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Assessment of Board of Management's Facility Maintenance Practices on Effective Governance of Public Primary Schools in Nyeri County, Kenya

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Abstract
Providing successful educational programmes requires effective governance in the provision and maintenance of facilities. Although public primary schools have Boards of Management (BOM) that act as supervisors, their effectiveness needs to be ascertained. The purpose of this study was to assess the BOM's facility maintenance practices concerning the effective governance of public primary schools in Nyeri County, Kenya. The study was grounded in Agency Theory and adopted a descriptive research design. The target population consisted of 352 public primary schools and 352 chairpersons of the Board of Management. Using the Yamane Table (1967), a sample size of 78 BOM chairpersons was selected. A questionnaire containing both closed-ended and open-ended items was used to collect data from the BOM chairpersons. Descriptive analyses were performed on the quantitative data, while content analysis was applied to the qualitative data. The study revealed that 76.2% of respondents agreed, while 23.8% disagreed that the Board of Management had significantly contributed to the provision and maintenance of school facilities. However, there was a notable gap in the availability and maintenance of modern technological infrastructure, where only 56.4% agreed, highlighting the need for strategic investment in digital learning tools. The study concluded that the physical environment is an essential aspect of creating a conducive learning atmosphere, and its maintenance plays a pivotal role in supporting effective school governance. The study recommends prioritising targeted investment in technological infrastructure to bridge the gap between traditional and modern resources. This study will be significant to education stakeholders as it provides useful information on effective governance.

Introduction
Facility maintenance is the ongoing management, upkeep and repair of a building and other infrastructure in schools to ensure safety, effectiveness and efficient operation. Maintaining the building's functionality and overall environment requires a range of tasks, from basic cleaning to complex repairs. Governance, which supports responsible facility management, facilitates infrastructure development and

the implementation of school policies that are essential for academic success (Muchiri et al., 2022; Wambugu et al., 2021). The physical environment in which education occurs can influence learners' engagement, motivation and overall academic achievement. Learners and staff should feel comfortable and safe while studying and teaching (Chege et al., 2023). Well-designed and maintained school facilities contribute to a relaxed and welcoming atmosphere. Adequate lighting, comfortable seating, proper ventilation and appropriate temperature control create a conducive environment for learning. When learners and staff feel physically comfortable, they are more likely to focus and engage in their studies and work (Anokam & Ipem, 2022). Another important aspect is safety and security, which fosters a positive learning and working atmosphere.

However, adequate research has not been conducted regarding the impact of BOM governance practices on the successful implementation of Competency-Based Education (CBE), despite the BOM's role in overseeing the management of educational institutions in Kenya. Without acknowledging the crucial broader governance functions, studies exploring CBE success have only examined fundamental components such as curriculum delivery and teacher control (Kimosop & Njenga, 2020). Evaluations of capacity-building initiatives for boards of management in CBE delivery systems, as well as a thorough analysis of the support systems provided by external partners, including parents and local authorities, are also issues that require attention. According to Chege et al. (2023), documented research does not sufficiently link governance systems with significant educational outcomes through effective facility management. Given that CBE necessitates substantial changes in facility expansion and the improvement of the learning environment, the study focuses on assessing BOM's maintenance practices concerning effective governance across various school backgrounds within Nyeri County.

Literature review

Globally, effective governance in educational institutions is a recognised necessity for ensuring quality education. Across the world, governing bodies play a pivotal role in the administration and oversight of schools. These bodies are responsible for strategic decision-making, resource allocation and fostering community involvement, which are critical for creating conducive learning environments (OECD, 2021). Schools with robust governance structures tend to perform better academically and offer more holistic education experiences for learners

