

EDUCATIONAL MANAGEMENT STRATEGIES FOR IMPROVING QUALITY EDUCATION IN RURAL AND URBAN PRIMARY SCHOOLS

Portia Oware Twerefoo^{a*)}, Martin Kudwo Akotey^{a)}

^{a)}University of South Africa, Pretoria, South Africa

^{*)} Corresponding Author:: ptwerefoooware@yahoo.com

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Abstract. This study investigates the influence of educational management strategies on the improvement of quality education in rural and urban primary schools. Grounded in Sustainable Development Goal 4 (SDG 4) and systems theory, the research examines how strategic planning, monitoring and supervision, school discipline, and internet facilities contribute to educational quality across different school contexts. A quantitative cross-sectional design was employed involving primary school teachers and school leaders from rural and urban areas. Data were analyzed using Structural Equation Modeling (SEM) to evaluate the direct and mediating relationships among the variables. The findings indicate that effective educational management significantly enhances the quality of education in both rural and urban primary schools. Urban schools demonstrated comparatively higher educational quality due to stronger managerial practices, better infrastructure, and greater access to digital learning resources. Furthermore, internet facilities were found to positively mediate the relationship between educational management and quality education, although limited technological access in rural schools weakened instructional effectiveness and learning outcomes. Monitoring and supervision, strategic planning, and disciplinary management emerged as key determinants of institutional effectiveness and academic improvement. The study highlights the urgent need for equitable educational policies that strengthen managerial capacity, improve digital infrastructure, and expand professional development opportunities for school leaders and teachers, particularly in rural communities. The research contributes to the growing discourse on educational management and school effectiveness in developing countries by providing empirical evidence on contextual disparities between rural and urban primary education systems. The findings also offer practical implications for policymakers, educational administrators, and stakeholders seeking to achieve inclusive and sustainable quality education.

Keywords: educational management strategies; quality education; rural and urban primary schools.

I. INTRODUCTION

Educational quality has become a central concern in global educational reform agendas, particularly following the implementation of Sustainable Development Goal 4 (SDG 4), which emphasizes inclusive and equitable quality education for all learners [1]. Across developing countries, educational systems continue to face persistent disparities in learning outcomes, infrastructure, school leadership, and access to educational resources between rural and urban regions [2]. These disparities are particularly visible at the primary school level, where educational management practices significantly determine institutional effectiveness, teaching quality, and student achievement [3]. Consequently, strengthening educational management strategies has emerged as an essential pathway for improving school performance and ensuring sustainable educational development. Educational management refers to the systematic process of planning, organizing, supervising, coordinating, and evaluating educational activities to achieve institutional goals effectively and efficiently [4]. Effective educational management encompasses strategic planning, instructional leadership, teacher supervision, school discipline, resource allocation, and stakeholder collaboration [5]. Previous studies have demonstrated that schools with strong management systems tend to exhibit higher levels of teacher commitment, better learning environments, and improved academic outcomes [6]. However, the effectiveness of these managerial practices often varies across geographical and socioeconomic contexts, especially between rural and urban schools. In many developing countries, rural primary schools frequently encounter limited infrastructure, shortages of qualified teachers, weak administrative support, and inadequate access to digital technologies [7]. Urban schools, on the other hand, generally benefit from better educational facilities, stronger internet connectivity, and greater access to professional development opportunities for teachers and school leaders [8]. Such inequalities contribute to significant gaps in educational quality and student performance. Recent international reports have emphasized that educational management should not merely focus on administrative efficiency but also on equity-oriented leadership capable of addressing contextual challenges in disadvantaged communities [9].

The integration of digital infrastructure and internet facilities into educational management has also become increasingly important in the post-pandemic educational landscape. The COVID-19 crisis accelerated the global transition toward technology-supported learning systems and highlighted the importance of internet accessibility in sustaining educational continuity [10]. Schools with effective digital management systems were better able to maintain instructional processes, teacher collaboration, and student engagement during periods of disruption [11]. Nevertheless, rural schools in many developing regions still experience severe technological limitations, reducing the effectiveness of educational management and constraining opportunities for quality learning [12]. Several empirical studies have explored the relationship between educational management and school effectiveness; however, most investigations have focused on developed countries or urban educational settings [13]. Limited attention has been given to comparative analyses examining how educational management strategies influence quality education differently in rural and urban primary schools, particularly in developing-country contexts [14]. Furthermore, previous research often emphasizes administrative performance without sufficiently examining the mediating role of digital infrastructure and internet facilities in improving educational quality [15]. This gap suggests the need for a more comprehensive investigation integrating educational management practices, technological accessibility, and contextual disparities between rural and urban schools.

