

## INFLUENCE OF PRINCIPALS' INSTRUCTIONAL LEADERSHIP PRACTICES ON STUDENTS' ACADEMIC ACHIEVEMENT IN PUBLIC SECONDARY SCHOOLS IN NAKURU COUNTY, KENYA

<sup>1</sup> Fridah Nanjala, <sup>2</sup> Dr. Hellen Kiende Guantai, PhD, & <sup>3</sup> Dr. Gladys Kinyanjui, PhD

<sup>1</sup> Student, Master Degree of Education, Educational Administration, School of Education and Lifelong Learning, Kenyatta University, Kenya

<sup>2,3</sup> Lecturer, Department of Educational Management, Policy and Curriculum Studies, Kenyatta University, Kenya

Accepted: February 10, 2024

### ABSTRACT

*Instructional leadership is associated with practices which the school principal does with the intention of enhancing students' academic achievement. This research sought to find out whether the instructional leadership practices influenced learners' academic achievement in KCSE in public secondary schools in Nakuru County. The study determined the influence of principals' instructional leadership practices on students' academic achievement in KCSE in public secondary school in Nakuru County. The objectives of this study were; to determine the influence of goal setting skills of the principal on KCSE performance of students in public secondary schools in Nakuru county, to determine the influence of principals' instructional supervisory practices on students' achievement in KCSE in Nakuru county, to establish the influence of principals' promotion of staff professional development on learners' achievement in KCSE in public secondary schools in Nakuru county and to determine the influence of principals' fostering of conducive learning environment on the learners' academic achievement in KCSE in public secondary schools in Nakuru county. The study was guided by Carrier's (2014) instructional leadership model which demonstrated an experimental illustration that deliberated on how the staff and the leader's crossing point resulted into institutions' desired achievement. The study used mixed methods research design which used both quantitative and qualitative approaches. The study was conducted in Nakuru County. The target population included 285 teachers and 33 principals of public secondary schools in Nakuru County. Therefore, the total sample size for the quantitative phase was 30 principals and 166 teachers totaling up to 196 respondents. The study employed the use of purposive sampling to select schools and principals. Simple random sampling technique was also used to select teachers in the selected schools. The study used questionnaires for both teachers and principal and interview schedules for the principals. Content validity was established by seeking expert judgement from specialists in the department of Educational Management, Policy and Curriculum studies. The reliability was tested using Cronbach's alpha to determine whether the questions in the questionnaire reliably measured what was intended. Qualitative data was analyzed thematically and presented in form of narrations. Quantitative data was analyzed using SPSS presented using frequency distribution tables and bar graphs. A multiple linear regression test was used to establish the influence of principals' instructional leadership practices on KCSE achievement. The major finding from the study was that the principals did carry out school programmes with the main aim of attaining the set goals. The study recommended that the roles of other instructional leaders like the heads of department, deputy principals and senior teachers should be explored. Additionally, the ministry of Education and TSC should take appropriate measures to curb continuous decline in KCSE performance in Nakuru County, Kenya.*

**Key Words:** School Principal, Leadership, Goal Setting Skills, Instructional Supervisory, Staff Promotion

**CITATION:** Nanjala, F., Guantai, H. K., & Kinyanjui, G. (2025). Influence of principals' instructional leadership practices on students' academic achievement in public secondary schools in Nakuru County, Kenya. *Reviewed Journal of Education Practice*, 5 (1), 1 – 18.

## INTRODUCTION

Education leadership Consortium of Nova Scotia (2018) indicates that, an instructional leader demonstrates instructional leadership when they focus on enhancing the effectiveness of instruction to improve the learners' academic achievement. Moreover, instructional leaders make sure that instructional practices are relevant to the context and that they are deeply rooted in the implementation process of the instructional program of the school.

Instructional leadership practices are the leadership roles and responsibilities that are related directly to the teaching and learning process, students and curriculum and the interaction between the teachers (Quay, 2011). The success of academic programs in schools depends on its instructional leader (Gulcan, 2012). Gulcan defines instructional leadership as all efforts taken by education leaders to enhance teaching and learning in institutions of learning. According to Murphy (2010), school principals' instructional leadership may be conceptualized in two ways as broad and narrow. According to Linda (2018), the broad category of instructional leadership entails development and implementation of goals, instructional management and school culture while the narrow category of instructional leadership involves those actions which relate directly to learning and teaching such as lesson observation, and teaching methodology. All these are aimed at enhancing learners' academic achievement. Instructional leadership involves creating conducive environment to facilitate teaching and learning in pursuit of social goals and academic achievement for learners (Felicia, 2016). Additionally, the students' achievement and conducive school environment are linked and that without it, good academic achievement will be difficult to achieve.

Bush (2015) indicated that a great instructional leader is one who gives curriculum and instruction the priority, mobilizes resources to facilitate the achievement of goals, and creates an environment where learners have high expectations in academic achievements. A part from being accountable for managerial responsibilities, the school principals today are also tasked with the responsibility of providing quality instructional leadership that reflect best practices for the main purpose of making sure that students attain higher academic achievement (Glan & Behar-Hornstain, 2000). Christine (2010) and Hallinger (2011) in their study on instructional leadership of principals revealed that the instructional leadership of principal is linked to improvement in examination performance and that some schools do well under instructional practices while others struggle. Hallinger and Heck (2011) asserted that instructional leadership practices can contribute to school academic improvement by enhancing supervision of instructional programs, principals' coordination and support of staff development and conducive work environment.

South Africa lags far much behind other nations on students' academic achievement although the country spends a lot of money on education than its peers (Taylor, Van der Berg & Mabogoane, 2013). Research done by department of education (2009) in South Africa found out that the role of the school principal as a curriculum and instructional leader should be affirmed for better students' academic outcome. However, the research failed to indicate the specific principals' instructional leadership practices and how they influence performance of learners in the national examination hence the need for this study.

Staff professional development basically entails programs and activities designed to develop and enhance competences, skills and knowledge and quality teachers for improved performance. Study findings by Xiao (2014) in china supported the fact that teacher professional development has a positive and strong impact on classroom teaching which results to improve student academic achievement. A study by Ahmed (2016) about the practices of instructional supervision in Ethiopia indicated that provision of professional support to teachers by the principals is important because it improves the instructional skill and efficacy of the teacher in the classroom. This enhances students' academic achievement. A study by Muthoni (2017) in Kenya recognized that there is a great connection between professional development and students' academic performance.