In high-performing education systems such as those in Finland and Singapore, strong governance frameworks are integral to their success. These frameworks emphasise accountability, strategic planning, and stakeholder engagement, ensuring that school policies are effectively implemented, and resources are optimally utilised (Tan, 2013). In Finland, for example, the decentralised education governance model allows for considerable autonomy at the school level, enabling tailored educational strategies that meet local needs (Sahlberg, 2015). Similarly, Singapore's centralised yet flexible governance structure supports rigorous academic standards and continuous improvement, contributing to its learners' outstanding performance in international assessments like the Programme for International Learner Assessment (PISA) (Tan, 2013). These examples highlight the vital role of effective governance in achieving high educational outcomes and the importance of strategic, inclusive, and transparent management practices. Zaman and Saeed (2019) define excellent governance in Pakistani education as the way a school system develops policies, generates and distributes funds, trains teachers for the classroom, plans curricula and

oversees the student body. This implies that the effectiveness, standards and accountability of the school are under the control of the administration.

In Africa, the governance of public schools has been the subject of extensive research and policy interventions. Many countries on the continent have decentralised their education systems to enhance the efficiency and accountability of school management (Garba, 2020). The roles of school management committees and boards of management have been emphasised in various national education policies (Chege et al., 2023). For instance, Tanzania, Uganda, and Rwanda have implemented reforms to strengthen public school governance (Mundy et al., 2016). These reforms often focus on improving resource mobilisation, increasing community participation, and enhancing transparency and accountability in school management. Ibo and Wokekoro (2022) support restructuring regarding the appalling state of public secondary school buildings in Nigeria's Bayelsa state. This finding aligns with the observations of Garba (2020), who emphasised the importance of planning maintenance to prevent facility breakdown.

In Tanzania, for example, the decentralisation of education governance has involved local communities in school management, fostering a sense of ownership and responsibility (URT, 2014). Similarly, Uganda's school policy reforms have aimed to increase the participation of parents and local leaders in school management, to enhance accountability and transparency (Nishimura & Ogawa, 2009). Despite these efforts, challenges such as inadequate funding, corruption, and lack of stakeholder engagement persist (Wales et al., 2016). These challenges emphasise the need for continual improvement in governance practices to ensure that schools can provide quality education. Therefore, effective governance in African schools necessitates robust school policies and practical mechanisms to address systemic issues and promote sustained community involvement.

In Kenya, the governance of public primary schools is primarily the responsibility of the board of management (Chege et al., 2023). Established under the Education Act 2013, BOMs are mandated to oversee the administration of schools, including resource mobilisation, allocation of resources, fostering community partnerships, and ensuring effective discipline management (Republic of Kenya, 2013). The effectiveness of BOM practices has a significant impact on the quality of education and the overall performance of schools. Waweru and Orodho (2014) posit that public primary schools face several governance challenges, including limited resources, insufficient stakeholder involvement and issues related to discipline and safety.

The BOM's role is to maintain the institution's infrastructure to the best of its ability and to meet the needs and requirements of staff, learners, customers, and other individuals who use the facilities (Amie-Ogan & Bikiya, 2020). Any educational institution aiming to provide high-quality education to its learners must offer suitable facilities, resources, and maintenance services that contribute to a more effective learning environment for its users (Mireles & Eliott, 2022). Another responsibility of a facility manager is to address the needs of learners and staff. The facility manager should anticipate demand and expectations from all the individuals using the facilities to fulfil the interests of the stakeholders. Leechman et al. (2019) aver that school governance encompasses vision, strategy, accountability, trust, capacity, and stakeholder relationships.

Well-designed halls, libraries, laboratories, and open spaces enhance the learning experience. Properly equipped classrooms with modern technology, interactive whiteboards, and comfortable furniture support various teaching methods, effectively engaging learners (Amie-Ogan & Bikiya, 2020). Specialised spaces, such as science labs, art studios, and music rooms, offer the necessary facilities for hands-on learning experiences. Moreover, facilities that include common areas, gathering spaces, and outdoor regions foster social interaction, collaboration, and a sense of community (Mireles & Eliott, 2022). These spaces encourage learners to collaborate, engage in group discussions, and develop essential social skills. Collaborative spaces also promote creativity, problem-solving, and teamwork. Providing an appropriate collaborative space enables teachers to create modern, learner-oriented lessons rather than those designed decades ago using traditional classroom settings and blackboards. Schools with well-maintained sports fields, gymnasiums, playgrounds, and recreational facilities allow learners to engage in physical exercise, team sports, and other extracurricular activities. These facilities contribute to a holistic educational experience and promote a healthy lifestyle (Daigneau, 2006). Physical activity is crucial for learners' overall well-being and cognitive development. Furthermore, in today's digital age, schools require up-to-date technological infrastructure. This infrastructure, which includes computers, interactive whiteboards, virtual laboratories, sound and video recorders, tablets, and numerous other devices, enables teachers to plan more interactive and engaging lessons for learners (Daigneau, 2006).

