researchers obtained permission for data collection from the College of Business Education (CBE) and subsequently sought 112uthorization from the District Executive Director (DED) of the sample districts to collect data from the target population while adhering to ethical standards. Additionally, they took participants' concerns about anonymity, confidentiality, and privacy into account.

4. Results and Discussion

The overview of the sociodemographic characteristics of respondents in secondary school accounting officers includes several key variables, such as sex, marital status, educational qualifications, age, and work experience. Concerning sex distribution, the majority of respondents are male, comprising 73 (56.59%), while female respondents account for 56 (43.41%). This suggests a somewhat greater representation of males among accounting officers in secondary schools. In terms of marital status, the predominant group consists of married individuals, totalling 82 respondents (62.02%), as illustrated in Table 1. Analysing educational qualifications, it is evident that a significant portion of respondents possess bachelor's degrees, amounting to 65 (50.38%). Meanwhile, 38 (29.46%) hold diplomas, and those with master's degrees or higher comprise 26 (19.38%). As on the age distribution among respondents reveals a varied demographic within the accounting officer's cohort. The most substantial group is situated within the 32-38 age range, representing 49 (37.98%) of the total. Responses regarding work experience are distributed across various experience brackets. The largest group consists of individuals with 6-10 years of experience, totalling 56 (43.41%) of the overall sample. This data provides valuable insights into the social and demographic characteristics of secondary school accounting officers respondents, highlighting the diversity and range of backgrounds and experiences within this group. Understanding these characteristics can enhance our analysis of the accounting officers' cohort's perspectives, behaviours, and decision-making processes in secondary education settings.

Table 2 Demographic characteristics of respondents

Variable		Frequency	Percent
Sex	Male	73	56.59
	Female	56	43.41
Marital status	Single	36	29.41
	Married	81	62.02
	Divorced	10	7.05
	Widow/er	2	1.52
Age of Respondents	25-31	23	17.83
	32-38	49	37.98
	39-45	34	26.36
	46-52	20	15.5
	53 Above	3	2.33
Education level	Diploma	38	29.46
	Bachelor`s degree	65	50.38
	Master`s degree and above	25	19.38
	PhD	1	0.78
Work experience	0-5	25	19.38
	06-Oct	56	43.41
	Nov-15	28	21.71
	16 Above	20	15.5

On the other hand, the study examines the roles of technological proficiency among school accounting officers in managing school funds. In addressing this objective, three variables of familiarisation of financial software tools, generating financial reports and integration with another system, such as FFARS, were measured concerning the management of school funds as detailed in Table 3.

Table 3: Association of Technological Proficiency and Managing School Funds

Variable	Low	High	Chi-square	P-Value
Familiarisation with Financial software tools			22.2531	0.01
No	84(76.36)	26(23.64)		
Yes	12(19.35)	50(80.65)		
Generating financial reports			17.9224	0.03
No	65(75.00)	19(25)		
Yes	8(20.00)	37(80)		
Integration with other systems, e.g., FFARS			35.3740	<0.01
No	60(73.58)	28(26.42)		
Yes	13(27.27)	38(72.73)		

As shown in Table 3 regarding familiarity with financial software tools, the analysis shows a significant association between familiarity with software tools usage and the ability to manage funds effectively (Chi-square = 22.2531, $p < 0.01$). The results show that the majority of accounting officers who are familiar with financial software tools (80.65%) responded positively to effective fund management, whereas only 23.64% of those not familiar with such tools did. The results reveal that familiarity with financial software tools is important for accounting officers to manage school funds. These findings are consistent with those of Nimusima et al. (2023), who found that information communications technology has a positive relationship with financial management among schools in Greater Bushenyi. Specifically, findings revealed the availability of financial management software (Beta=.513, P<01). A study by Bukhori et al. (2020) found that financial management software in schools enhances data processing and financial recapitulation, receiving a user feasibility rating of 84%. These findings signify the importance of financial software tools in improving accounting education and financial management in educational institutions. In contrast, Chidinmachinenye et al. (2019) found that school administrators do not effectively utilise management information systems for financial management in secondary schools. The study adds that they do not draft the school budget using a central database, use the Remita online payment gateway for fee payments, prepare the school statement of

account using an operational support system, or store all financial information on storage devices. The study concludes that investing in technological financial tools can enhance financial management and increase value for money in the education sector.

