

## Strategic Plan Implementation and Physical Development in Day Secondary Schools in Masinga and Yatta Sub-Counties, Machakos County, Kenya

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### Abstract

The purpose was to assess the impact of implementing the strategic plan on schools' physical development. A mixed-methods research design, employing a convergent parallel approach, was used to provide a comprehensive analysis. Data were collected from principals, teachers, and Board of Management members using questionnaires and in-depth interviews. Quantitative data were analyzed using descriptive and inferential statistics, while qualitative data were analyzed thematically. The findings indicated that the development and implementation of strategic plans explained 33.8% ( $R^2 = .338$ ) of the total variation in the physical development of the schools. The results also revealed an F statistic of 17.373 and a p-value of  $0.000 < 0.05$ . This implied that the independent variable (the development and implementation of strategic plans) was a good predictor of the dependent variable (the physical development of the schools). The Ministry of Education should standardize guidelines for strategic planning and develop monitoring frameworks to track implementation progress. The government of Kenya, through the Ministry of Education, should streamline policies on schools' strategic planning. In particular, the government should make it mandatory for all schools to have a well-stipulated strategic plan. The Ministry of Education should send representatives to participate in the formulation of the school strategic plans. The Ministry of Education should also develop an evaluation framework to assess implementation progress.

**Keywords:** *Strategy, strategic plan implementation, physical development of schools*

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### 1. Introduction

Strategy is defined as “a pattern of purposes, policies, programs, actions, decisions, or resource allocations that define what an organization is, what it does, and why it does it” (Bryson, as cited in Narikae & Lewa, 2017). Although public institutions are not profit-driven, strategic planning remains essential due to limited resources and the need to achieve long-term goals efficiently. In the education sector, strategic planning began at the university level in the United States in the late 1970s and extended to schools in the late 1980s (Carron, 2010). In developing countries, however, its adoption has been slower.

In Kenya, strategic planning gained prominence following the Ministry of Education's adoption of a five-year strategic plan (2008–2012). The vision was “to have a globally competitive quality education and training for Kenya's sustainable development” (Ministry of

Education [MoE], 2009, p. 9). Schools are therefore required to develop strategic plans aligned with their mission and vision over a five-year period. In 2013, the Government of Kenya mandated all public institutions to develop internal strategic plans to enhance results-based management and operational efficiency.

Strategic planning is expected to improve both academic and non-academic performance by enabling schools to allocate resources effectively in response to internal strengths and external opportunities (Akinyi, 2008).

This study focuses on young day secondary schools in Masinga and Yatta Sub-Counties of Machakos County, established between 2004 and 2018 through the Constituency Development Fund (CDF). Many of these schools rely heavily on NG-CDF support and political goodwill for infrastructure development. Political transitions often disrupt the continuity of development projects and the implementation of strategic plans.

This study examines key issues affecting the strategic planning and implementation processes in schools, particularly those that influence effectiveness and institutional performance. It highlights the tendency of some institutions to approach strategic planning superficially, resulting in limited impact during implementation.

Although strategic planning and management are important in educational institutions, numerous challenges persist in formulating and implementing such strategies in day secondary schools. Many school heads, Boards of Management, teachers, and key stakeholders lack a clear understanding of their roles in the strategic planning process. Previous studies have not adequately addressed the significance of specific steps within the strategic planning process and their impact on implementation outcomes. This study seeks to determine the impact of implementing strategic plans on schools' physical development.

## **2. Literature Review**

### **2.1 The Need for Strategic Planning**

Strategic planning in education is the systematic process by which schools define their direction, set priorities, allocate resources effectively, and adopt long-term goals to achieve sustainable improvements in performance and institutional capacity (Juma, Nyaga & Ndwiga, 2022). In the context of Kenyan day secondary schools, this process is particularly crucial due to the myriad challenges that constrain their ability to deliver quality education and compete favorably with well-resourced institutions.