Implementing effective facility management in schools necessitates a systematic approach that involves planning, coordination, and ongoing evaluation. It is a continuous process that demands regular monitoring, adaptation, and constant improvement (Sari et al., 2021). Therefore, it is vital to define the goals and objectives of facility management within the framework of the overall mission and vision of the educational institution (Mireles & Eliott, 2022). It is essential to develop a plan that outlines strategies, school policies, and procedures to guide facility management activities. This plan should include maintenance schedules, safety protocols, space management strategies, energy conservation initiatives, technology integration plans, and budgeting processes. The subsequent step is to build a competent team with a qualified facility manager as a leader responsible for overseeing facility management activities (Amie-Ogan & Bikiya, 2020). The team should possess the necessary skills and expertise in maintenance, safety, space planning, technology, and finance. Shaikh et al. (2021) add that effective implementation requires collaboration with vendors, contractors, and service providers to ensure timely and cost-effective maintenance and repairs.

Clear roles and responsibilities should be defined to ensure effective coordination and accountability. Conducting regular facility assessments is crucial for ongoing improvement. Regular assessments include inspections, surveys, and feedback from the staff and learners. The evaluation aims to maintain the quality of the facilities, improve them, and offer better facility management, regularly evaluate the effectiveness of facility management practices and gather feedback from stakeholders, and monitor key performance indicators, such as maintenance response time, energy consumption, and user satisfaction (Al-Bizri & Gray, 2021). Ultimately, the assessment results are utilised to pinpoint areas for improvement and implement adjustments to enhance facility management practices.

Theoretical framework

Agency Theory underpinned the study. The theory was developed by Jensen and Meckling (1976). Agency theory explains the relationship between authority and agents, particularly emphasising issues

of accountability, responsibility and alignment of interests. In the context of public primary schools in Kenya, the BOM acts as government agents. The theory assumes that conflicts may arise due to differences in priorities or access to information, hence the need for strong governance frameworks to align goals and enhance accountability. Under this theoretical lens, BOMs are expected to act in the best interests of stakeholders by ensuring school facilities are adequately maintained, secure, and conducive to learning. The application of agency theory enabled the researchers to critically evaluate whether the agents (BOMs) were fulfilling their duties of managing physical infrastructure effectively and transparently, as entrusted to them by the authority (the Ministry of Education).

Methodology

This study was conducted in Nyeri County, Kenya and employed a descriptive research design. The target population consisted of 352 public primary schools and 352 BOM chairpersons. According to Kumar (2019), every element from which data is gathered for specialised investigations is identified by the target population. A simple random sampling method was used to determine the sample size (Taherdoost, 2016). With the help of the Yamane Table 1967, a sample size of 78 BOM chairpersons was selected. A questionnaire comprising both closed-ended and open-ended items was used to collect quantitative and qualitative data from the respondents. According to Creswell and Creswell (2018), a questionnaire is a valuable tool for surveying a large number of respondents on specific topics.

To ascertain the validity and reliability of the research instrument, a pilot study was conducted in Laikipia County using a subset of the sample that was similar to the one used in the main study. The split-half method was used, and the Cronbach coefficient was computed to assess reliability. The Cronbach's alpha coefficient yielded 0.82, indicating that the research tool was reliable. Experts, comprising university supervisors, examined the research instrument's items and wording to ensure they were appropriate and suitable (Creswell, 2012). Through editing, coding and tabulation, the researcher processed the respondents' primary data. Quantitative data were analysed using descriptive statistics, including frequencies, percentages, means, and standard deviations, while qualitative data were analysed using content analysis. Data was presented through narration and in tabular form.

