

Relationship between Teachers Perceptions of Principals' Management of Strategic Planning Guidelines Strategy and Students' Academic Performance in Public Secondary Schools in Nairobi City County, Kenya

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Abstract

In a rapidly changing era, educational change has become one of the crucial tasks for better student performance in schools. Principals are charged with the responsibility of creating a conducive learning climate that fosters academic success. The success is dependent on the way principals manage the process of school wide-change. The purpose of this study was to examine the relationship between teachers' perceptions of principals' management of strategic planning guidelines strategy and students' academic performance in public secondary schools in Nairobi City County. The study fitted within cross-sectional descriptive survey designs with a target population comprising 94 public secondary schools, 94 principals, and 906 teachers. The schools were stratified to categories; national, extra-county, and county schools to ensure equal representation during sampling. Stratified simple random sampling methods were used to select schools, principals and teachers. The sample size comprised 30 principals and 304 teachers. Data was collected using teachers' questionnaire and a school data form. Data were analysed through descriptive and inferential statistics. The hypothesis was tested at .05 alpha levels using linear regression analysis. It was found that teachers' perceptions towards principals' management of strategic planning guidelines strategy were positively correlated to students' academic performance ($p < .001$). It was concluded that when several changes are implemented simultaneously, student academic performance improves greatly. The study recommends that principals in schools should incorporate the necessary school-wide changes that influence students' academic performance

Keywords: Teachers Perceptions, Principals, Management, Strategic Planning, Academic Performance, Public Secondary Schools.

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1. Introduction

Globally, educational management in the 21st Century is expected to focus on the achievement of the Sustainable Development Goals (SDGs) which were identified by 193 countries that came together in 2015, Kenya being one of them (UNDP, 2015). The report explains that these countries agreed on the year 2030 Agenda on Sustainable Development Goals which each of these countries committed themselves to fight poverty and attain sustainable development within 15 years. Two of the modular building-blocks of SDGs achievement goals were education, gender, inequality and digital revolution for sustainable development (Sachs, Traub, Mazzucato, Messner, Nakicenovic, & Rockström, 2019). A study by Beare, Caldwell, and Millikan (2005), argue that complex and dynamic changes are required for sustained school improvement in the 21st Century. West, Jackson, Harris, & Hopkins (2000), ascertain that changes in economic conditions, technological developments, market changes, legal amendments, and changing customer preferences due to social and political changes are considered among the external reasons of organizational change.

Cheng and Mok (2008), assert that numerous educational reforms and school restructuring movements have been implemented to pursue educational effectiveness and school development in most countries in the world. The new millennium in the 21st century is indicated by rapid change and a complex society. Beare, Caldwell, & Millikan (2005), argue that complex and dynamic changes are required for sustained school improvement (West, Jackson, Harris, & Hopkins, 2000). This shift requires numerous changes in educational context. Hrebiniak (2013), identifies eleven changes of educational reform, which is a part of the strategies of the school-wide change in that they involve the judgment of institutional success on the quality of student learning, shared responsibility in student learning and providing access to educational services for learners. Hrebiniak continued to purport that constant identification, development, testing, implementation, and assessment of a variety of effective learning technologies including new applications of computer and information technology which are great changes likened to school wide change and it is expected to initiate students' achievement leading to improved academic performance.

According to Benson (2015), there are three main catalysts for school wide-change, which include;

regulatory directives, crisis that exposes a problem and desire for improvement. He purports that such an idea can be utilized in planning of the school strategy for teaching and learning geared towards better students academic performance. This initiative would be embraced in the management of school-wide change. Benson (2015), also found that the school strategy may drive the great desire for school change. Benson continues to note that there are teaching and learning tools used to make work easier for principals and teachers to embrace the school-wide change from teachers initiative to goal implementation. Speaking of school-wide change strategies in a school organization, the leading parameter is inevitably considered to be the school principal. A study by (Aksu, 2004), concluded that the common understanding that a school is as good as its manager" indicates the impact of the managerial competence, symbolized with the identity of the school principal. Aksu continues to assert that the ability of school principal's response to such expectations or validation of this perception may be associated with their being open to great change. School principals are expected not only to exhibit good management ability in relation to managing the school-wide change, but also to orchestrate programs, managing and evaluating the change process (Gumuseli, 2009). Such a process would bring about improved students' academic performance.