## **Statement of the Problem**

Instructional leadership is regarded as one of the main components in enhancing the quality of education which then translates to good academic achievement. School principals, on the other hand are tasked with the responsibility of initiating and sustaining instructional leadership in their respective schools. They do this by carrying out suitable instructional leadership practices like proper goal setting, staff professional development, good supervisory practices and providing conducive environment for teaching and learning which in turn facilitates maximum learner achievement.

Despite all these efforts by the school principals, KCSE performance in public secondary schools in Nakuru County has generally remained poor as shown by the KCSE mean scores in the table 1.1 above. The researcher therefore sought to find out whether the instructional leadership practices like goal setting skills, staff professional development, supervision practices and teaching and learning environment; which were important in promoting effective teaching influences learners' academic achievement in KCSE in public secondary schools in Nakuru County.

## **Purpose of the Study**

The purpose of this study to determine the influence of principals' instructional leadership practices on academic achievement in KCSE in public secondary schools in Nakuru County with the view of informing educational practices in Kenya. This study was guided by the following objectives;

- To determine the influence of goal setting skills of the principal on KCSE performance of students in public secondary schools in Nakuru county
- To determine the influence of principals' instructional supervisory practices on students' achievement in KCSE in Nakuru county
- To establish the influence of principals' promotion of staff professional development on learners' achievement in KCSE in public secondary schools in Nakuru county
- To determine the influence of principals' fostering of conducive learning environment on the learners' academic achievement in KCSE in public secondary schools in Nakuru county

## **Research Hypotheses**

The following were the null hypotheses for this study.

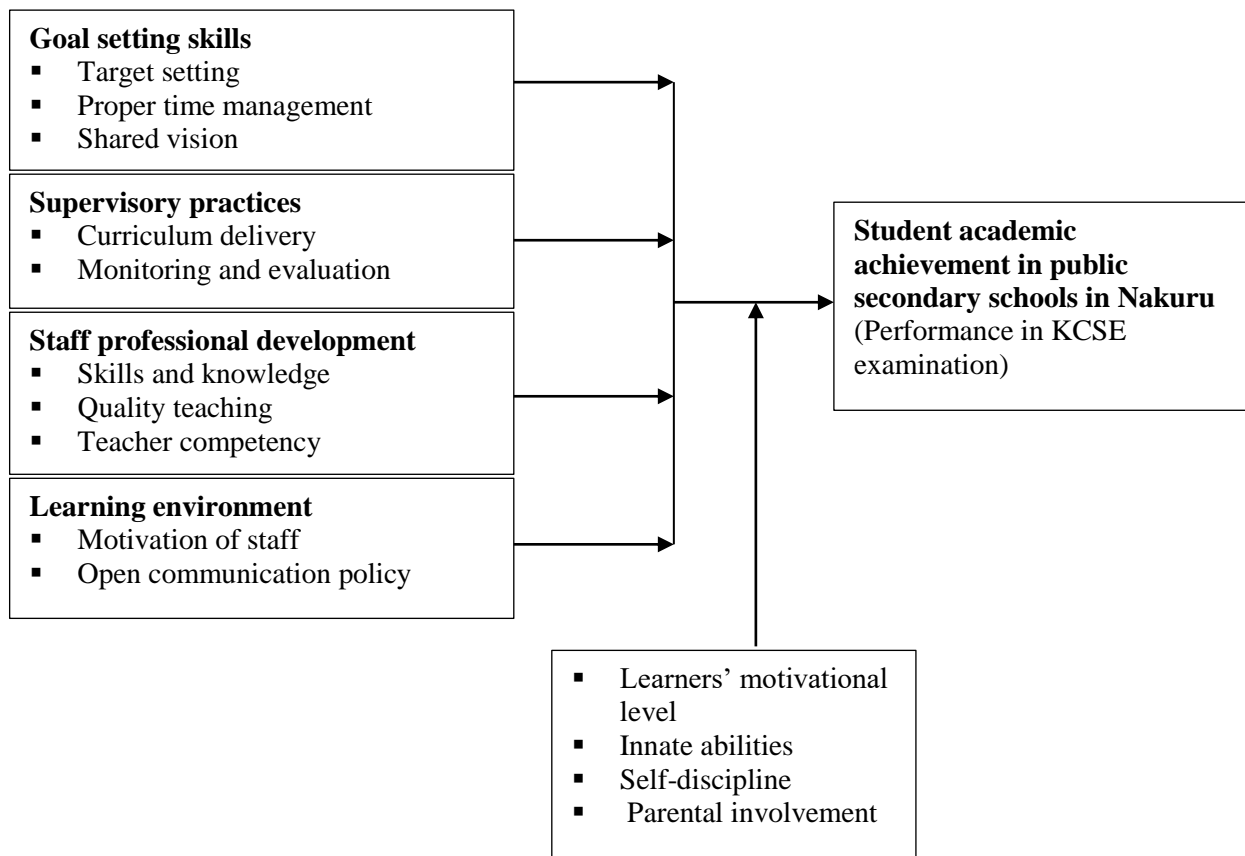
- H<sub>0</sub>1. There is no significant influence between goal setting skills of the principal and students' academic achievement in KCSE in public secondary school in Nakuru County, Kenya.
- H<sub>0</sub>2. There is no significant influence between principals' instructional supervisory practices and students' academic achievement in KCSE in public secondary schools in Nakuru County, Kenya.
- H<sub>0</sub>3. There is no significant influence between principals' promotion of staff professional development and students' academic achievement in KCSE in public secondary schools in Nakuru County, Kenya.
- H<sub>0</sub>4. There is no significant influence between fostering of conducive learning environment by the principal and students' academic achievement in KCSE in public secondary schools in Nakuru County, Kenya.

## **Theoretical Framework**

This study was guided by Carrier's (2014) instructional leadership model. This model demonstrated an experimental illustration that deliberated on how the staff and the leader's crossing point resulted into institutions' desired achievement. The instructional leadership model by Carrier (2014) differentiates the work of an instructional leader from those of the principal and teachers. The school principal is supposed to concentrate on providing quality learning for all students by developing a school community geared towards a common vision. The principal should focus on attaining the desired goals in the learning process and be in a position to drive instructions to achieve the best outcome. The teachers should also implement the functions of

the principal within the class. Carrier (2014) asserts that the principal as an instructional leader should be enthusiastic to carry out his/her duties and be ready to take up any other essential responsibility for the advancement of the students' achievement. The school principal should also demonstrate a strong expert resolve to achieve the role of an instructional leader. Therefore, with the ultimate outcome of improved student achievement, the principal as an instructional leader is modeled by the teachers' output.