Results and discussion

The analysis below presents an interpretation of each item from the questionnaire based on the frequency distribution, mean scores, and standard deviations. The responses were given using a five-point Likert scale: Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A), and Strongly Agree (SA).

Table 1: Responses on BOM Provision and Maintenance of Facilities (N = 78)

S/N	BoM has provided and maintained the following	SD (f/%)	D (f/%)	N (f/%)	A (f/%)	SA (f/%)	Mean	Std. Dev
1	A welcoming and friendly atmosphere	0 / 0.0%	1 / 1.3%	2 / 2.6%	32 / 41.0%	43 / 55.1%	4.55	0.50
2	Proper ventilation, temperature control, lighting	0 / 0.0%	2 / 2.6%	4 / 5.1%	30 / 38.5%	42 / 53.8%	4.45	0.50
3	Functioning safety and security system	0 / 0.0%	19/24.4 %	6 / 7.7%	51 / 65.4%	2/2.6%	4.11	0.31
4	Adequate space for co-curricular activities	4/5.1 %	4 /5.1 %	0 / 0.0%	60 / 77%	10 / 12.8%	4.00	0.40
5	Up-to-date technological infrastructure (computers, internet)	4 / 5.1%	14 / 17.9%	16 / 20.5%	26 / 33.3%	18 / 23.1%	3.66	0.81
6	Comfortable seats, desks, and tables	1 / 1.3%	8 / 10.3%	14 / 17.9%	35 / 44.9%	20 / 25.6%	3.79	0.62
7	Clear emergency response protocols	1 / 1.3%	18/23.1 %	10 / 12.8%	44 / 56.4%	5/6.4%	3.79	0.52
8	Well-maintained classrooms and libraries	2 / 2.6%	7 / 9.0%	10 / 12.8%	31 / 39.7%	28 / 35.9%	3.89	0.72
9	Well-maintained playgrounds	1 / 1.3%	13/16.7 %	10 / 12.8%	51 / 65.4%	3/3.8%	3.77	0.42
10	Common space for social interaction and collaboration	1 / 1.3%	4 / 5.1%	8 / 10.3%	47 / 60.3%	18 / 23.1%	3.87	0.57
	Average	**2%**	**11.4%**	**10.4%**	**52.2%**	**24%**		

A Welcoming and Friendly Environment

A significant majority of respondents affirmed that the BOM has cultivated a welcoming and friendly atmosphere, with 55.1% strongly agreeing, 41.0% agreeing, 2.6% being unsure, and 1.3% disagreeing. The high mean score of 4.55 and low standard deviation of 0.50 reflect a strong, consistent perception of inclusivity and warmth within the school environment. This aligns with the assertions of Thapa et al. (2013), who emphasise that a favourable school climate, characterised by respect, inclusivity, and emotional safety, plays a vital role in enhancing both academic and social outcomes for students. Similarly, Cohen et al. (2020) highlight that inclusive school governance contributes significantly to teacher retention and student engagement, reinforcing the value of the BOM's efforts in this domain.

Proper Ventilation, Temperature Control and Lighting

Likewise, 53.8% strongly agreed, 38.5% agreed, 5.1% were not sure, and 2.6% disagreed that the BOM had ensured proper ventilation, temperature control, and lighting. The mean score of 4.45 and standard deviation of 0.50 indicate general satisfaction with the environmental comfort provided in schools. The resulting mean score of 4.45 and standard deviation of 0.50 confirm widespread satisfaction with the physical learning environment and a shared consensus among participants. Learning is not limited to the classroom; proper and comfortable learning spaces also play a significant role in educational institutions (Wambugu et al., 2021). The findings support the work of Earthman (2002) and Uline and Tschannen-Moran (2008), who established that favourable physical learning conditions reduce absenteeism and

improve students' ability to concentrate, thereby contributing positively to learning outcomes.