Most day schools in Kenya have distinctive features that adversely affect learning outcomes, with shortages of basic infrastructure among the most prominent. This shortage encompasses inadequate classrooms, insufficient furniture, limited laboratory spaces, and poorly stocked libraries. Empirical evidence suggests that the availability of physical learning facilities correlates significantly with academic performance: schools equipped with sufficient facilities tend to achieve higher results in the Kenya Certificate of Secondary Education (KCSE) than those with scarce resources (Bakari, Likoko & Ndinyo, 2014). A lack of basic learning facilities, therefore, not only undermines the morale of learners and educators alike but is also likely to translate into poor examination performance and limited opportunities for progression.

The challenge of infrastructure deficiency is not unique to Kenya. A broader assessment of secondary education systems across African countries points to persistent gaps in the provision of essential learning resources, which impede quality and equity in schooling (African Secondary Education Sector Report, 2024). In addition, strategic planning is often

underutilized or poorly implemented in many schools, leading to ineffective resource prioritization and missed opportunities for improvement (Sang et al., 2015).

Strategic planning, therefore, offers a mechanism by which schools can anticipate infrastructure deficits, propose viable interventions, and sequence improvements in a realistic and sustainable manner. Without an articulated plan that aligns vision and practice, institutions risk remaining trapped in a reactive management mode, responding only to immediate problems rather than addressing root causes that constrain long-term performance.

Another salient characteristic of day schools in Kenya is the shortage of trained teachers. Unlike boarding schools, many day schools operate with critically low staffing levels, sometimes with only a principal and a deputy principal responsible for managing all academic and administrative functions. This scenario is exacerbated by unfavourable pupil-teacher ratios in secondary schools; although the World Bank reported a national ratio of about 33.44 students per teacher in 2009, the reality on the ground in many day schools is a significantly heavier workload due to uneven teacher deployment and uneven staff distribution (Trading Economics, 2018). The result is that some teachers, despite lacking formal teaching qualifications, are often deployed to teach subjects outside their field of specialisation simply to fill vacancies. This negatively affects both teacher performance and learner outcomes because overburdened teachers have limited capacity to deliver content deeply or provide personalised support.

Internationally, research has consistently linked teacher shortages, high student-teacher ratios, and poor teacher quality with lower student achievement (UNESCO, 2018). Within the Kenyan context, these conditions are particularly acute in rural and marginalised regions, where attracting and retaining trained teachers remains challenging due to a combination of low incentives, poor infrastructure, and limited professional development opportunities.

The teacher shortage has clear implications for education costs and quality. While a low student-teacher ratio is generally associated with more personalised instruction and better learning outcomes, high ratios magnify teacher workload, dilute instructional time, and ultimately contribute to wider achievement gaps. In this regard, strategic planning enables schools to forecast staffing needs, budget for recruitment and professional development, and advocate for equitable distribution of teaching staff in line with national standards.

The need for strategic planning in day schools is further underscored by theoretical frameworks such as the World Declaration on Education for All (1990) and the Dakar Framework for Action (2000), which highlight the significance of “basic learning needs” as fundamental prerequisites for effective education systems (United Nations General Assembly, 2012). These frameworks not only affirm the role of infrastructure and pedagogical quality in driving educational outcomes but also stress the imperative of planning as a means to institutionalise equity and adequacy across learning environments.

High schools today operate within a dynamic and often turbulent educational landscape that requires forward-looking leadership. They face mounting pressures to improve student achievement, integrate evolving technologies, respond to diverse learner needs, and manage fiscal constraints. In such a complex environment, mere day-to-day reactive management is insufficient for fostering long-term success or institutional vitality. Strategic planning, therefore, emerges as an essential tool for schools to proactively navigate these challenges. It provides a structured framework for articulating a clear vision, aligning resources with priorities, and ensuring that efforts across the institution are coordinated toward a shared set of goals.

## 2.2 Enhancing Student Achievement and Outcomes

The central mission of any high school is to ensure that learners graduate with the competencies, knowledge, and dispositions necessary for success in higher education, career pathways, and civic life. Strategic planning enables schools to anchor this mission at the heart of their decision-making processes. A key feature of effective strategic planning is the engagement of stakeholders, including administrators, teachers, parents, and learners, in analyzing academic performance data and identifying specific areas for improvement.