The study shows a significant relationship between the ability to generate financial reports and the level of technological proficiency (Chi-square = 17.9224, p = 0.03). The results indicate that a significant majority (80%) of officers capable of generating accurate financial reports also exhibited strong fund management skills, in contrast to only 25% among those who struggled with report generation. These findings align with those of Amos et al. (2022) and Gatere (2016) who found effective financial reporting practices important for ensuring transparency and accountability in educational institutions and that a lack of financial report writing skills can lead to significant oversights. In contrast, Edmund & Lyamtane, (2018) found that many schools prepared different financial reports that were submitted to the Ministry of Education. The study concludes that schools maintain various financial documents for reference, ensuring that their financial records comply with the government's requirements for preparing and retaining school financial reports. The study concludes that preparing financial reports is a fundamental skill that reflects an officer's technological capability, and accounting officers who are proficient in report writing are likely adept at utilising software tools and interpreting data, enhancing their overall efficiency.

Moreover, analysis of the integration of accounting systems, such as FFARS, indicated that 72.73% of officers who utilised these systems demonstrated effective fund management, whereas this was true for only 26.42% of those who did not integrate such systems. These results indicate a robust correlation between the technological proficiency of school accounting officers and their effectiveness in managing school funds (Chi-square = 35.3740, $p < 0.01$). From the analysis, this proficiency largely stems from familiarity with financial software tools, underscoring the advantages of using automation to produce accurate financial reports and streamline administrative tasks for better management of school funds. The study adds that the integration of financial systems like FFARS with other school management systems has led to improvements in data management, reporting ease, and enhanced monitoring and control by third parties, such as local government authorities. The findings align with those of Emmanuel (2023), who indicates that school heads and bursars are knowledgeable about the Facility Financial Accounting and Reporting System (FFARS) and that it has significantly aided in managing financial resources in secondary schools. However, Emmanuel (2023) also noted that users of FFARS in these schools encounter several challenges, including a lack of computers, limited Internet access in many areas, and low competency among FFARS users.

5. Conclusion and Recommendations

5.1 Conclusion

The study stresses the significant influence of technological proficiency on the effective management of school funds by accounting officers in selected secondary schools in the Dodoma Region, Tanzania. Findings indicate that officers who are familiar with financial software tools and integrated systems, such as FFARS, exhibit superior capabilities in generating accurate financial reports and managing resources efficiently. This proficiency is essential for promoting transparency and accountability in financial operations within educational institutions. The results underscore the necessity for ongoing training and support to enhance the technological skills of school accounting officers, ultimately leading to improved financial management practices and better educational outcomes.

5.2 Recommendations

The study had the following recommendations: first, the government should implement comprehensive training programs focused on financial software and technology integration for school accounting officers to enhance their skills and confidence in managing school funds. Second, the ministry concerned with education should allocate resources for the acquisition and maintenance of modern financial management systems, such as FFARS, to streamline financial operations and improve data accuracy in schools. Third, relevant authorities should conduct regular audits and assessments of financial management practices in schools to ensure compliance with ethical standards and identify areas for improvement. Finally, the ministry concerned with education should promote the integration of technology in financial management practices across educational institutions, ensuring that all school accounting officers are equipped with the necessary tools and training to succeed.

5.3 Areas for Further Research

First, the research could explore the differences in financial management practices between schools with varying levels of technological proficiency, providing insights into best practices and effective strategies. Second, the research could examine the specific impacts of various digital financial management systems on the efficiency and accuracy of financial reporting in educational institutions. Third, the research could explore the effectiveness of integrating financial literacy programs for school accounting officers and staff, which could enhance overall financial management capabilities and decision-making processes.

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References

Afshari, M., Ghavifekr, S., Siraj, S., & Ab Samad, S. (2012). Transformational Leadership Role of Principals in Implementing Information and Communication Technologies in Schools. *Life Science Journal*, *9*, 281–284.

Amanati, P., Mukhlisa, A. S., & Suharyat, Y. (2024). Manajemen Pembiayaan Pendidikan untuk Meningkatkan Mutu Pendidikan. *NUSRA : Jurnal Penelitian Dan Ilmu Pendidikan*, *5*(1), Article 1. https://doi.org/10.55681/nusra.v5i1.1828

Amos, S., Eghan, M. P. K., & Oppong, E. (2022). The Impact of Instructional Materials in Teaching and Learning of Biology in the Colleges of Education in the Central Region of Ghana. *Open Journal of Educational Research*, 213–221.