### Conceptual Framework



**Independent Variables**

**Intervening Variables**

**Dependent Variable**

**Figure 1: Conceptual Framework**

### LITERATURE REVIEW

Instructional leadership constitutes the principals' behavior that sets clear goals and high expectations for teacher and student performance, monitors and provides feedback regarding the core business of the school, promotes staff professional development and creates conducive environment for learning which translates to higher academic achievement (Hallinger & Murphy, 2013)

Purkey and Smith (2012) described instructional leadership as the actions taken by the principal to develop a satisfying and productive work environment for both learners and teachers. Instructional leadership has characteristics normally associated with school principals whose work has been identified as effective. Instructional leaders designated as school principals provide instructional leadership in institutions of learning. Research done by Wallace Foundation (2012) in the United States of America on instructional leadership established that school principals are faced with great challenges in meeting the increased demands of learning and teaching.

### **Goal setting skills and its influence on KCSE performance**

Goal setting skills is the process of identifying an objective to be achieved and establishing measurable timelines and goals. Locke and Latham (2013) asserted that goal setting is simply transforming or putting ideas into action and having a clear set of goals be it for yourself or for the school organization because it is important foundation of success. Locke (2013) further indicated that goals set by individuals themselves can be highly important in gaining commitment even though they may not be targeted as high as another person may assign. Moreover, student involvement in goal setting process is a way of initiating the process for the student to start internalizing the motivation piece that will assist in attaining their self-determined goal.

Locke (2013) noted that goal setting helps the student to understand what is expected of them thus allowing for greater attention towards attaining the set goals. He further added that, after setting those goals, the school principal should communicate them to the school fraternity. The school principal as an instructional leader should communicate and also explain the goals, the expectations and the school program to the school community. Principals who exercise instructional leadership should always ensure that the significance of the set goals is understood by reviewing and discussing them with the parents, staff, board of management and students periodically in the context of curricular, instruction and budgeting decisions.

### **Instructional supervision practices and its influence on KCSE performance**

Instructional supervision entails checking, observing and watching teachers' activities, which is geared towards monitoring and coaching them as well as providing direction, professional guidance, assistance and leadership for professional development in order to enhance the quality of instructional delivery. An empirical study conducted by Vivian, Jeffrey and Susan (2016) in instructional supervision practices in USA revealed that there's a significant relationship between students' academic performance and supervision. The study used interviews and questionnaires to collect data. The sample size for this study was one school. This study also utilized descriptive research design. This current study will use interviews and questionnaires and interviews to collect data together with descriptive research design the main participants will be the teachers and the school principal.

A study done by Rosemary and Vera (2016) on the role of effective supervision on academic achievement in Ghana revealed that there exists a significant relationship between learners' academic performance and supervision practices of the principal. The study was based on supervision model and collegial model of educational management. The study employed descriptive research design. Questionnaires were used to collect information. This current study will use both questionnaires and interviews to collect data. This study will be anchored in Carrier's (2014) instructional leadership model.

In Kenya, supervision of curriculum implementation is conducted by Teacher's Service Commission and the Ministry of Education. The Ministry of Education has a directorate tasked with standards and quality assurance in schools in terms of human resource and physical structure. The TSC deals with supervision and employment of teachers. Supervision is carried out through the use of Teacher Performance Appraisal Development (TPAD). According to TSC, supervision has enhanced students' performance through reduced teacher absenteeism and proper management of instructional time (TSC, 2018). Research carried out by Samoei (2014) on supervision in public secondary schools in Nandi district revealed that supervision of learning process for instance checking the punctuality of the teacher, monitoring learners academic progress and protection of instruction time was established to be very key in schools that achieved good academic performance.

### **Staff professional development and its influence on KCSE performance**

Staff professional development refers to programs and activities designed to enhance and develop competencies and skills for improved performance. The principal as the staff professional developer is at the center of the concept of the principal as an instructional leader (DuFour, 2013). Further, DuFour (2013), indicates that an ongoing staff development program is one indicator of the best instructional leadership.

Additionally, DuFour (2013) asserts that according to Race to the Top guidelines, more rigorous supervision practice is supposed to influence professional development of the teachers. A study done by Oluwatoyin (2018) on the needs for in-service teacher professional development in the sub-Saharan Africa established that well designed and very objective in-service professional development of teachers leads to improved academic achievement of students. The study adopted the use of questionnaires to collect data. The target population was teachers. This current study will use descriptive research design and questionnaires to collect data to establish if there exist a connection.

The government of China has put in place policies that provide teachers with a number of guides to their development and learning which in turn has improved student performance. Review study carried out by Xiao (2014) in China on instructional leadership of the principal in fostering teacher professional development discovered that relevant instructional leadership practices associated with teacher professional development lead to teacher competency and quality teaching in the classroom, hence enhancing learner academic achievement. Further, the study indicates that the school principal should encourage, support and nurture teacher learning.

### **Learning environment and its influence on KCSE performance**

According to findings by Vedavathi (2017) in a study on secondary school environment in India, school principals need to be given more opportunities to expand and reform the school environment. Moreover, it takes a team of dedicated school community to create conducive work environment for improved learner outcomes. Hallinger (2012), argued that school principal as instructional leaders are capable of changing the environment of their schools directly or indirectly. This can be realized by maintaining high visibility in order to communicate priorities and model expectations, creating a rewarding system, protecting instruction time and selecting participating and supporting staff development. It has been found globally that effective leaders develop conducive school environment that help motivate both teachers and students resulting to higher academic achievements.

A study by the Wallace foundation (2012) in USA established that principals in schools rated well for instructional climate are better at introducing a secure, stable and trustworthy working environment and their staff regard the principal undertakings as well intended. Although the above study was conducted in a different geographical location, with a different sample size and used different research methods and designs, the researcher is keen to note whether the findings will concur.

## **METHODOLOGY**

The study employed mixed methods research design, combining both quantitative and qualitative data. The study was conducted in Nakuru County. Nakuru County was ideal for this research because it had been registering poor performance in KCSE mean scores in the past 5 years. The average County mean score was a D+ which was an indicator of poor performance.

According to Njoro Sub-County Education Office, there were 33 public secondary schools with an equal number of principals (The Sub-County Director office-TSC, Njoro, 2021). There were 285 teachers (The Sub-County Director Office-MoE, Njoro, 2021). School principals were selected as respondents since they had skills to oversee implementation, monitoring and evaluation of instructional leadership practices. Teachers were also included as respondents because they are the implementers of the instructional leadership practices.

The researcher purposively selected Njoro Sub-county as the site for the study. Yamane's (2007) sample size formula was used to determine the sample size for the 30 participating schools from a list of the 33 schools in the sub-county. Purposive sampling was used to select the 30 principals.