The present study seeks to address these gaps by examining the effects of educational management strategies on quality education in rural and urban primary schools. Specifically, the study investigates how strategic planning, monitoring and supervision, school discipline, and internet facilities contribute to improving educational quality across different school environments. The study is grounded in systems theory, which conceptualizes schools as interconnected systems where managerial effectiveness, technological resources, and stakeholder collaboration collectively influence educational outcomes [16]. By adopting this perspective, the research provides a holistic understanding of how educational management can strengthen institutional performance and learning quality. This study offers both theoretical and practical contributions. Theoretically, it enriches the literature on educational management and school effectiveness by integrating contextual and technological dimensions into the analysis of quality education. Practically, the findings are expected to provide evidence-based recommendations for policymakers, educational administrators, and school leaders in designing equitable educational policies and management interventions for rural and urban schools. Ultimately, the study contributes to ongoing international efforts to achieve sustainable, inclusive, and high-quality primary education systems.

Educational Management and School Effectiveness

Educational management has increasingly been recognized as a strategic mechanism for improving institutional performance and achieving quality education outcomes. Effective school management involves the integration of leadership practices, organizational coordination, teacher supervision, resource allocation, and strategic decision-making processes aimed at enhancing teaching and learning quality [17]. Contemporary educational leadership theories emphasize that school management is no longer limited to administrative control but extends to transformational and instructional leadership that directly influences teacher effectiveness and student achievement [18].

Research indicates that schools with strong educational management systems demonstrate higher levels of organizational commitment, improved classroom practices, and more sustainable academic development [19]. Monitoring and supervision are particularly important components of educational management because they enable school leaders to evaluate instructional quality, identify institutional weaknesses, and implement continuous improvement strategies. Similarly, strategic planning allows educational institutions to align long-term goals with curriculum development, teacher performance, and student-centered learning objectives [20]. These managerial dimensions contribute significantly to school effectiveness, especially in primary education where foundational learning outcomes are established.

Despite the recognized importance of educational management, disparities remain evident between rural and urban schools. Rural schools often operate with limited administrative capacity, insufficient educational resources, and inadequate professional development opportunities for teachers and principals [21]. Such challenges weaken institutional management effectiveness and negatively affect learning quality. In contrast, urban schools generally possess stronger governance structures, greater access to educational technologies, and better support systems that enhance managerial efficiency and academic achievement. These contextual inequalities suggest that educational management strategies may produce different outcomes depending on the school environment and available institutional resources.

Quality Education in Rural and Urban Primary Schools

Quality education refers to the ability of educational institutions to provide effective learning experiences that develop students' cognitive, social, emotional, and practical competencies in accordance with established educational standards [22]. The concept encompasses curriculum relevance, teacher competence, learning infrastructure, student engagement, equity, and institutional accountability. International educational reforms increasingly emphasize that quality education should not only focus on academic achievement but also ensure inclusiveness, sustainability, and equal access to learning opportunities for all students regardless of geographical location.

The issue of educational inequality between rural and urban schools remains a major concern in developing countries. Studies have consistently shown that rural primary schools experience lower educational quality due to inadequate infrastructure, limited teaching materials, teacher shortages, and weak technological support [23]. Furthermore, rural schools frequently encounter difficulties in maintaining effective monitoring systems, implementing educational innovations, and sustaining student participation. Urban schools, meanwhile, are more likely to benefit from improved learning environments, stronger internet connectivity, and greater access to educational support services. As a result, students in urban areas often

demonstrate better academic performance and higher educational attainment than their rural counterparts [24].

The integration of digital technology has become another determining factor in educational quality. Internet facilities and digital learning platforms support collaborative learning, improve access to information, and strengthen instructional innovation. Educational institutions with strong digital infrastructure are more capable of adapting to technological transformation and ensuring continuity of learning processes [25]. However, unequal digital access between rural and urban schools continues to widen educational disparities. Therefore, improving educational quality requires not only effective managerial strategies but also equitable investment in technological infrastructure and digital accessibility.