In embracing the school-wide change in Kenya, the Ministry of Education (MOE) through Teachers Service Commission (TSC) has introduced Teachers Performance Appraisal and Development (TPAD) tool for use by the principals and teachers in teaching and learning evaluation. This is with an intention of improving and monitoring curriculum delivery to improve on the student academic achievement. A report by TSC (2016), ascertains that the purpose of TPAD is to identify the principals' performance and management gaps and planning on teacher development and support measures. A study by Aloo, Ajowi and Aloka (2017) on TPAD application in Kenya concluded that it had enabled principals and teachers to adhere to 14 schemes of work and lesson plans coupled with course outline. The teachers' positive perception of the principals' management of school wide change strategies are crucial. Swanepoel (2008), in his study on the school reform found that school-based management has recently emerged as the instrument to accomplish the decentralization of decision-making powers to school level. He asserts that the success thereof depends largely on school principals' disposition regarding teacher involvement. Okiiya (2015), on change management and performance of public secondary schools in Siaya County found that change in teaching styles significantly influence academic performance.

2. Objective of the study

To determine the relationship between teachers' perceptions of principals' management of strategic planning guidelines strategy and students' academic performance in public secondary schools in Nairobi City County.

3. Hypothesis of the study

There is no significant relationship between teachers' perceptions towards principals' management of strategic planning guidelines and students' academic performance at public secondary schools in Nairobi City County.

4. Literature Review

Perceptions of Teachers' towards Principals' Management of Strategic Planning Guidelines and Students' Academic Performance

One management tool that has been acclaimed internationally as effective in improving the performance of state owned enterprises as well as government departments is the use of strategic planning (Bryson, 2011). Bryson, stresses that Strategic planning is important to any organizational work performance because it determines the organization's success or its failure. The term strategy as Nickols (2016), points out is a general action plan which was formulated to achieve a long-term goal using resources deployed by the organizations. The author defined a strategy as direction and scope of an organization over the long term which achieves advantage for the organization through its configuration of resources within a changing environment. This, he argues is to meet the needs of markets and fulfill stakeholders' expectations". The study found that strategy is always identified within the institutions' and organizations' strategic planning process where they match their strategies with the prevailing environmental factors and therefore the process becomes the core business of the organizations' planning.

Strategic planning as defined by Edwards, Slyke and Bryson (2011) for public and non-profit organizations is a guide to strengthening and sustaining organizational achievements, a disciplined effort to produce fundamental decisions and actions that can shape and guide what an organization is, what it does, and why it does it. A report by Rainey (2009), ascertains further that to deliver the best results, strategic planning requires broad yet effective information gathering, development and exploration of strategic alternatives, and an emphasis on future implications of the present decisions. Harvey (2008), defined strategic planning as the process of setting goals, deciding on actions to achieve those goals and mobilizing the personnel and the resources needed Bryson (2018), argues that many organizations around the globe have started taking interest in developing

strategic plans because many policies and programmes which they had initiated before have failed due to lack of continuity. He concludes that introducing strategic plans is the only solution to ensure quality output and improve the organizational standards which will eventually yield improved outcomes.

Chang (2008), asserts that a school's strategic plan should contain implementation strategies, actions and benchmarks for implementation, monitoring and evaluation, as well as the expenditure framework which allows adjustments in areas of management during its implementation. Chang further purport that the school's strategic plan should entail the school's analysis of its strategic issues for development, prioritization, planning to address such issues and, finally, implementing a plan to manage these issues by the principals for delivery of the expected students' academic performance. He concluded that such a plan can lead to school effectiveness, improvement and development so that if properly implemented by the teachers, it can ensure that the learners receive quality education through proper supervision by the principals during the implementation process. Further, he explains that School Developed Strategic Plan (SDSP) is a live document which automatically links the whole school to continuous self-evaluation reports and performance appraisal Objectives for the school to maintain continuous students' performance and evaluation. A study by (Stosich, 2014), purport that recent accountability policies have heightened pleasure on school principals to use strategic planning data to improve students' achievements in school wide program. In USA, a study of No Child Left behind (NCLB) program (Linn, Baker, & Betebenner, 2002), explains that the "No Child Left Behind" refers to the No Child Left behind Act of 2001, of a federal law passed in USA. NCLB representing legislation that attempts to accomplish standards - based education reform which strategized that 100% of students (including special education students and those from disadvantaged background) to be given equal opportunities in USA. In his study on NCLB strategy (Kucerik, 2002), in USA found that the stake holders want principals, teachers and students held accountable for students' academic performance through a workable strategic plan. While accountability policies have led to substantial data about students' academic performance, little data is collected on the organizational conditions that school principals would need to change to foster continuous improvement of students' achievements (Thoonen, Slegers, & Oort, 2011).