Functionality of Safety and Security Systems

Concerning the functionality of safety and security systems, 65.4% agreed, 24.4% disagreed, 7.7% were not sure, and 2.6% strongly agreed. The resulting mean of 4.11 and a very low standard deviation of 0.31 suggest a broad consensus on the adequacy of safety infrastructure, with minimal dissent. This observation aligns with Bosworth et al. (2011) and Addington (2009), who found that students' sense of physical safety is intrinsically linked to their psychological well-being and academic motivation. The BOM's success in this area reflects its capacity to meet fundamental obligations regarding school safety infrastructure.

Adequate Space for Co-Curricular Activities

On the availability of adequate space for co-curricular activities, 77% agreed, 12.8% strongly agreed, 5.1% disagreed, and 5.1% strongly disagreed. This indicates a high level of support for extracurricular activities and affirms the BOM's effectiveness in supporting extracurricular programming. Moreover, facilities that include common areas, gathering spaces, and outdoor regions foster social interaction, collaboration, and a sense of community (Mireles & Eliott, 2022). These spaces encourage learners to collaborate, engage in group discussions, and develop essential social skills. This finding aligns with studies by Eccles and Roeser (2011) and Fredricks and Eccles (2006), which emphasise the significance of extracurricular programming in promoting student engagement, leadership, and interpersonal skills. The BOM's ability to support holistic education is thus evident in this area.

Availability of up-to-date technological infrastructure

However, the availability of up-to-date technological infrastructure (such as computers and the internet) elicited more diverse views, with 33.3% agreeing, 23.1% strongly agreeing, 20.5% neutral, 17.9% disagreeing, and 5.1% strongly disagreeing. The relatively lower mean score of 3.66 and the highest standard deviation of 0.81 reflect a mix of experiences, indicating a need for enhanced investment and standardisation in ICT resources across schools. This finding is consistent with the observations of Trucano (2016) and Wang et al. (2021), who have affirmed the persistent digital divide in education, particularly in resource-limited settings. These results suggest that while the B0M has succeeded in many physical aspects of school management, there remains a critical need for strategic investment in technology-related resources.

Comfortable seating and furniture

Comfortable seating and furniture were affirmed by 44.9% of respondents who agreed and 25.6% who strongly agreed. A smaller proportion of respondents, at 17.9%, remained neutral, 10.3% disagreed, and 1.3% strongly disagreed. The mean score of 3.79 and standard deviation of 0.62 points to a generally favourable but varied assessment, possibly influenced by school-specific disparities. When learners and personnel feel physically comfortable, they are more likely to focus and engage in their studies and work (Anokam & Ipem, 2022).

Emergency Response Protocols

Regarding emergency response protocols, 56.4% of respondents agreed and 23.1% disagreed. Although 12.8% remained neutral, 6.4% agreed, and 1.3% strongly disagreed. The mean score of 3.79 and a standard deviation of 0.52 demonstrate a generally positive outlook, albeit with opportunities for improvement in

awareness and communication. Brock et al. (2016) emphasise the importance of consistent emergency preparedness across all school environments, including regular drills and clear communication, to ensure safety and minimise disruption during crises.

Maintenance of Classrooms and Libraries

The maintenance of classrooms and libraries was viewed positively by 39.7% who strongly agreed and 35.9% who approved. Meanwhile, 12.8% remained neutral, 9% disagreed, and 2.6% strongly disagreed. The mean score of 3.89 and standard deviation of 0.72 reflect overall satisfaction but suggest that maintenance practices may vary across schools. Classrooms adequately furnished with interactive whiteboards, contemporary technology, and comfortable chairs can facilitate a variety of instructional strategies and successfully engage students (Amie-Ogan & Bikiya, 2020).

Playground Maintenance

In terms of playground maintenance, 65.4% agreed, 16.7% disagreed, 12.8% were neutral, 3.8% strongly agreed, and 1.6% strongly disagreed. With a mean score of 3.77 and a low standard deviation of 0.42, the feedback indicates positive and consistent perceptions of outdoor play facilities. Schools with well-maintained sports fields and playgrounds offer opportunities for learners to engage in physical exercise and participate in team sports. These facilities contribute to a holistic educational experience and promote a healthy lifestyle (Daigneau, 2006).