The study consisted of 30 respondents who were the school principals' equivalent to the number of sampled schools that participated in the study. The teachers sample size was 166. This was according to Yamane

(2007) formula. The total sample size for the quantitative phase was therefore 30 principals and 166 teachers totaling up to 196 respondents.

A pilot study was done before the actual study to guarantee that all the research tools yield the information needed (Bryman, 2001, Gorard, 2003). Content validity for the questionnaire survey was established by seeking expert judgement (Mertens, 2005). Cronbach’s alpha was calculated using SPSS.

## FINDINGS

### Instrument Return rates

This is the proportion of the research instruments that have been returned after they were administered to the respondents. In this case the questionnaires and the interview guides were administered to the respondents.

**Table 1: Questionnaire Return Rates**

Respondents	Number of questionnaires administered	Number of questionnaires returned	Return rate %
Teachers	166	155	93.4%
<b>Totals</b>	<b>166</b>	<b>155</b>	

The above table shows the return rate of the questionnaires. Questionnaires for teachers returned at the rate of 93.4 % .The researcher put in place all the necessary measures to ensure all the research instruments were returned but some were not. All the same, the return rate was within the recommended range of 70- 100% (Mugenda and Mugenda, 2003) therefore the return rate was within the acceptable levels.

### KCSE results for public secondary schools in Nakuru County

The study sought to analyze the KCSE results of the county in the years under review. The results were the key outcome of the study hence very significant to the study. The study was interested in comparing and correlating KCSE results and instructional leadership practices and to evaluate the degree and extend to which instructional leadership practices of the principal influenced the academic achievement of students in public secondary schools in Nakuru County. School principals were asked to provide the KCSE results for their respective schools for the period under study. The analysis was presented in table 2 below:

**Table 2: KCSE performance**

Year	2018	2019	2020	2021	2022
<b>KCSE Mean</b>	4.9616	5.0638	5.5144	5.4218	5.3459

The information in the table above indicates that the county has had a fluctuating trend of performance with a mean grade of D+ which is regarded as poor performance.

### Determination of study hypothesis and objectives

The objectives of the study explored the influence of the principals’ instructional supervisory practices, goal setting skills, promotion of staff professional development and fostering conducive learning environment on KCSE performance in public secondary school in Nakuru County, Kenya.

A multiple linear regression test was used to establish the influence. The acceptable level of significance for this test was 0.05 at degree of freedom of 1. Levels of significance greater than 0.05 indicated that principals’ instructional leadership practices did not have an influence on the performance of KCSE in Nakuru County. On the other hand, a significance level of less than 0.05 meant that principals’ instructional leadership practices had an influence on the KCSE performance. A *p* value ( $p < 0.05$ ) meant that the results were statistically significant. The value of probability that forms the boundary between upholding or rejecting the Null hypothesis was used to establish the significant levels. A (*p*) value greater the 0.05 resulted to upholding of the Null hypothesis while (*p*) value lesser than 0.05 led to the rejection of the Null hypothesis.

### Principals' goal setting skills and its influence on the performance of KCSE

In line with the first objective, this research sought the opinions of teachers on the extent to which their goal setting skills influenced the performance of KCSE. The teachers were asked to indicate their views as; SA= Strongly Agree, A= Agree, D=Disagree, and SD=Strongly Disagree. The responses are shown in table 3 below:

**Table 3: Teacher's Responses on Goal Setting Skills and KCSE Performance**

Statement	DS		D		A		SA	
	F	%	F	%	F	%	F	%
1.Principal explains school mission and vision to the teachers and students	0	0	20	12.9	66	42.6	69	44.5
2.Principal explains the school curriculum programmes to the teachers	0	0	0	0	95	61.3	60	38.7
3.Principial designs comprehensive school work plan in due consultation with stakeholders	0	0	10	6.5	81	52.3	64	41.3
4.School principal engages stakeholders in setting targets and goals for the school	5	3.2	5	3.2	60	38.7	85	54.8
5.Principal carries out school programmes with the aim of attaining set goals	0	0	16	10.3	60	38.7	79	51.0

The results in the above table indicates that 69 (44.5%) of the teachers agreed strongly with the statement that the school principal explains school mission and vision to teachers and students while 66 (42.6%) agreed with the same statement. However, 20 (12.9%) of the teachers disagreed with the statement. In response to whether the principals explains the curriculum programme to teachers, the results showed that 60 (38.7%) of the teachers agreed strongly that the school principal normally explains the curriculum programmes to the teachers. The findings also indicated that 95 (61.3%) of the teachers agreed with the statement. None of the teachers disagreed with the statement. The third statement was on whether the school principal develops detailed school work plan after consulting stakeholders. The results indicated that 64 (41.3%) of the teachers strongly agreed with the statement while 81 (52%) agreed with the statement. However, 10 (6.5%) disagreed with the statement that principals prepare school work plan in consultation with stakeholders. To establish whether principals conduct school programmes with the aim of attaining set goals, the results indicated that 85 (54.8%) of the teachers strongly agreed with the statement while 60 (38.7%) agreed. However, 5 (3.2%) of the teachers disagreed with the statement that principals conduct school programmes with the aim achieving set goals. Lastly, the teachers were requested to indicate the extent to which they disagree or agree with the statement that school principal involved stakeholders in setting goals and targets for the school. The findings showed that 79 (51%) of the teachers strongly agreed while 16 (10.3%) of the teachers disagreed with the statement. However, 60 (38.7%) agreed with the statement that school principals involve stakeholders in setting goals and targets.

The null hypothesis tested was stated as:

#### **H<sub>0</sub>1. There is no significant influence between goal setting skills of the principal and students' academic achievement in KCSE in public secondary school in Nakuru County, Kenya.**

In order to find out whether there was an influence of the goal setting skills of the principal to students' academic achievement in KCSE, a multiple linear regression test was conducted. Simple regression summary on the influence of goal setting skills of the principal on students' academic achievements in KCSE indicated that there was a significance level of 0.0001 as shown in the table 4 below;



**Table 4: Regression coefficients of Goals Setting Skills on Students' Academic achievement in KCSE**

Model	Unstandardized Coefficients			
	B	Std. Error	T	Sig.
(Constant)	.416	1.515	.275	.786
I explain the school mission and vision to teachers and students	.359	.558	.643	.527
I explain the school curriculum programs to the teachers	-1.020	.525	-1.942	.064
I develop comprehensive school plan in consultation with stakeholders	.768	.526	1.461	.158
I carry out school programmes with the main aim of attaining the set goals	2.602	.582	4.469	.000
I involve stakeholders in setting goals and targets for the school	-1.446	.533	-2.714	.012
<b>R<sup>2</sup> = 0.647</b>	<b>Std. Error of the Estimate=0.9614</b>			
<b>F ratio= 8.414</b>	<b>Sig &lt;0.0001</b>			
<b>N= 29</b>				