Continuous improvement requires school principals to articulate a vision for improved instruction and students' learning and to develop systems for collecting, analyzing and acting upon information data that supports the principals in realizing this vision (Fullan, 2011). In schools, this vision can only be influenced by the school principals as they are the vision carriers and must collaborate with the teachers to achieve students' outcomes (Sammons, Leithwood & Hopkins, 2011). Different types of data in school management strategy is very important as it is used in organizing school results by analysis of Strengths, Weaknesses, Opportunities and Threats (SWOT) analyses in improvement of students' performance and especially when the achievement has stagnated. In such circumstances, schools may use the Kurt Lewins theory of change so as to freeze the status quo and embrace the 21st Century school change and later freeze the good practices so as to achieve the expected students' academic performance. When teachers' perception is positive on the school change, students are likely to perform better in academics. Schools are still struggling world over to achieve the idea of using data analysis for students' achievement. A study by Sammons et al. (2011), noted that data use was no longer a choice for school principals but is a must. The study findings are still useful even today although Leithwood et. al assert that research has continued to describe difficulties in everyday educational data use and the struggles that managers and therefore principals have in fostering the analysis of such data.

Education systems must have a powerful and coherent educational improvement strategy in order to improve students' academic achievement (Childress, Elmore, Grossman, & Johnson, 2007). They assert that the strategic plan for management of human capital and the education system's educational improvement strategy are inextricably linked. According to Pearce and Robinson (2014), implementation of the strategic plan involves key activities which develop short term objectives which are implementable with developing policies that empower action. Njeru, Stephen and Wambui (2013), pointed out that a school that formulates and implements strategic plan derives benefits such as having negotiated and agreed clear goals and objectives that the principal and teachers can follow for students' academic achievement. They continue to argue that communication of the set goals to various stake holders by the principal through provision of a base upon which progress can be measured; building strong and functional teams with teachers with a clear vision on how the school will run is an indication of school success. Such collaboration may provide the school management with new ideas which can steer the school to greater heights of excellence and commit the school funds to a well-organized and coherent performance agenda. Such a process may be referred to as the school-wide change process. The education sector, like the economic sector, needs the use of human, material and financial resources to function (Bell, 2002). Bell reiterates that Secondary school sector is the springboard of all educational institutions where students are prepared to take a lasting decision of who they will be in the society tomorrow as they prepare to undertake a university study career. Bush and Bell (2002), continues to explain that this calls for the need to engage all stakeholders in strategic planning and school management which calls for full participation of principals, teachers and other stakeholders in form of collegial support which they found that it brings about students'

achievement and school success. Strategic planning is one of the major steps that schools should take to address the challenges they face in enhancing the quality of their educational objectives which will address the expected students' outcome (Elias, Zins, Graczyk, & Weissberg, 2003)

In Kenya, some of the main challenges faced by the MOEST in implementing and actualizing vision 2030 within the social pillar of education is students' academic performance, access, quality education, completion, retention and relevance (MOEST, 2005). Further, the MOEST has also, through the Kenya Education Sector Support Programme (KESSP) program, come up with the a program to work closely with a wide range of stakeholders in the education sector in the development Sector Wide Approach Program (SWAP) for the development of the education sector in Kenya for the next five years. The program recommended that in ensuring that the challenges are mitigated, schools should prepare strategic plans that run between 3-5 years out of which they identify key strategies that are relevant for students' achievement. A study by Nyagah (2015), aimed at analyzing the factors that affect formulation of strategic plans in secondary schools in Mombasa County in Kenya found that management of schools, training of teachers and principals and resources allocation to a large extent affect formulation of strategic plans in schools. The study further recommended that there was need to train the principals and teachers on the formulation and implementation of the schools' strategic plan.