Azzahra, N., & Safira, L. (2022). *The Importance of Financial Management and Entrepeneurship Competencies for School Principals* (0 ed.). Center for Indonesian Policy Studies. https://doi.org/10.35497/555486

Banu, A. N. (2023). The Impact of Technology Integration in Educational Management and Administration. *IJFMR - International Journal for Multidisciplinary Research*, *5*(6). https://doi.org/10.36948/ijfmr.2023.v05i06.10858

Bisht, A. (2023, March 23). The Future of School Payments: Emerging Trends & Benefits. *Schoolcues Blog*. https://www.schoolcues.com/blog/the-future-of-school-payments-emerging-trends-benefits/

Budiasih, Y. (2024). The Influence of Digital Technology on Financial Management. *Accounting Studies and Tax Journal (COUNT)*, *1*, 92–100. https://doi.org/10.62207/wb6d3c96

Bukhori, I., Rojab, I., & Hidayat, A. (2020). Pendayagunaan Software Asisten Dalam Pengelolaan Sistem Informasi Manajemen Keuangan Sekolah. *TADBIR MUWAHHID*, *4*, 13. https://doi.org/10.30997/jtm.v4i1.2481

Chai, M. M. (2022, August 22). *Preparedness of School Heads to Manage Financial Resources in Public Secondary Schools in Kwimba District, Mwanza Region, Tanzania – Journal of Research Innovation and Implications in Education*. https://jriiejournal.com/preparedness-of-school-heads-to-manage-financial-resources-in-public-secondary-schools-in-kwimba-district-mwanza-region-tanzania/

Chidinmachinenye, T., Anachuna, O., & Chidinma, T. (2019). School administrators' utilization of management information system for administrative effectiveness in secondary schools in Enugu education zone. *International Journal of Research -GRANTHAALAYAH*, *7*, 102–109. https://doi.org/10.29121/granthaalayah.v7.i9.2019.565

Creswell, J. W. (2013). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. SAGE.

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed). SAGE Publications.

Damka, O., Ephrahem, G., & Bhoke-Africanus, A. (2021). Effectiveness of School Heads' Financial Management Skills in Provision of Quality Education in Secondary School. *Journal of Education, Society and Behavioural Science*, 20–28. https://doi.org/10.9734/jesbs/2021/v34i230302

Edmund, S., & Lyamtane, E. (2018). Effectiveness of the Heads of Schools in Managing Financial Resources in Public Secondary Schools in Moshi Municipality. *International Journal of Scientific Research and Management*, *6*. https://doi.org/10.18535/ijsrm/v6i5.el01

Egwu, S. O. (2016). Management strategies for conflict resolution in secondary schools in Ebonyi state, Nigeria. *UNIZIK Journal of Educational Management and Policy*, *1*(1), 88–94.

Emmanuel, M. (2023). *Effectiveness of Facility Financial Accounting and Reporting System (FFARS) in Managing Financial Resources in Government Secondary Schools: A Case of Mbeya District.* [PhD Thesis, The Open University of Tanzania]. http://repository.out.ac.tz/4386/

Eremie, I., & Agi, U. K. (2020). Information and Communication Technology (ICT) Skills and Efficient Management of Educational Resources in Public Secondary Schools. *Journal of the International Society for Teacher Education*, *24*(1), 36–47.

Ezenwaka, F., Ofor, N., Onuora, J., & Nwaorgu, I. (2022). Effect of Accounting Software on Transparency in the Nigerian Public Sector. *Journal of Economics, Management and Trade*,

32–42. https://doi.org/10.9734/jemt/2022/v28i930437

Gatere, A. (2016). Integrity and Financial Accountability in Schools: Role of Principals' of Schools in Kenya. *International Journal of Educational Research*. https://www.semanticscholar.org/paper/Integrity-and-Financial-Accountability-in-Schools%3A-Gatere/ab42f7b1246fbb6519ad84d5c14013ed6bdd6d1f

Hartley, S. (2024). *The Future of School Payments: Trends Every Principal Should Know*. https://www.kindo.co.nz/post/the-future-of-school-payments-trends-every-principal-should-know

Idris, O. S. (2018). The Role of Principal in School Financial Management: The Current Status. A Case Study in Four Public Secondary Schools in Zoba Debub, Eritrea. *Journal of Education and Practice*, *9*(33), 53.

Khoirudin, A., Khoiri, N., Fahreza, R. B., & Nisa, I. F. (2023). Manajemen Sekolah di Era Society 5.0 dalam Meningkatkan Kualitas dan Produktivitas Sumber Daya Manusia. *Al-Fahim: Jurnal Manajemen Pendidikan Islam*, *5*(2), 222–240.

Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, *30*(3), 607–610. https://doi.org/10.1177/001316447003000308

Kwateng, O., Agyapong, G., Frimpong, F., & Baidoo, P. (2023). *The influence of implementation of Ghana's integrated financial management information system in senior high schools.* https://www.globalscientificjournal.com/researchpaper/The_influence_of_implementation_of_Ghana_s_integrated_financial_management_information_system_in_senior_high_schools_.pdf

Mapolisa, T. (2014). Challenges Faced by School Heads in the Management of School Finances in Nkayi District Secondary Schools. *Nova Journal of Humanities and Social Sciences*, *3*.