For example, schools can use strategic planning to set measurable objectives such as improving the percentage of students attaining a C+ or higher in KCSE over a defined period or increasing the proportion of learners proficient in core subjects such as mathematics and English. By emphasizing evidence-based goals, strategic plans move schools beyond vague aspirations to concrete targets that can be monitored and evaluated. This approach aligns with findings by Juma et al. (2022), who observed that Kenyan schools that embraced strategic planning reported improvements in institutional coherence and learner outcomes, even though the practice is not yet fully widespread.

A data-driven focus on student achievement also creates an accountability loop that drives continuous instructional improvement. Schools that regularly track performance indicators such as subject-level pass rates, transition rates, and dropout statistics are better positioned to deploy targeted interventions and remedial measures. This is especially relevant for day schools, where diverse learner abilities and socio-economic backgrounds necessitate differentiated support strategies.

## 2.3 Efficient Allocation of Resources

Secondary schools in Kenya face perennial challenges around budgeting and resource allocation. Strategic planning transforms the budgeting process from a historical exercise to a forward-looking strategy tool that aligns financial and human resources with core school priorities. For instance, if a strategic goal emphasizes improving science education, the plan can guide the allocation of funds toward well-equipped laboratories, curriculum-aligned materials, and teacher training in STEM subjects.

Without a strategic framework, resource decisions often become fragmented, reactive, or based on tradition rather than current priorities. Strategic planning enables schools to justify resource allocation based on empirical evidence and strategic intent, ensuring that limited funds are deployed in a manner that maximises educational impact. Research in Kenyan public secondary schools underscores the importance of proper planning in budget prioritisation, with strategic planning linked to more strategic investment in areas that directly support learning and teaching (Alubisia, 2025).

## 2.4 Fostering Proactive Leadership and Adaptability

The educational environment is in constant flux, with curriculum reforms, technological advancements, evolving labor market needs, and shifting societal expectations. Schools that merely respond to changes after they occur are often a step behind. Strategic planning empowers school leadership to be proactive rather than reactive by requiring regular situational analyses, such as SWOT (Strengths, Weaknesses, Opportunities, Threats) assessments.

This anticipatory approach encourages leaders to examine both internal capacities and external trends that could affect the school's future. For example, identifying opportunities such as digital learning platforms or partnerships with community organisations can help schools

expand learning modalities. Simultaneously, anticipating threats, such as funding cuts, demographic shifts, or increasing competition, enables schools to develop contingency plans.

Strategic planning, therefore, builds institutional resilience and adaptability, traits that are essential for navigating change sustainably. The research by Sang et al. (2015) found that involvement in strategic planning enhanced the ability of Kenyan secondary schools to align their operations with emerging educational demands, although many schools still lacked formalised processes for doing so.

### **2.5 Building Stakeholder Engagement and Shared Ownership**

A strategic plan is most effective when it is developed through broad stakeholder participation rather than by a small group of administrators alone. Involving teachers, support staff, parents, learners, and community members in the planning process cultivates a sense of shared ownership and collective accountability. This collaborative approach not only enriches the plan with diverse perspectives but also helps to sustain commitment to goals across the institution.

Stakeholder engagement in strategic planning also fosters a stronger partnership between the school and the wider community. When community members and parents are involved in shaping the school's vision, they are more likely to support implementation efforts, advocate for resource mobilisation, and participate in activities that reinforce the strategic priorities. According to Juma et al. (2022), schools that reported higher engagement in planning also exhibited improved morale among staff and increased collaboration, which in turn supported the realisation of strategic goals.

In summary, strategic planning is no longer a luxury but a fundamental necessity for contemporary high schools, especially day secondary schools in Kenya. It provides a disciplined, participatory, and forward-looking process through which schools can articulate their future, prioritize objectives, and mobilize resources strategically. By focusing on clear student outcome goals, aligning resources with priorities, fostering proactive adaptation, and engaging the entire school community, strategic planning equips schools with a roadmap to navigate complexity and fulfill their essential educational mission.