In some countries, the government has made it mandatory for schools to formulate strategic plans, for example the Australian government has made a guideline of what schools should include in their strategic plan (State of Victoria, 2020). There is also lack of structures to monitor formulation of strategic plans by secondary schools. The principals therefore need to supervise the formulation and implementation of strategic plans so that it can eventually benefit the students' performance. The report ascertains that among the strategies that are set by schools include formulation of mission statement, continuous assessment, benchmarking, and syllabus coverage to improve the students' academic performance. In a school set up, a strategic plan helps a school define what it intends to achieve when it comes to their students' academic success, objectives and organizational goals. A combination of good planning and collaboration ensures that all stakeholders including parents, teachers, administrators, principals, board members and community are all striving for the same goals Ong (2016), stipulated that a strategic plan in a school is very significant in that it gives the principal and the teachers a sense of purpose and direction capable of guiding them in making everyday choices about what actions should be taken in order to produce the expected students' outcome (Victoria & Chikwature, 2016). The study by Victoria & Chikwature on the teachers' perceptions of the role of strategic planning in educational development, found that teachers did not fully understand the concept of strategic planning as the concept is still on trial. This study seeks to investigate further on the perception of the teachers on this phenomenon.

Organizational change is not only a multilevel construct, but a multi-faceted one. Specifically, organizational change refers to organizational members' change commitment and change efficacy to implement organizational change (Weiner & Lee, 2008). Organizational change is the movement of an organization away from its present state and towards some desired future state to increase its effectiveness. This is achieved through an ambitious strategic planning. A question may be asked; why does an organization such as the school need to plan to change the way it performs its activities? This is because the education environment is constantly changing, and hence the school organization must plan to adapt to these forces in order to remain relevant and effective (Blankstein, 2010). The implementation of the school strategic plan is the required change that the schools need to implement. In the US, interest in applying strategic planning as a reform tool in education became popular in the early 1990's, and gained popularity in some states like Rhodes Island where strategic planning in school districts is mandated by state law (Ralph J. Jaspardo, 2012). Cooper (2003) concurs with Weiner (2009) that organizational change is not only a multilevel construct, but a multi-faceted one and the school as an organization should plan its strategic plan well.

Phiri and Chileshe (2016), undertook a study to evaluate the impact a strategic plan has on a students' academic performance. The findings revealed that a strategic management system placed the teachers in pre-determined positions for effective performance which resulted in improved student' academic performance. Nevertheless, principals required to evaluate the strategic plan on a termly basis to take note of barriers to success such as lack of resources. Bryson (2011), ascertains that incorporating strategic planning, school districts have an uninterrupted record of embracing the process as a regular feature of their organizational life. Bryson further noted that an increasing focus on accountability and academic achievement contributed to the movement for school transformation as early as in 1990s. Bryson (2011), noted that to regularly engage in the process of examining the mission and vision, assessing current state, setting goals, determining action plans to achieve their goals, and measuring progress towards meeting the goals has become a characteristic of successful schools. Nothing affects a school more than its inability to create and execute a strategic plan (Hrebiniak, 2013). Hrebiniak ascertains that a good strategic plan can improve the students' academic outcome. Stephen and Jagongo (2016), found that to deliver the best results, strategic planning should cover a wide scope of internal and external information while seeking alternative measures to curb future implications resulting from current decisions. The teachers' positive perception on the principals' supervision of strategic plan implementation, may

therefore improve students' academic performance.

In Kenyan schools, strategic planning was introduced in 2008, after discovery that schools only operated on development plans adapted from the Ministry of States Agency for International Development (USAID). An investigation was carried out by the MOE, which established that plans in schools were more general and did not adequately focus on outputs and outcomes (Ministry of Education, 2008). Mwenda (2014), in a study on determinants of effective institutional strategic planning in public secondary schools in Meru district in Kenya, found out that despite the fact that 93% of the principals had received training on strategic planning, many had not effectively implemented it in their respective institutions. Murugu (2013), in his study on strategic performance in public secondary schools in Kenya also revealed that the very few schools with well executed strategic plans had better organized programs for students' academic performance. Another study carried out by Okode (2013) to determine the influence of secondary schools' strategic planning on students' academic performance in Rachuonyo North District, Kenya revealed that the majority of the schools had mission statement written on walls and entrance of school gates. The study revealed the statements or information on the walls was not well understood by the teachers and the timeline was not well stipulated in many schools, which led to a clash of programs. Positive perception of the teachers on the principals' supervision of the strategic plan implementation may imply improve students' academic performance hence the need for this study.