Multiple linear regression test was used to test if goal setting skills significantly predicted students' academic achievement in KCSE. The overall regression was statistically significant  $R^2 = .647$ ,  $F(5, 23) = 8.414$ ,  $p < .001$ . It was found that goal setting skill "I carry out school programmes with the main aim of attaining the set goals" ( $\beta = 2.602$ ,  $p < 0.0001$ ) and "I involve stakeholders in setting goals and targets for the school" ( $\beta = -1.446$ ,  $p = 0.012$ ) significantly predicted students' academic achievement in KCSE. Table 4.13 above illustrates that the significant level of the goal setting skills of the principal was highly significant at  $p$  level 0.0001 a value less than alpha 0.05 meaning there was a significant influence between goal setting skills of the principal and the students' academic achievement in KCSE performance. This showed that the goal setting skills of the principal resulted to higher academic achievements of the students in KCSE performance. This led to the rejection of the null hypothesis. This meant that there was need for school principals to set goals and targets for their schools to increase the academic achievement of the students in KCSE. Therefore, the alternative hypothesis that there is a significant influence between the goal setting skills of the principal and students' academic achievements in KCSE performance in Nakuru County, Kenya was taken. These research findings concur with the findings by Mohamad (2013) in Malaysia and Kristin (2012) in USA on goal setting in schools. They established that framing school goals, communicating them, commitment, inclusivity and teamwork leads to higher academic achievement. In line with the findings, the researcher's opinion was that goal setting fostered team spirit and ownership hence contributing to improved academic achievement as indicated by Kirui (2012) in his study about the role of team work in the learning institutions of Kenya.

The interviewed principals on whether the goal setting skills of the principals influenced the performance of students in KCSE indicated that principals lead in the goal setting exercise in their schools. All the school principals agreed that the rest of the school stakeholders for instance students, teachers, parents and school employees take part in goal setting for the school. All the principals that were interviewed agreed that goal setting skills was important in enabling target setting for teachers and students, ensures proper management of time as well as creating a school culture that enhances learners performance. These responses supported research findings of the quantitative results on goal setting that revealed a significant influence between school principals, goals setting skills and students' academic achievement in KCSE.

### Instructional supervisory practices and KCSE performance

The teachers were asked to respond to structured questions that provided information which assisted in determining the extent to which instructional supervisory practices of the principal influenced the performance of students in KCSE in Nakuru County. The information was presented in the table 5 below;

**Table 5: Teachers’ responses on Supervisory Practices and KCSE Academic Achievement**

Statement	DS		D		A		SA	
	F	%	F	%	F	%	F	%
1.Principals proposes new teaching methods and approaches after supervision	4	2.6	30	19.4	74	47.7	47	30.3
2.Principal carries out lesson observation on teachers regularly	5	3.2	32	20.6	88	56.8	30	19.4
3.Principal goes through learners books after supervision is done	5	3.2	67	43.2	72	46.5	11	7.1
4.Principal makes sure that teachers prepare and make use of schemes of work	0	0	5	3.2	76	49.0	74	47.7
5.Principal gives useful and constructive feedback after the supervision	0	0	25	16.1	85	54.8	45	29.0

The findings from the table above indicates that 74 (47%) of the teachers agreed with the statement while 47 (30.3%) of the teachers also strongly agreed that school principals suggest new teaching methods and approaches after supervision. On whether the school principal conducts lesson observation regularly on teachers, 30 (19.4%) of the teachers strongly agreed while 88(56.8%) agreed with the statement. The research study also showed that 11 (7.1%) of the teachers strongly agreed that principals checked students books while 72 (46.5%) of the teachers agreed with the statement. These findings concur with the findings of a study by Samoei (2014) which established that practices of supervision involved checking the punctuality of teachers, monitoring the academic progress of teachers and checking students’ notes. The study also found out that 76 (49.0%) agreed that principals make sure that teachers prepare and make use of schemes of work while 74 (47.1%) of the teachers strongly agreed with the statement. However, none of the teachers disagreed with the statement. This is an implication that principals and teachers had taken the issue of the use and preparation of teacher’s professional document seriously as emphasized by TSC in the performance contract for school principals and teacher performance, appraisal and development for teachers. These findings agreed with the findings from the research done by Ameh, Sale and Egba (2015) who argued that supervision should entail checking teacher lesson notes, records of work, scheme of work, students notes, punctuality of the teacher and classroom observation for improved learner performance.

The study also established that 45 (29%) of the teachers strongly agreed with the statement that school principals give useful and constructive feedback after supervision. 85 (54.8%) of the teachers also agreed with the statement. None of the teachers disagreed with the statement. The study findings are in line with the findings of Okumbe (2007) in a study conducted in USA about supervision which discovered that supervision entails carrying out class observation and giving feedback to teachers to improve learner’s academic achievement. This indicated that a great number of teachers in Nakuru County suggested new teaching methods and approaches after supervision

The null hypothesis tested was stated as;

**H<sub>0</sub>2. There is no significant influence between principals’ instructional supervisory practices and students’ academic achievement in KCSE in public secondary schools in Nakuru County, Kenya.**

For the researcher to determine whether there was a correlation between the instructional supervisory practices of the principal and students' academic achievement, a multiple linear regression test was carried out. The results were presented in table 6 below;

**Table 6: Regression coefficients Instructional supervision practice on KCSE achievement**

Model	Unstandardized Coefficients			
	B	Std. Error	T	Sig.
(Constant)	.190	1.618	.117	.908
I suggest new teaching methods and approaches after supervision	2.459	.806	3.050	.006
I carry out lesson observation on teachers regularly	-1.046	.580	-1.801	.085
I go through students' books after supervision has taken place	-.080	.535	-.150	.882
I make sure teachers prepare and utilize schemes of work	.266	.454	.586	.563
I give useful and constructive feedback after supervision	-.273	.371	-.738	.468
<b>R<sup>2</sup> = 0.404</b>	<b>Std. Error of the Estimate=1.2488</b>			
<b>F ratio= 3.114</b>	<b>Sig =0.027</b>			
<b>N= 29</b>				

Multiple linear regression test was used to test if instructional supervisory practices significantly predicted students' academic achievement in KCSE. The overall regression was statistically significant  $R^2 = .404$ ,  $F(5, 23) = 3.114$ ,  $p = 0.027$ . It was discovered that instructional supervisory practice "I suggest new teaching methods and approaches after supervision" ( $\beta = 2.459$ ,  $p < 0.006$ ) significantly predicted students' academic achievement in KCSE in Nakuru County. From table 4.16 above, the significant level was 0.027 which is lower than the 0.05 alpha which implied that instructional supervisory practices of the principal has an influence on students' academic achievement in KCSE in Nakuru County.