### **3. Methodology**

The study employed a mixed-methods research design using a convergent parallel approach, in which qualitative and quantitative data were collected simultaneously, analyzed independently, and later interpreted together. The target population consisted of 80-day secondary schools in Yatta and Masinga Sub-Counties in Machakos County. Using Nassiuma's (2000) formula, a sample size of 20 schools was obtained through convenience sampling. For the qualitative phase, in-depth interviews were conducted with five school principals and four Board of Management chairpersons until data saturation was achieved.

For quantitative data collection, self-developed questionnaires were administered to principals and Heads of Departments (HoDs) from the sampled schools. The questionnaires were designed differently for principals and teachers and contained both closed-ended and open-ended items to capture quantitative and qualitative information. To ensure the reliability and validity of the instruments, the questionnaires were pilot-tested with a small group from the target population to identify omissions, ambiguities, and irrelevant items prior to the actual study. Data analysis involved both qualitative and quantitative approaches. Qualitative data were analyzed using framework analysis and thematic coding, while quantitative data were analyzed using descriptive statistics (percentages, means, medians, and modes) in SPSS.

Correlation and regression analyses were further conducted to assess the relationships among the study variables. Ethical considerations, including informed consent, confidentiality, and research authorization from relevant institutions, were also observed throughout the study.

#### 4. Results

##### 4.1 Impact of the school strategic plan

The respondents stated the impact of the school's strategic plan on the institution's management, physical development, and learners' performance. The findings are shown in Table 1.

**Table 1: Impact of the school strategic plan**

		No impact	Little impact	Moderate	Great impact	Very great impact	Mean	Std. dev
The physical development of the institution	Construction of infrastructure in the school.	5.6%	8.3%	19.4%	25.0%	41.7%	3.9	1.2
	Actual growth of the student population.	11.1%	5.6%	30.6%	19.4%	33.3%	3.6	1.3

Further, 41.7% of respondents stated that the school's strategic plan had greatly impacted the construction of school infrastructure. Most of the schools under investigation are young schools that lack many facilities, especially in terms of infrastructure. With proper planning, meager resources are used effectively to build infrastructure as needed at any given time. A well-thought-out plan in place is a tool for fundraising from well-wishers because it is a good sign of direction

From the tabulation in Table 1 above, 33.3% reported that the school's strategic plan had a significant impact on the actual growth of the student population. Most CDF schools start with a very small number of students, and without a clear sense of direction, the community will not find it easy to bring their sons and daughters to a small school. Strategic planning gives the community confidence in the direction the institution is taking, and therefore, they can bring their children. In addition, 30.6% of the respondents stated that the school's strategic plan had a moderate impact on the transition from form one to form four. Student retention is a big challenge in these small schools. Many parents bring their children to such schools in form one, promising that after the first term, they will get them into a better school. To keep such a learner in school, the school convinces the parent and the child that there is a good reason to stay. One way to ensure the learner stays is to involve them in planning their own path of success through strategic planning. Right from form one, learners need to develop strategies to keep them on an upward trajectory in both performance and talent development. Student success is characterized by “solid and effective teaching, strong levels of student engagement, deep learning, and value-added skills development” (Hanover Research, 2014).

##### 4.2 Impact of the school strategic plan

The respondents stated the impact of the school's strategic plan on the institution's management, physical growth and development, and learners' performance. The findings are shown in Table 2.

**Table 2: Impact of the school strategic plan**

		No impact	Little impact	Moderate	Great impact	Very great impact	Mean	Std. dev
The physical development of the institution	Construction of infrastructure in the school	0.0%	8.3%	16.7%	33.3%	41.7%	4.1	1.0
	Actual growth of the student population	0.0%	16.7%	33.3%	8.3%	41.7%	3.8	1.2

The respondents: 66.7% stated that the school strategic plan had greatly impacted the management of BoM affairs; 50% agreed that the school strategic plan had greatly impacted the management of teachers' and school staff affairs; and 41.7% noted that the school strategic plan had greatly impacted the management of students' affairs. This implied that most respondents acknowledged the significant impact of the school's strategic plan on the institution's management. School management and administration need to be strategic and intentional to achieve desired results.