Chimuka (2016) in his study on investigation of the effects of secondary schools strategic planning on pupils' academic performance in selected schools of Lundazi District in Zambia established that, the strategic plans were not well utilized and therefore only influenced pupils' performance to a little extent. Chimuka also found that schools that had put continuous assessment programme in place in assessing their pupils' made a considerable progress on their 48 pupils' academic performance. Chimuka further established that improving teacher preparedness on strategic planning was among the various strategies used by schools and this had positively influenced pupils' academic performance. The study further revealed that management and supervision of teaching and learning strategy influenced pupils' academic performance to a large extent. The overall findings by Chimuka indicated that there was a positive and significant influence of the school strategic plan on pupils' academic performance with the greatest influence from teacher preparedness strategy. Gakenia, Katuse and Kiriri (2017) sought to examine the role of principals' execution of strategic plan on the performance of national schools in Kenya. The study revealed that the strategy execution is positively correlated to academic performance of national schools. Positive perception of the teachers on the supervision of the implementation of strategic plans may imply improvement of student academic performance hence the need for this study.

5. Methodology

A descriptive cross sectional survey design design was adopted targeting 94 public secondary schools, 94 principals, and 906 teachers. The schools were stratified to categories; national, extra-county, and county schools to ensure equal representation during sampling. Stratified simple random sampling methods were used to select schools, principals and teachers. The sample size comprised 30 principals and 304 teachers. Data was collected using teachers' questionnaire and a school data form. Data was collected using structured questionnaires for teachers and principals & instruments validated & adjustments done after the pilot study. Reliability was determined using Cronbach Alpha coefficient that yielded 0.753 and 0.873 respectively. Data was analysed through descriptive and inferential statistics. The study hypothesis was tested at .05 alpha levels using linear regression analysis.

6. Findings and Discussions

Teachers' perception of principals Management of Strategic Planning Guidelines Strategy and Students' Academic Performance

In answering the research question, the teachers were asked to indicate their views on the principal's management of strategic planning guidelines strategy (TSC Tool) and students' academic performance. In answering the research question, the researcher converted the Likert scale in to means where a mean of 1 – 1.4 was within the range of strongly disagree, 1.5 - 2.4 was within a range of disagree, 2.5- 3.4 was a range for the undecided, 3.5 - 4.4 representing a range of agree while 4.5 to 5.0 was a range of strongly agree. The means were interpreted as either; 2 = positive perceptions (2.5 - 5.0) or 1 = negative perceptions (1.0 - 2.4). Table 1 presents the means of teachers' responses.

Table 1: Teachers' perception of principals' management of strategic planning guidelines strategy and students' academic performance

Statement	N	M	SD
Principal initiates school's strategic plan with time lines which teachers use to improve students' academic performance	290	3.88	0.97
Principal applies pressure towards setting targets and rewards target achievement by teachers which helps to improve students' academic performance	290	3.88	0.96
Principal initiates shared management practices with teachers to foster ownership of school's vision and mission which helps improve students' academic performance	290	4.02	0.90
Principal supervises teachers' professional documents through lesson observation using TPAD which has helped improve students' academic performance	290	4.14	0.86
Principal supervises teachers on student centred methods of teaching/learning which has improved students' academic performance	290	3.87	0.85
Principal addresses causes of dismal performance through supervision of continuous evaluation and revision which has helped improve students' academic performance	290	4.02	0.88
Principal provides adequate teaching and learning resources for teachers and students which hinders students' academic performance	290	3.80	0.94
Principal provides teachers with professional development through regular training which hinders improvement of students' academic performance	290	3.89	0.89
Principal initiates development and implementation of the timely feedback policy to learners and parents which motivates students to improve their academic performance	290	3.88	0.89
Principal supports teachers in ensuring timely coverage of syllabus and revision which hinders students' improvement in academic performance	290	3.72	0.94
Overall mean	290	3.91	0.87