In the qualitative phase, the principals were asked to give some of the instructional supervisory practices which they used in their school. Most of the principals agreed to the fact that instructional supervision of the teachers was important since it ensured effective and efficient curriculum delivery. Proper instructional supervision led to guided teaching hence enabling monitoring and evaluation of the learning and teaching process. The school principals identified some of the supervisory practices done in their schools for instance preparation of professional documents like records of work, schemes of work, lesson notes and lesson plans, teacher lesson observation and giving useful and constructive feedback after supervision. All these were done to enhance students' academic achievement in KCSE. The principals' responses strengthened the research findings of the quantitative phase hence indicating a significant influence between instructional supervisory practices of the principal and students' academic achievement in KCSE.

### **Staff professional development and KCSE performance**

The third objective of the research was to determine the influence of staff professional development by the principal on the KCSE performance in public secondary schools in Nakuru County, Kenya. In this study, staff professional development entailed those programmes and activities designed to enhance and develop skills and competences for improved performance. To achieve the objective, teachers were asked to respond to structured questions which provided information that enabled the researcher to have enough information for better conclusion. The information provided on this objective were presented as shown in table 7 below;

**Table 7: Teachers' responses on Staff Professional Development and Academic Achievement KCSE**

Statement	DS		D		A		SA	
	F	%	F	%	F	%	F	%
1.Principal implements programmes for staff development in the school to enhance classroom teaching	0	0	30	19.4	71	45.8	54	34.8
2.Principal inspires teachers to enroll for courses to enhance competencies and professionalism	5	3.2	31	20.0	57	36.8	62	40.0
3.Principal organizes internal trainings and workshops to cater for instructional needs of teachers	5	3.2	24	15.5	77	49.7	49	31.6
4.Principal makes sure that HOD's hold meetings to share ideas from courses attended to improve classroom teaching	0	0	23	14.8	64	41.3	68	43.9
5.Principal makes sure that staff professional development funds are allocated in the annual budget of the school	5	3.2	59	38.1	65	41.9	26	16.8

In order to establish if the principal implemented staff professional development programmes in school to enhance classroom practices, 71 (45.8%) of the teachers agreed and 54.8 (34.8%) agreed strongly to the statement. This implied that school principals in Nakuru County supported greatly the idea of staff professional development of teachers. These research findings were supported by findings by Waters, Marzano and McNulty (2005) who argued that school principals are staff professional developers, implementers and facilitators of school programmes. The success of implementation of staff professional development by the principal could be as a result of the new policy by TSC on curriculum implementation in Kenya. The policy which guides the evaluation and implementation of curriculum delivery in Kenya is by Teacher's Performance Appraisal and Development (TPAD) by teachers and Performance Contract (PC) by principals. This policy identifies teacher professional gaps and gives ways of bridging these gaps by training teachers both externally and internally through capacity building programmes.

On whether school principals encouraged teachers to attend courses to enhance their professionalism, 57 (36.8%) of teachers agreed and 62 (40%) of the teachers strongly agreed with the statement. To find out whether the school principals planned internal training and workshops to meet the instructional needs of teachers, the research found out from 77 (49.7%) of teachers who agreed and 49 (31.6%) of teachers who strongly agreed with the statement that principals do plan workshops and internal trainings to meet the instructional needs of the teachers. This implied that school principals in Nakuru County organized internal; trainings and workshops for their teachers to acquire new methodologies, skills, competencies and knowledge for improved students' academic achievement. These research findings were supported by research findings by Kaylan and Melisa (2015) who indicated that staff professional development is important in students' academic achievement.

To determine whether the principal ensured HOD's in the school hold meetings with teachers from attended courses to improve classroom teaching, it was discovered that 64 (41.3%) of the teachers agreed while 68 (43.9%) of the teachers strongly agreed with the statement that principals ensured HOD's hold meetings with teachers to share information on the courses they have attended to improve classroom teaching. Departmental meetings according to Wamulla (2013) are very important in the school. The meetings help teachers with

similar discipline to come together and reason together on matter syllabus coverage, teaching methodologies, sharing new concepts and skills in order to achieve set targets. The findings are in line with the findings of Wamulla (2013) who argued that trained teachers are equipped with relevant competencies' and skills required to effective teaching for improved academic achievement

The null hypothesis tested was;

**H<sub>0</sub>3. There is no significant influence between principals' promotion of staff professional development and students' academic achievement in KCSE in public secondary schools in Nakuru County, Kenya.**

In order find out whether there was a relationship between principals' promotion of staff professional development and students' academic achievement in KCSE, a multiple linear regression test was done as shown in table 8 below;

**Table 8: Regression Coefficients of Principals' Promotion of Staff Professional Development on Students' academic achievement in KCSE**

Model	Unstandardized Coefficients			
	B	Std. Error	T	Sig.
(Constant)	5.340	1.839	2.904	.008
I implement staff development programmes in the school to enhance classroom practices	.577	.572	1.008	.324
I inspire teachers to attend courses to enhance their competencies and professionalism	-1.131	.689	-1.640	.115
I organize internal trainings and workshops to meet instructional needs of the teachers	-.396	.724	-.548	.589
I make sure that HOD's hold meetings with teachers to share information from courses attended	-.028	.627	-.045	.964
I ensure that staff development funds are allocated in the school annual budget	1.081	.619	1.746	.094
<b>R<sup>2</sup> = 0.408</b>	<b>Std. Error of the Estimate=1.2440</b>			
<b>F ratio= 3.172</b>	<b>Sig =0.025</b>			
<b>N= 29</b>				

Multiple linear regression test was used to test if promotion of staff professional development significantly predicted students' academic achievement in KCSE. The overall regression was statistically significant  $R^2 = 0.408$ ,  $F(5, 23) = 3.172$ ,  $p < 0.025$ . It was found that none of the indicators of staff professional development significantly predicted students' academic achievement in KCSE. The table above showed that the significant level of principals' promotion of staff professional development was highly significant at p level of 0.025, a value lower than alpha 0.05 which meant that there was a strong influence between principals' promotion of staff professional development and students' academic achievement in KCSE. This led to the rejection of the null hypothesis hence the alternative hypothesis that there is a significant influence between principals' promotion of staff professional development and students' academic achievement was adopted.