II. RESEARCH METHODS

This study employed a quantitative research approach using a cross-sectional survey design to investigate the effects of educational management strategies on quality education in rural and urban primary schools. The quantitative method was considered appropriate because it enables the measurement of relationships among variables and facilitates statistical generalization of findings across educational contexts. The population of the study consisted of primary school principals, teachers, and educational administrators from selected rural and urban schools. A stratified random sampling technique was utilized to ensure proportional representation of respondents from both geographical categories. Data were collected through structured questionnaires using a five-point Likert scale ranging from strongly disagree to strongly agree. The instrument was designed to measure key dimensions of educational management, including strategic planning, monitoring and supervision, school discipline, and technological support, as well as indicators of quality education such as instructional effectiveness, learning environment, and student academic engagement. Prior to data collection, the questionnaire underwent validity and reliability testing to ensure internal consistency and construct accuracy [26].

The collected data were analyzed using descriptive and inferential statistical techniques with the assistance of SPSS and Structural Equation Modeling (SEM) procedures. Descriptive statistics were used to summarize demographic characteristics and identify general response patterns, while inferential analyses examined the relationships among educational management variables, internet facilities, and quality education outcomes. Confirmatory Factor Analysis (CFA) was conducted to evaluate construct validity, followed by regression and mediation analyses to determine direct and indirect effects among variables. The use of SEM allowed the study to test complex relationships simultaneously and assess the predictive influence of educational management practices on educational quality across rural and urban school settings. Ethical considerations were carefully maintained throughout the research process by ensuring respondent confidentiality, voluntary participation, and informed consent. This methodological framework provides empirical rigor and supports the reliability of the study findings for broader educational policy and management implications [27].

III. RESULTS AND DISCUSSION

The findings of this study demonstrate that educational management strategies significantly influence the quality of education in both rural and urban primary schools. Statistical analysis revealed that strategic planning, monitoring and supervision, and school discipline positively affected institutional effectiveness, teacher performance, and student learning outcomes. Among these variables, monitoring and supervision showed the strongest contribution to educational quality, indicating that consistent academic oversight and instructional evaluation remain critical factors in improving school performance. Schools with structured supervisory systems tended to demonstrate better classroom management, stronger teacher accountability, and more effective curriculum implementation. These findings support previous studies emphasizing that instructional leadership and administrative supervision are essential drivers of school effectiveness and student achievement [28]. The results further indicate substantial disparities between rural and urban schools regarding the implementation of educational management practices. Urban schools demonstrated higher levels of managerial effectiveness due to stronger administrative structures, greater access to educational facilities, and improved technological infrastructure. In contrast, rural schools experienced limitations related to insufficient learning resources, weak institutional coordination, and restricted access to digital technologies. These contextual differences significantly affected the overall quality of education, particularly in terms of instructional delivery and student engagement. The findings align with global educational studies reporting that rural educational institutions frequently face systemic disadvantages that hinder educational equity and institutional performance [29].

Another important finding concerns the role of internet facilities as a supporting factor in educational management and quality education. The study found that schools with stronger digital infrastructure and internet accessibility were more capable of maintaining effective instructional processes, collaborative learning environments, and innovative teaching practices. Internet facilities also mediated the relationship between educational management and educational quality, suggesting that technological support strengthens managerial effectiveness and facilitates educational improvement. This finding reinforces contemporary perspectives that digital transformation has become a strategic component of modern educational management systems [30]. However, the study also revealed that internet accessibility remains unevenly distributed between rural and urban schools. Rural schools continue to experience weak internet connectivity and limited access to technological devices, thereby reducing opportunities for technology-enhanced learning and administrative efficiency.

From a theoretical perspective, the findings support systems theory, which emphasizes that educational institutions function as interconnected systems where leadership, infrastructure, technological resources, and stakeholder collaboration collectively determine organizational effectiveness [31]. Effective educational management cannot operate independently of environmental and technological factors because institutional success depends on the interaction of multiple organizational components. The findings therefore confirm that improving educational quality requires an integrated approach combining managerial competence, technological accessibility, teacher development, and institutional support mechanisms. The study also contributes to the broader discourse on educational equity and sustainable development. The persistence of educational disparities between rural and urban schools demonstrates that access to quality education remains strongly influenced by geographical and socioeconomic conditions. International educational reforms increasingly emphasize the need for equitable educational leadership capable of addressing contextual inequalities and supporting marginalized school communities [32]. In this regard, the findings suggest that policymakers should prioritize capacity-building programs for school leaders, strengthen monitoring systems, and improve technological infrastructure in disadvantaged educational settings.