From the data on Table 1, it can be deduced that in most of the statements, teachers agreed that application of strategic planning guidelines strategy (TSC Tool) influenced students' academic performance. For example in the statement that stated that the principal has initiated the school's strategic plan with time lines which teachers use to improve students' academic performance and the statement that the principal applies pressure towards setting targets and rewards target achievement by teachers which helps to improve students' academic performance both had a mean of 3.88 and sd of 0.97 respectively which is in a range of 3.5 – 4.4 and hence the conclusion that the majority of the teachers agreed that strategic planning is very important for teaching for it is geared towards better students' academic performance. The importance of the new paradigm of strategic planning in organizations and therefore schools is confirmed by a report by Rainey (2009), who ascertained further that to deliver the best results, strategic planning requires broad yet effective information gathering, development and exploration of strategic alternatives, and an emphasis on future implications of present decisions. In a school set up, (Victoria and Chikwature, 2016) ascertained that a strategic plan in a school is very significant in that it gives the principal and the teachers a sense of purpose and direction capable of guiding them in making everyday choices about what actions to be taken in order to produce the expected students' academic performance.

Moreover in table 1, from the means and standard deviation, the teachers also agreed that the principal initiates shared management practices with teachers to foster ownership of the school's vision and mission through collaboration which helps improve students' academic performance ($m = 4.02$; $sd = 0.9$). The teachers also agreed that the principal supervises professional lesson plan documents by teachers through lesson observation using TPAD (TSC evaluation tool) which has helped improve students' academic performance ($m = 4.14$; $sd = 0.86$). They also agreed that the Principal supervises teachers on student centred method of teaching and learning which has helped to attain improved students' academic performance ($m = 3.87$; $sd = 0.8$). The teachers further agreed that the principal addresses the causes of dismal performance through supervision of continuous evaluation and revision which has helped improve students' academic performance ($m = 4.02$; $sd = 0.88$). These results are in agreement with the findings of a study by Phiri and Chileshe (2016), in Mwense District, Zambia whom in their study on the impact of a strategic plan on students' academic performance revealed that a strategic management system placed the staff members in pre-determined positions for effective performance which resulted in improved student performance. Phiri and Chileshe also advised that the principals required to evaluate the strategic plan on a termly basis to take note of barriers to success such as lack of teaching and learning resources.

Teachers agreed that the principals provided adequate teaching and learning resources for teachers and students which improves students' academic performance ($M = 0.80$; $SD = 0.94$). The teachers further agreed that the principals provide teachers with professional development through regular training which improves students' academic performance ($M = 1.89$; $SD = 0.01$). This means that principals provide adequate teaching and learning resources for teachers and students to the best of their capability as noted by the teachers. In support this positive

move by the principals, the Kenya government through the MOE has provided textbooks provision, computers and laboratory equipment through the new education support programmes (Sessional paper no 1 of 2019). It was also observed from table 4.16 that the principal initiates the development and implementation of the school's timely feedback policy to learners and parents which motivates students to improve their academic performance ($M= 3.88$; $SD= 0.89$). These findings are confirmed by Phiri and Chileshe (2016) who stressed the importance of strategic planning on students' academic performance. The overall agreement rating was interpreted as positive perceptions as it was within the range of positive (2.5 - 5.0). These results agree with those of Chimuka (2016); Edwards et al. (2018); Gakenia et al. (2017) and Phiri and Chileshe (2016) who found that use of strategic plan on students' academic performance placed the teaching staff members in pre-determined positions for effective teaching which resulted in improved students' academic performance.

Test of hypothesis

H01: There is no significant relationship between teachers' perceptions towards principals management of strategic planning guidelines and students' academic performance at public secondary schools in Nairobi City County.

The first null hypothesis stated that there is no significant relationship between teachers' perceptions towards principals' management of strategic planning guidelines and students' academic performance at public secondary schools in Nairobi City County. To determine the relationship, a linear regression analysis was performed with the composite school mean scores and means of teachers' perceptions on principals' management of strategic planning guidelines strategy variable. Three output tables present the results; Table 2, 3, and 4. Table 2 presents output of the proportion of variance in the dependent variable that can be explained by the independent variable and statistical significance of the regression model which is the information needed to predict the dependent variable, academic performance, using the independent variable. This is explained on table 2.