In the qualitative phase the school principals were asked to explain some of their roles in promoting staff professional development in their schools that resulted in enhanced academic achievement in KCSE. The principals indicated that teachers' staff professional development enhanced the knowledge and skills of teachers which in turn led to increased teacher competency and quality teaching. The principals also argued that they do promote staff professional development in school at school levels by planning internal trainings and workshops and by making sure that funds for teacher capacity-building are factored in the school annual budget. The principals that were interviewed confirmed that staff professional development was important since education has become dynamic.

### Learning Environment and KCSE performance

The fourth objective of the study sought to establish the influence of principals' fostering of conducive learning environment on the performance of KCSE in public secondary schools in Nakuru County, Kenya. Conducive learning environment was characterized by open communication policy and motivation of staff which enhanced teaching and learning. In order to achieve this objective, teachers were asked to answer structured questions which provided information that enabled the researcher to have adequate information for a better conclusion. The information is shown in table 9 below:

**Table 9: Teachers' responses on Learning Environment and Students' Academic Achievement KCSE**

Statement	DS		D		A		SA	
	F	%	F	%	F	%	F	%
1.Principial creates an environment in which teachers views to improve classroom teaching are respected	5	3.2	15	9.7	69	44.5	66	42.6
2.Principal creates an environment in the school which enables teachers to creatively work with the available resources in the school system to improve classroom teaching	5	3.2	14	9.0	81	52.3	55	35.5
3.Principal communicates clearly the mission, vision, goals and expectations to improve classroom teaching	5	3.2	15	9.7	78	50.3	57	36.8
4.Principal makes sure that an open communication policy exists in the school which allows them to provide feedback to the principal concerning classroom teaching	14	9.0	16	10.3	75	48.4	50	32.3
5.Principal is willing to accept suggestions or ideas from teachers regarding classroom teaching	5	3.2	21	13.5	60	38.7	69	44.5

The findings from the tables above indicate that school principals provided a conducive environment in which teachers contributions to improve classroom teaching were respected. This was confirmed by 69 (44.5%) of teachers who agreed and 66 (42.6%) of the teachers who strongly agreed with the statement. The low percentage of teachers who strongly agreed that principals provided conducive environment where by teacher contribute to enhance classroom teaching could be an implication that school principals need to improve on creating conducive environment in which the contribution of teachers are respected to enhance learner performance in KCSE. Payne and Wolfson (2000) argue that the school principals should be the role model, sets high expectations and inspires others for life-long learning alongside motivating and supporting staff professional development. Additionally, the principal establishes understanding and mutual trust among teachers.

The statement on whether the principal provided an environment that enabled teachers to work innovatively with available resources in school system to improve classroom teaching established that 81 (52.3%) of the teachers agreed and 35.5 (35.5%) of teachers strongly agreed with the statement. This showed that a small percentage of principals and teachers strongly agreed with this statement. This implied that principals in Nakuru County had not embraced the policy of innovation and creativity advanced by TSC and the Ministry of Education (Republic of Kenya, 2008). Teachers and principals need to use locally available resources for the implementation of the curriculum in their respective schools to enhance students' academic achievement

in KCSE. These findings contrast with the findings by Silins and Mulford (2004) in their research on professional development which established that the school principals should provide conducive environment for teachers to improve innovation, creativity and development in the school curriculum implementation for better students' academic achievement in KCSE.

On whether the school principal communicated school mission, vision, expectations and goals clearly to enhance classroom teaching found that 78 (50.3%) of the teachers agreed while 57 (6.8%) of the teachers strongly agreed with the statement. This implied that school principals were not doing so well in communicating school mission, vision, expectations and goals to stakeholders hence they may have contributed to poor performance in KCSE in public secondary schools in Nakuru County. The findings of this study concurred with the findings of Vedavathi (2017) who argued that establishing conducive learning and teaching environment is a collective responsibility which takes a dedicated entire school community to create. Additionally, (Hallinger, 2012) indicated that school principals created a conducive working environment by communicating priorities, maintaining a high visibility and supporting high quality staff professional development programmes.

The statement on whether the principal ensured that the school had an open communication policy which allowed teachers to give feedback to the principal regarding classroom teaching found out that 75 (48.4%) of the teachers agreed and 50 (32.3%) of teachers agreed strongly with the statement. Lastly, the statement on whether school principals are willing to accept suggestions and ideas from teachers on classroom teaching established that 60 (38.7%) of the teachers agreed with the statement while 69 (44.5%) strongly agreed with the statement. The study findings are in line with the findings by Makoqo (2013) in a study in Lesotho that established that school principals that provide direction, accept ideas, inspire and respect teachers provided a conducive environment where teachers worked effectively for improved students' academic achievement in KCSE. In addition, Wallace Foundation (2012) indicated that high performing schools in the USA were headed by principals who were better in creating stable, trustworthy and secure working environment. The lower percentage of those who strongly agreed may be an indicator of ineffective instructional leadership practice on the part of the principal that may have resulted to poor academic achievement in KCSE. The researchers' view was that principals in public secondary schools in Nakuru County should improve on their willingness to accept suggestions and ideas from teachers for the betterment of the academic achievement in KCSE.

The null hypothesis tested was;

**H<sub>0</sub>4. There is no significant influence between fostering of conducive learning environment by the principal and students' academic achievement in KCSE in public secondary schools in Nakuru County, Kenya.**

In order to find out whether there was a relationship between fostering of conducive learning environment by the principal and students' academic achievement in KCSE, a multiple linear regression test was done between the average results of scores of both teachers and principals on principals fostering of conducive learning environment and KCSE achievement and the average school mean scores for the time under study. The results were presented in table 10 below;

**Table 10: Fostering of conducive Learning environment on Students' academic achievements in KCSE**

Model	Unstandardized Coefficients			
	B	Std. Error	T	Sig.
(Constant)	-.181	2.322	-.078	.939
I create an environment in which ideas of teachers to improve classroom teaching is respected	.779	1.007	.774	.447
I provide a learning environment where teachers work creatively with resources available in the school system to improve classroom teaching	.122	.622	.195	.847
I communicate the school, mission, vision, goals and expectations to improve teaching	-1.561	.743	-2.101	.047
I make sure an open communication policy is in place that allows teachers to give feedback to the principal concerning classroom teaching	1.008	1.154	.873	.391
I am willing to accept suggestions or ideas from teachers regarding classroom teaching	1.059	.704	1.505	.146
<b>R<sup>2</sup> = 0.371</b>	<b>Std. Error of the Estimate=1.2828</b>			
<b>F ratio= 2.710</b>	<b>Sig =0.046</b>			
<b>N= 29</b>				