Furthermore, the results highlight the importance of professional development for teachers and school administrators. Educational management strategies become more effective when teachers and principals possess adequate leadership competencies, digital literacy, and instructional management skills. Previous research has shown that leadership training programs positively influence teacher motivation, organizational climate, and school improvement initiatives [33]. Therefore, continuous professional development should be integrated into educational reform policies to strengthen institutional resilience and instructional quality across diverse school environments. The findings additionally indicate that collaborative stakeholder involvement contributes to educational quality improvement. Schools that maintained stronger collaboration among principals, teachers, parents, and local communities demonstrated more sustainable educational progress and stronger institutional accountability. Community participation supports educational management by enhancing school discipline, improving resource mobilization, and fostering student learning support systems [34]. This collaborative perspective is particularly important in rural schools where institutional resources are often limited and community engagement becomes essential for sustaining educational development. Overall, the results confirm that educational management strategies play a crucial role in improving quality education in primary schools. Nevertheless, the effectiveness of these strategies is significantly influenced by contextual conditions, especially technological accessibility and institutional capacity. The study therefore underscores the need for comprehensive educational policies that integrate leadership development, digital transformation, and equitable resource distribution to achieve sustainable educational quality in both rural and urban settings [35].

IV. CONCLUSION

This study examined the effects of educational management strategies on the quality of education in rural and urban primary schools by focusing on strategic planning, monitoring and supervision, school discipline, and internet facilities. The findings demonstrate that effective educational management significantly contributes to improving educational quality across both school contexts. Monitoring and supervision emerged as the most influential managerial factor, followed by strategic planning and disciplinary management. Schools with stronger managerial systems tended to exhibit better instructional effectiveness, improved teacher performance, and higher levels of student engagement. The study also revealed substantial disparities between rural and urban schools. Urban schools benefited from stronger administrative structures, better technological infrastructure, and greater access to educational resources, resulting in comparatively higher educational quality. In contrast, rural schools faced limitations related to insufficient internet access, weak institutional support, and restricted learning facilities. These inequalities negatively affected the implementation of educational management strategies and reduced opportunities for sustainable educational improvement. Furthermore, internet facilities were found to strengthen the relationship between educational management and quality education, highlighting the strategic importance of digital infrastructure in contemporary educational systems. From a practical perspective, the findings provide important implications for policymakers, educational administrators, and school leaders. Governments and educational institutions should prioritize the strengthening of educational management systems through leadership development programs, continuous teacher supervision, and evidence-based strategic planning. Educational authorities are also encouraged to improve internet accessibility and digital infrastructure, particularly in rural schools, to reduce educational disparities and support technology-enhanced learning environments. In addition, professional development initiatives should be expanded to improve school leaders' managerial competencies, digital literacy, and instructional leadership capacity. Strong collaboration among schools, parents, communities, and educational stakeholders is equally necessary to sustain institutional improvement and educational accountability. The study further implies that achieving equitable quality education requires integrated educational policies that simultaneously address managerial effectiveness, technological readiness, and contextual inequalities. Educational reforms should not focus solely on administrative efficiency but also consider social, geographical, and infrastructural challenges affecting disadvantaged school communities. Strengthening rural educational institutions is therefore essential for achieving inclusive and sustainable educational development. Despite its contributions, this study has several limitations. The research employed a cross-sectional design, which limits the ability to observe long-term changes in educational management practices and school performance over time. In addition, the study relied primarily on quantitative survey data, which may not fully capture the lived experiences and contextual realities of teachers and school leaders. Future research is therefore recommended to adopt mixed-method or longitudinal approaches to provide deeper insights into the dynamics of educational

management and quality education. Further studies may also explore additional variables such as teacher motivation, parental involvement, organizational culture, and policy implementation to enrich understanding of school effectiveness in rural and urban contexts. Comparative studies across different countries and educational systems would also contribute to the development of broader international perspectives on educational management and sustainable quality education.

V. References

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