Table 2: Overall model fit 1

Number of observations	874
F (25, 848)	3.6
Prob. > F	0.000
R - squared	0.0958
Adjusted R - squared	0.0692
Root SME	.922018

From the overall model fit summary, it was found that strategic planning guidelines explained a significant amount of the variance in the value of student academic performance ($F(25, 848) = 3.6$, $p < .001$, $R^2 = .095$, R^2 Adjusted = .069). The $R^2 = 0.095$ indicates that 9.5% of the variance in KCSE scores can be predicted from the strategic planning guideline strategy. This indicated that, overall, the model applied statistically significantly predicted the dependent variable, academic performance. Analysis of Variance (ANOVA), Table 2 provided the analysis of the variance in the model, numerical information on the variation and how well the model explained the variation for the observations, the value predicted by the model, and the difference between the actual observed value of the dependent variable and its predicted value by the regression model for each data point is presented on table 3.

Table 3: ANOVA 1

Source	SS	df	MS	F	Prob. > F
Model	76.41409	25	3.056563	3.6	0.000
Strategic Planning guidelines	76.41409	25	3.056563	3.6	0.000
Residual	720.8994	848	0.850117		
Total	797.3135	873	0.913303		

The first line of Table 3 summarizes the model. The sum of squares (SS) for the model is 76.41 with 25 degrees of freedom (df). This line results in a mean square (MS) of 3.06. The corresponding F statistic is 3.6 and has a significance level of 0.001. Thus the model was significant at the 0.1% level. Therefore, the null hypothesis is rejected. It was concluded that there is a statistically significant relationship between teachers' perceptions of strategic planning guidelines and students' academic performance on table 4

Table 4: Regression analysis of KCSE performance data with management of strategic planning guidelines

mean score	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]
Strategic Planning guidelines	0.03145	0.007524	4.18	0.000	0.016683 0.046216
cons	0.733987	0.249633	2.94	0.003	0.244036 1.223939

The coefficient is 0.031. The coefficient is statistically significantly different from 0 using alpha of 0.05 because its p-value is 0.000, which is smaller than 0.05. Therefore, for every unit increase in teachers' perceptions on principals' management of strategic planning guidelines strategy a 0.031 unit increase in KCSE mean score is predicted. On the reverse, for every increase of one point on the KCSE score, the mean of

teachers' perceptions on principals' management of strategic planning strategy is predicted to be higher by 0.031 points. The final predictive model was: $KCSE\ score = 0.73 + (0.31 * \text{strategic planning guidelines})$. In this new approach to planning educational curriculum implementation, the principals have found it appropriate to apply and manage the application of strategic planning guidelines as they have come to understand that it is important to the students' academic performance. This is further confirmed by (Hrebiniak, 2013) who in his book reported that nothing affects a school more than its inability to create and execute a strategic plan. Hrebiniak ascertains that a good strategic plan can improve students' outcomes.

The above findings agree with Edwards, Slyke, and Bryson (2018), who found that schools' strategic planning such as mission statement written on walls and entrance of school gates, continuous assessment program in place made a considerable value added progress on their students' academic performance. The findings also agree with Chimuka (2016), who found that strategic planning guidelines such as having a mission statement written on school walls and entrances had an impact on students' performance. The findings also agree with Gakenia, Katuse, and Kiriri (2017) who found a strong and positive correlation of 0.479 between the strategic plans execution and academic performance. Since $F(11, 75) = 2.030$, $p < 0.037$ then the model was considered a good predictor of academic performance as a p value of 0.037, implied only a 3.7% likelihood of a multiple linear regression model giving the wrong responses.

7. Conclusion

The study concluded that there is a significant relationship between teachers' perceptions towards principals' management of strategic planning guidelines and student academic performance. Students' academic performance would be improved when principals' initiated shared management practices with teachers to foster ownership of the school's vision and mission. Principals' supervision of professional lesson plan documents by teachers through lesson observation using TPAD was perceived to improve students' academic performance.

8. Recommendations

Principals should be encouraged to engage all the stakeholders such as parents, teachers Association, Boards of management, students, sponsors and members of the public. The support would be in strategic planning and collaborative support so that all may support new changes in the school for the implementation for better students' academic performance.

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