Multiple linear regression test was used to test if conducive learning environment significantly predicted students' academic achievement in KCSE. The overall regression was statistically significant  $R^2 = 0.371$ ,  $F(5, 23) = 2.710$ ,  $p = 0.046$ . It was discovered that the indicator of conducive learning environment "I communicate the school, mission, vision, goals and expectations to improve teaching" ( $\beta = -1.561$ ,  $p < 0.046$ ) significantly predicted students' academic achievement in KCSE. The table above indicated that the significant level of principals' fostering of conducive learning environment was highly significant at  $p$  level 0.046 a value lower than alpha 0.05 which implied a strong influence of principals' fostering a conducive learning environment and students' academic achievement in KCSE. This led to the rejection of the null hypothesis that there was no significant influence between fostering of conducive learning environment by the principal and students' academic achievement in KCSE in public secondary schools in Nakuru County, Kenya. The alternative hypothesis was adopted that there was a significant influence between principals' fostering of conducive learning environment and students' academic achievement in KCSE in Nakuru County, Kenya.

On the qualitative phase, the researcher sought the principals' opinion by asking how they fostered conducive learning environment in their schools. The school principals were asked to explain what they understood by 'conducive learning environment'. Most of the principals agreed that this was an environment characterized by mutual trust, respect, and positive attitude and open communication which facilitated enhanced learning and teaching. The school principals pointed out that conducive learning environment led to productive school culture which in turn enhanced learners' academic achievement in KCSE.

## CONCLUSIONS AND RECOMMENDATIONS

Majority of school principals set goals which influence the students' academic achievement in KCSE in public secondary schools in Nakuru County.

The research established that school principals in public secondary schools in Nakuru County applied effective supervisory practices which influenced students' academic achievement in their schools.

Public schools in Nakuru County embraced and supported programmes and strategies that promote staff professional development. This enhanced learners academic achievement in KCSE.



There's need for the school principals to strengthen fostering of conducive learning environment to enhance students' academic achievement.

### **Recommendations**

This study established that the general performance of KCSE in public secondary schools in Nakuru County is gradually declining hence the researcher recommends the TSC to come up with a paradigm shift to help curb the situation.

The school principals should prioritize appropriate capacity building programmes for teachers for instance seminars, workshops and refresher courses to equip teachers with current skills, trends, attitudes, knowledge and competencies in their subject areas. This will assist in effective teaching of students hence enhancing their academic achievement.

The study recommends the TSC and Ministry of Education to come up with a formal programmes of identifying professional gaps of teachers and providing fully funded training programmes for all teachers

The study recommends that the roles of other instructional leaders like the heads of department, deputy principals and senior teachers should be explored.

### **Suggestions for further research**

The study suggests further research in the following areas;

- This study was carried out in public secondary schools in Nakuru County hence there's need to undertake similar research in other counties in the republic of Kenya.
- Another study can also be done to investigate the influence of other instructional leaders like the deputy principals, heads of department and the senior teacher to the academic achievement of students in KCSE.

### **REFERENCES**

- Ahmed, K.A. (2016). Instructional leadership practices in secondary schools of Assosa zone, Ethiopia. *International Journal of Advanced Multidisciplinary Research and Review*, 4(7), 192-05.
- Allison, G. (2013). *Effective professional Development in eva of High Stakes Accountability*. Washington. Centre for Public Education.
- Bush, T. (2015). Understanding instructional leadership. *Journal of Educational Management, Administration and Leadership* Vol. 43(4) 487-489. 137
- Carrier, L.L. (2014). *Putting the leadership back in instructional leadership: What does an effective model of instructional leadership look like in practice when we place a value on both the work and leadership of principals?* Plymouth: Plymouth University.
- Christin, P. (2010). Landscapes of leadership in South African Schools: Mapping the changes. *Educational Management administration & Leadership*, 38 (6).694-711.
- DuFour, R. (2013). "The learning –centered principal". *Educational leadership* 59, (8) 12-15.
- Gulcan, M.G. (2012). Research on Instructional leadership competences of school principals. *Education*, 132(3), 625-635
- Hallinger, P. & Heck, R. (2011). Conceptual and Methodological Issues in Studying School Leadership Effects as a Reciprocal Process. *School effectiveness and school improvement*, 22 (2), 143 – 149.
- Hallinger, P. (2011). Leadership for learning: Lessons from 40 years of empirical research. *Journal of Educational Administration*, 49(2), 125-142.
- Hallinger, P. (2012). *School leadership that makes a difference: Lessons from 30 years of International Research*. Rome. Ministry of Education.

- Kirui, K.K. (2015). Leading instructional programme and its effects on academic achievement of students in national examinations in public secondary schools in Tinderet Sub-County, Kenya. Masters project Report.
- Kristin, W. (2012). A study on student achievement on classes that set goals and self-monitor their achievement. Published PhD Thesis. Northwest Missouri State University.
- Linda, R. V. (2018). Learning outside the classroom: How principals define and prepare to be instructional leaders. *Journal of Education Research International*. Article ID 8034270.
- Locke, E. A. & Latham, G.P. (2013). *New Developments in Goal Setting and Task Performance*. New York. Routledge
- Mugenda, O.M & Mugenda A.G. (2003). *Research Methods: Quantitative and Qualitative Methods*: Nairobi: African Centre for Technology Studies
- Muthoni P.N. (2017). Relationship between principals' instructional leadership and students' academic achievement in KCSE in Meru and Tharaka Nithi counties. Published Thesis
- Okumbe, J.A. (2007). *Educational management. Theory and practice*. Nairobi. University of Nairobi Press
- Oluwatoyin, A. (2018). Needs for in-service professional development of teachers to improve students' Academic performance in Sub-Saharan Africa DOI:10.4172/2151-200.1000330
- Samoei, C. J. (2012). Instructional Supervisory Role of principals and its influence in student's academic achievement in public secondary schools in Nandi North District, Nandi County, Kenya. Published Thesis. Catholic University of Eastern Africa.
- Taylor, N., Van der Berg, S., & Mabogoane, T. (2013). *What makes schools effective? Report of National School Effectiveness Study*. Cape Town; Pearson.
- Xiao, L.J (2014). *Principals' Instructional leadership: Fostering Teacher Professional Development*. Hong Kong. Hong Kong Institute of Education.
- Yamane, T, (2007) *Statistics, An introductory Analysis*, 2nd Ed. New York: Harper and Row.
- Wamulla, O.J. (2013). Factors Influencing academic performance in Kenya Certificate of Secondary Education in private schools in Westlands Division Nairobi, Kenya. Project Report. University of Nairobi