Common Spaces for Social Interaction and Collaboration

Lastly, shared spaces for social interaction and collaboration were appreciated by 60.3% who agreed and 23.1% who strongly agreed, though 10.3% were neutral, 5.1% disagreed, and 1.3% strongly disagreed. The mean score of 3.87 and standard deviation of 0.57 suggest general approval, with moderate variation in experiences. Kuh (2009) argues that informal social environments enhance student engagement and identity formation. Such spaces are essential for fostering collaboration, communication and a sense of community within the school.

Conclusion

The study concluded that the overall provision and maintenance of facilities by the board of management were significant, with robust performance in managing traditional infrastructure and the learning environment. However, the findings also reveal an uneven distribution, especially in the domain of modern technological infrastructure. This disparity underscores the need for targeted investment and strategic interventions to enhance digital learning resources. Such improvements are essential to ensure that all public primary schools have access to equitable, future-ready learning environments.

References

Addington, L. A. (2009). Cops and cameras: Public school security as a policy response to Columbine. *American Behavioural Scientist, 52*(10), 1426–1446. https://doi.org/10.1177/0002764209332556

Al-Bizri, S., & Gray, J. (2021). Facilities management in educational institutions: Improving learning environments through effective asset control. *Facilities, 39*(5/6), 359–375.

Amie-Ogan, O., & Bikiya, M. (2020). Strategies for effective facilities management in Nigerian schools: Implications for policy and practice. *International Journal of Educational Policy Research and Review, 7*(2), 30–37.

Anokam, E. O., & Ipem, J. (2022). The Influence of Safety School Environment on Inclusive Education for Sustainable Development. *Educational Research (IJMCER), 4*(6), 81-88.

Bosworth, K., Ford, L., & Hernandéz, D. (2011). School climate factors contributing to student and faculty perceptions of safety in select Arizona schools. *Journal of School Health, 81*(4), 194–201.

Brock, S. E., Nickerson, A. B., Reeves, M. A., Jimerson, S. R., Pesce, R. C., & Lazzaro, B. R. (2016). *School crisis prevention and intervention: The Prepare model* (2nd ed.). National Association of School Psychologists.

Chege, P. M., Mutiso, J., & Wambua, E. (2023). Governance systems and educational outcomes in Kenya's competency-based curriculum: The missing link. *Journal of Education Policy and Leadership, 8*(1), 45–59.

Cohen, J., Cardillo, R., & Pickeral, T. (2020). *School climate and governance: Building inclusive environments that support learning*. Teachers College Press.

Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). SAGE Publications.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approach* (5th ed.). Sage Publications.

Daigneau, W. A. (2006). Facility management for education: Planning and maintaining effective learning environments. *Facilities Manager, 22*(3), 12–18.

Earthman, G. I. (2002). School facility conditions and student academic achievement. *UCLA's Institute for Democracy, Education, and Access.* https://escholarship.org/uc/item/5sw56439

Eccles, J. S., & Roeser, R. W. (2011). Schools as developmental contexts during adolescence. *Journal of Research on Adolescence, 21*(1), 225–241. https://doi.org/10.1111/j.1532-7795.2010.00725.x

Fredricks, J. A., & Eccles, J. S. (2006). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental Psychology, 42*(4), 698–713. https://doi.org/10.1037/0012-1649.42.4.698

Garba, M. H. (2020). Assessment of school facilities maintenance in Nigeria for the effectiveness of teaching process: A case study of North Eastern public senior secondary schools. *African Scholar Publications & Research International, 18*(8), 191-214

Ibo, V., & Wokekoro, E. (2022). Building performance measurement as a tool for efficient maintenance of public secondary schools in Bayelsa State, Nigeria. *SSRN.*

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics, 3*, 305–360.