Matete, R. (2022). Forms of Decentralization and their Implications for Educational Accountability in Tanzania. *Heliyon*, *8*, e09436. https://doi.org/10.1016/j.heliyon.2022.e09436

MoEST. (2019). Tanzania Syllabuses for Primary Education—English Medium Schools. *Mabumbe*. https://www.tie.go.tz/uploads/files/ENGLISH%20Syllabus%20III-VII%2009%20July%202019%20Press%20B%20Final.pdf

Muema, F. (2015). *Integration ICT in School Financial Management: A case of a Secondary School in Tanzania*. https://www.academia.edu/17239351/Integration_ICT_in_School_Financial_Management_A_case_of_a_Secondary_School_in_Tanzania

Musa, M. (2022). *Financial Resource Management Challenges Faced by School Heads in the Public Secondary Schools at Kwimba District, Mwanza, Tanzania*. http://repository.costech.or.tz//handle/123456789/85822

Muthanga, R. W. (2017). *The Effect of Accounting Practices on the Management of Funds in Public Secondary Schools in Nairobi County* [Thesis, University of Nairobi]. http://erepository.uonbi.ac.ke/handle/11295/103349

Mwawasi, F. M. (2014). Technology Leadership and ICT Use: Strategies for Capacity Building for ICT Integration. *Journal of Learning for Development*, *1*(2). https://eric.ed.gov/?id=EJ1106114

Nicholaus, J., Siamoo, P., & Lyamtane, E. (2023). CONTRIBUTIONS OF FACILITY FINANCIAL ACCOUNTING AND REPORTING SYSTEM TOWARD TRANSPARENCY AND ACCOUNTABILITY IN FINANCIAL MANAGEMENT AMONG PUBLIC PRIMARY SCHOOL HEADS IN MOSHI MUNICIPALITY, TANZANIA. *European Journal of Education Studies*, *10*. https://doi.org/10.46827/ejes.v10i12.5093

Nimusima, P., Tugaineyo, A., Kigonya, L., Mugisha, F., Rubalema, A., Kalinda, P., Oceng, P., Emmanuel, E., & Rwakihembo, J. (2023). Information and Communication Technologies and Financial Management: A study on Secondary Schools in Greater Bushenyi. *American Journal of Education and Practice*, *7*(3), Article 3. https://doi.org/10.47672/ajep.1552

Nurlizai, T. M., & Amirulkamar, S. (2024). Management of School Operational Assistance Funds (Bos) at State Junior High School (SMP) Calang, Aceh Jaya Regency in 2020. *International Journal of Research in Social Science and*

Humanities (IJRSS) ISSN:2582-6220, DOI: 10.47505/IJRSS, *5*(2), Article 2. https://doi.org/10.47505/IJRSS.2024.2.8

Nwune, E. N., Nwogbo, V. N., & Okonkwo, C. C. (2016). Competencies improvement needs of head teachers of primary schools in supervision of instruction in Anambra state. *UNIZIK Journal of Educational Management and Policy*, *1*(1), 59–66.

Quidasol, G. D. (2020). School heads technology leadership and its relationship with teachers and learners' performance. *International Journal of Advanced Research*, *8*, 12–22. https://doi.org/10.21474/IJAR01/11258

Sakimin, & Prihatin, E. (2021). *The Use of ARKAS Application in Management of School Operational Assistance Funds (BOS)*. https://doi.org/10.2991/assehr.k.210212.021

Silva, D. (2014). *Silva's management competency theory: a factor-item analytic approach utilizing oblique rotation direct oblimin method under kaiser-bartlett's test of sphericity*.

Sipenji, N., Tibbs, C., & Sindani, M. (2024). Effect of Digital Financial Management System on Accountability of Public Secondary Schools in Bungoma County, Kenya. *African Journal of Empirical Research*, *5*, 832–842. https://doi.org/10.51867/ajernet.5.2.73

Sospeter, M. (2022). Prospects And Challenges on Public Funds Management. The Reflection From Head Of Schools In Tanzania. *INTERNATIONAL JOURNAL OF ADVANCED RESEAinH AND PUBLICATIONS*, *5*(3), 11–14.

Wessels, P. (2015). The identification and discussion of strategies for implementing an IT skills framework in the education of professional accountants. *South African Journal of Accounting Research*, *22*, 147–181. https://doi.org/10.1080/10291954.2008.11435135

Wessels, P. L. (2005). Critical information and communication technology (ICT) skills for professional accountants. *Meditari Accountancy Research*, *13*, 87–103. https://doi.org/10.1108/10222529200500006