Further, 41.7% of the respondents stated that the school's strategic plan had greatly impacted the construction of school infrastructure, and 41.7% agreed that it had greatly impacted the actual growth of the student population. This implied that most respondents acknowledged the significant impact of the school's strategic plan on the institution's physical growth and development.

In addition, 41.7% of the respondents stated that the school strategic plan had a great impact on the transition from form one to form four, 41.7% agreed that the school strategic plan had a great impact on improvement in internal exams performance, and 41.7% noted that the school strategic plan had a great impact on performance in KCSE. This implied that most respondents acknowledged the significant impact of the school's strategic plan on learners' performance. The common understanding is that the existence of school plans is enough to guide school actions and drive positive change and improvement.

### 4.3 Correlation Results

The study sought to determine from the principals how strategic plans in schools impact the physical development of the institution. Table 3 shows the correlation results between the development and implementation of strategic plans and the physical development of schools.

**Table 3: Correlation Results; Strategic plan implementation and physical development**

			Physical development	Development and implementation
Spearman's rho	Physical development	Correlation Coefficient	1	.557**
		Sig. (2-tailed)	.	0.000
		N	36	36
	Development and implementation	Correlation Coefficient	.557**	1
		Sig. (2-tailed)	0.000	.
		N	36	36

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

The findings indicated that the development and implementation of a strategic plan ( $r = .557^{**}$ ,  $P = .000$ ) were positively and significantly correlated with the physical development of the schools. The significance was supported by a p-value of 0.000, which was less than the critical p-value of 0.05. This implies that improvement in the development and implementation of the strategic plan is significantly correlated with the physical development of schools. With the meager resources at the school's disposal, a realistic plan needs to be put in place to ensure that some funds are directed toward the institution's infrastructural development.

#### 4.4 Regression Results

The principals' data in Table 4 indicate regression results on the effect of development and implementation of strategic plans on the physical development of schools.

**Table 4: Regression Results; development and implementation of strategic plans and physical development of schools**

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
Physical development					
(Constant)	1.509	.559		2.701	.011
Strategic plan	.680	.163	.582	4.168	.000
R Square	0.338				
Adjusted R-Square	0.319				
F statistic	17.373				
P value	0.000				

The findings indicated that the development and implementation of strategic plans explained 33.8% ( $R^2 = .338$ ) of the total variation in the physical development of the schools. The results also revealed an F statistic of 17.373 and a p-value of  $0.000 < 0.05$ . This implied that the independent variable (the development and implementation of strategic plans) was a good predictor of the dependent variable (the physical development of the schools).

Further, the constant 1.509 denoted the value of the schools' physical development when holding the development and implementation of strategic plans at zero. Finally, the findings indicated that the development and implementation of strategic plans ( $\beta = 0.680$ ,  $p = .000$ ) had a positive and significant effect on the schools' physical development. This suggested that a marginal increase in development and implementation of strategic plans would lead to an improvement in the physical development of the schools by 0.680 units.

Based on the regression results, the null hypothesis that the development and implementation of strategic plans in day secondary schools has no effect on the physical development of schools was rejected. This was supported by a p-value of 0.000, which was less than the critical p-value of 0.05. Therefore, the alternative hypothesis was adopted, implying that the development and implementation of strategic plans in day secondary schools have a significant effect on the physical development of schools.

## 5. Conclusion

The study concludes that the school's strategic plan had a significant impact on infrastructure development and student population growth. The study also concludes that the development and implementation of a strategic plan were positively and significantly correlated with the schools' physical development. Further, the study concludes that the development and implementation of strategic plans had a positive and significant effect on the physical development of the schools. Strategic planning plays a crucial role in guiding physical development in schools. It ensures that infrastructure investments are aligned with institutional priorities and long-term goals.

## 6. Recommendations

The Ministry of Education should standardize guidelines for strategic planning and develop monitoring frameworks to track implementation progress. The government of Kenya, through the Ministry of Education, should streamline policies on schools' strategic planning. In particular, the government should make it mandatory for all schools to have a well-stipulated strategic plan. The Ministry of Education should send representatives to participate in the formulation of the school strategic plans. The Ministry of Education should also develop an evaluation framework to assess implementation progress.

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