Kimosop, M. K., & Njenga, R. (2020). Teachers' preparedness and implementation of the competency-based curriculum in Kenya: A case of primary schools in Baringo North Sub-County. *Journal of Education and Practice, 11*(19), 67–74.

Kuh, G. D. (2009). The National Survey of Student Engagement: Conceptual and empirical foundations. *New Directions for Institutional Research,* (141), 5–20. https://doi.org/10.1002/ir.283

Kumar, R. (2019). *Research methodology: A step-by-step guide for beginners* (5th ed.). Sage Publications.

Leechman, C., MacBeath, J., Frost, D., & Swaffield, S. (2019). Leadership for learning: The challenges of the 21st century. *Educational Review, 71*(1), 72–88.

Mireles, J., & Eliott, C. (2022). Reimagining school spaces for the 21st century: Facility management for creative learning. *Journal of Educational Facilities, 15*(2), 25–38.

Muchiri, P., Gikonyo, J., & Mureithi, K. (2022). Board of management practices and implementation of the competency-based curriculum in Kenya's public schools. *International Journal of Educational Research, 10*(4), 110–123.

Mundy, K., Green, A., Lingard, B., & Verger, A. (2016). The global education policy field and the rise of education governance. In K. Mundy et al. (Eds.), *The handbook of global education policy* (pp. 1–18). Wiley Blackwell.

Nishimura, M., & Ogawa, K. (2009). School-based management and educational outcomes: Lessons from case studies in the Philippines and Uganda. *International Journal of Educational Development, 29*(3), 232–240.

OECD. (2021). *Education policy outlook 2021: Shaping responsive and resilient education policy in a changing world.* OECD Publishing.

Republic of Kenya. (2013). *The Basic Education Act No. 14 of 2013*. Government Printer.

Sahlberg, P. (2015). *Finnish lessons 2.0: What can the world learn from educational change in Finland?* (2nd ed.). Teachers College Press.

Sari, R., Susilo, H., & Manan, A. (2021). School facilities and infrastructure management to support effective learning during the pandemic. *Journal of Educational Management and Instruction, 1*(3), 165–174.

Shaikh, S., Ahmed, T., & Ali, M. (2021). Strategies for effective facility management in public schools: The role of partnerships. *Journal of Educational Planning and Administration, 35*(2), 90–103.

Taherdoost, H. (2016). Sampling methods in research methodology: How to choose a sampling technique for research. *International Journal of Academic Research in Management, 5*(2), 18–27.

Tan, C. (2013). *Learning from Shanghai: Lessons on achieving educational success.* Springer.

Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research, 83*(3), 357–385.

Trucano, M. (2016). *Knowledge maps: ICT in education*. World Bank.

United Republic of Tanzania (URT). (2014). *Education and training policy*. Ministry of Education and Vocational Training.

Uline, C., & Tschannen-Moran, M. (2008). The walls speak: The interplay of quality facilities, school climate, and student achievement. *Journal of Educational Administration, 46*(1), 55–73. https://doi.org/10.1108/09578230810849817

Wales, J., Magee, A., & Nicolai, S. (2016). *The role of education governance in delivering equitable and quality learning outcomes*. Overseas Development Institute (ODI).

Wambugu, D. M., Chege, M., & Muthoni, M. (2021). School infrastructure and learning environment: Impact on student performance in public secondary schools in Kenya. *International Journal of Education and Research, 9*(5), 67–78.

Wang, X., Chen, Y., & Zhang, Z. (2021). Digital divide and educational equity: A meta-analysis. *Education and Information Technologies, 26*(2), 1393–1414. https://doi.org/10.1007/s10639-020-10361-1

Waweru, P. N., & Orodho, J. A. (2014). Management practices and students' academic performance in national examinations in public secondary schools in Kiambu County, Kenya. *International Journal of Recent Scientific Research, 5*(2), 472–479.

Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper & Row.

Zaman, S., & Saeed, S. (2019). Good governance as an instauration towards socioeconomic development: A case study of Pakistan. *Journal of Public Administration and Governance, 9*(3), 58.